

CHAMPION[®]

A REPUTATION BUILT ON SAFETY

Proudly Handmade in Great Britain

HAT & BODY PROTECTOR FITTING MANUAL





CHAMPION® A REPUTATION BUILT ON SAFETY

Built to Perfection Tested to Destruction

Champion riding hats out perform BRITISH SAFETY STANDARDS tests day after day. Why daily? Because Champion believe that hats should not only be safety tested at the design stage, but continually tested throughout manufacture.

This investment in safety means that every Champion hat achieves the highly credited British Standard Kitemark and is a guarantee every hat will comfortably out perform the four main areas of testing; penetration, shock absorption, harness strength and stability.

Each Champion riding hat conforms to the following specification;

- Lightweight high performance shell.
- Shock absorbing polystyrene liner for improved safety.
 - Easily adjustable harness with quick release buckle.



PENETRATION TESTED



HARNESS TESTED



IMPACT TESTED



CRUSH TESTED

CHAMPION HAT AND SKULL STRUCTURE





evenly to polystyrene liner.

place in accident situations.

... AND HOW THEY WORK

ALL CHAMPION HATS AND SKULLS ARE MADE FROM THE FOLLOWING:

OUTER SHELL (which is made from ABS Plastic in the traditional hats & skulls, and Glass Fibre in the ventairs) serves the following purposes:

- To stop any sharp objects penetrating the hat/skull
- To spread the force from an impact over a larger surface area
- Protect the polystyrene liner from disintergrating during impact

POLYSTYRENE LINER absorbs the energy from the impact, causing the beads to crush together and reduces bruising to the head.

FOAM PADDING provides comfort for the wearer.

AN INTERNAL FABRIC LINING gives the hat a smooth finish.

The photographs below show a cross section of a polystyrene liner before impact and after impact. These photographs clearly show how the polystyrene has crushed at the impact area, saving the rider from sustaining a serious head injury.



Before impact



After impact



TESTED TO DESTRUCTION

CHAMPION RIDING HATS OUT PERFORM BRITISH STANDARDS SAFETY TESTS DAY AFTER DAY, WHY DAILY?

Because Champion believe that hats should not only be safety tested at the design stage, but continuously tested throughout manufacture.



Penetration test; a 3kg toughened steel spike is dropped directly onto the hat - a test which demonstrates the hats resiliance against sharp objects such as horse shoe studs.



Harness test; tests both the strength of the harness, and the ability to keep the hat securely in place.



Shock test; a hat fixed to a metal head is dropped vertically onto a steel anvil - this tests the shock absorption qualities which will protect you in a potential fall.



Crush test; a hat is placed between two steel plates and crushed, the amount of crushing is measured.

This investment in safety means that every Champion hat earns the highly credited British Kitemark and is a guarantee that the hat will comfortably out perform the four main areas of testing - (1) Penetration, (2) Harness strength and stability, (3) Shock absorption, (4) Crush resitance.



BSI KITEMARK

NY CLUB

All Champion hats and skulls carry the BSI Kitemark logo. This kitemark shows that a quantity from every batch is independently tested by the British Standards Institution to ensure consistent adherence to the current safety standards.

All Champion hats and skulls meet:

PAS 015: 2011

All Champion PAS 015:2011 hats and skulls are PONY CLUB approved

*Always check with your riding organisation for current rules.











STEP BY STEP GUIDE TO FITTING

- Hat or skull? Assess the customer's requirements based on what they will be using it for.
- Measure Measure the customer's head with a tape measure. Place the tape measure 1/2 an inch/13mm above the eyebrows, skim the tops of the ears and measure the fullest part of the head.
- **See Size Chart** Refer to the Champion size chart to convert the measurement into a hat/skull size.
- **Reassure** Explain to the customer that the hat/ skull you are fitting may feel more snug than their current hat. Over time, the foam in their old hat will have compacted therefore making it looser than a brand new one.
- **Fitting** Take the hat/skull and roll it onto the customer's head from the front, placing it in the correct position about 1/2 an inch/13mm above the eyebrows. Press down until it is in the correct position on the head. If the hat is fitted with an adjustable head sizing ring, it may be best to roll the hat on to the customer's head from the back.
- **Crown** Ensure that your customer can feel the top of the hat on the top of their head. If not, the hat/skull may be too small, therefore try fitting the next size up.

- Vacuum fit Hold the hat/skull lightly at each side and gently rock the hat. You need to ensure there is a vacuum on the front fitting, therefore the customer's eyebrows should move up and down when the hat is rocked back and forth. Another way to test for this vacuum/suction is to gently lift the hat off the customer's head. It should create a feeling of suction as you lift it. If there is no vacuum/suction and the eyebrows do not move, then the hat is too big. Repeat the steps above with a smaller hat/skull.
- **Space** Check for space at the front of the temples. A little room at this point prevents headache from occuring. Check the space at the back of the hat/ skull. There may be a little space here which is not as critical as the front area. However too much room would suggest that you are fitting either the wrong size or the wrong style for that customers head.
- Harness Adjust the harness, begin with front strap clip in the buckle, leave the strap loose, adjust the nape strap then adjust the front strap ensuring a snug fit under chin. Thread the loose ends of both straps through the retaining "O" rings and slide them up to the buckles to prevent slippage.
- Finally Check again that you have a vacuum fit across the front area by gently rocking the skull/hat. Gently tapping the hat from the back is another way to ensure there is no movement. The hat should not tip forward onto the rider's eyes whilst being tapped.



USEFUL TIPS

- Always talk through the process with your customer. This ensures that they know what to expect
 next and also gives them the comfort that you know what you are doing and why you are doing it.
- Give the customer, especially children time to get used to the feel of the hat/skull.
- Should the hat/skull force the ears to bend substantially then try another style. All moulds are different shapes therefore a different style may be more suitable for that customers head.
- If you are struggling to fit your customer into any style of Champion hat/skull then you may need to try another brand. All brands, mould shapes are different as are peoples head shapes.
- Always advise your customer on the importance of taking care of their new hat/skull. Dropping the hat/skull, or allowing it to roll around in the car etc. can cause damage. This damage would not be visible on the outside, however could have caused internal damage to the polystyrene. If you are concerned that your helmet might be damaged then replace it. British Standards recommend hats should be replaced after 3 5 years depending on degree of usage.
- It is advisable to remove the hat/skull from the customers head when adjusting the straps especially when fitting children. Some nervous customers may prefer to do up the clip themselves.
- Should your customer feel that the hat/skull that you have fitted is too small then try the next size up on them. This may feel more comfortable if they are not used to wearing a hat/skull, however you will be able to show them how the hat moves as opposed to their eyebrows and explain that the front vacuum is the vital fitting point. Give them extra time to wear the correct size to get used to the snug feeling, or try a different style to see if it is more comfortable.



HAT AND SKULL SIZE GUIDE

Jockey Skull Sizes

00	00½	0	0½	1	1 ½	
6% - 6¼	61/4 - 63/8	63% - 61/2	6½ - 6%	6% - 6¾	6¾ - 6%	
50 - 51cm	51 - 52cm	52 - 53cm	53 - 54cm	54 - 55cm	55 - 56cm	

			7				
2		2½	3	3½	4	4½	5
6% - 7	7	- 71/8	7% - 7%	71/4 - 73/8	7¾ - 7½	7½ - 7%	7% - 7%
56 - 57cm	57	7 - 58cm	58 - 59cm	59 - 60cm	60 - 61cm	61 - 62cm	62 - 63cm

Riding Hat Sizes

61/4	6%	6½	6%	6¾	6%	7	7%	71/4	7%	7½	7%	7%
51cm	52cm	53cm	54cm	55cm	56cm	57cm	58cm	59cm	60cm	61cm	62cm	63cm

Velvet Cover Sizes

PAS 015:2011 Skull Size	Velvet Cover			
50cm - 57cm	Large			
58cm - 63cm	Extra Large			





CHAMPION[®]

BODY PROTECTORS

MEETING THE BETA 2009 STANDARD FOR HORSE RIDERS & EN: 13158:2009 Level 3

- The revision of the European safety standard is intended to ensure that there are no gaps to the sides or shoulders of body protectors.
- All sizes shall be tested at Type approval stage.
 One child & one adult protector will be required for annual re-test.
- All protectors will be tested whole with particular attention paid to closures such as zips.
- Coloured warning markers are required to denote maximum user-size opening.
- Shoulder widths are governed by chest size (4% minimum). For example a chest size of 100cm will result in a shoulder width of 4cm minimum.
- The waist must have a minimum overlap of 2.5cm in all sizes.

- There shall be a minimum overlap of 2.5cm at the shoulder on all sizes.
- Half thickness areas of the body protector is controlled at a maximum pre-determined distance below the top of the shoulder to help protect the rider's clavicle. This also applies to the sides where the half thicknesses are controlled to prevent injuries to the hip.
- Ergonomic tests shall be carried out on three sizes of protector by real-life subjects.
- Size markings should meet maximum and minimum sizing requirements as detailed in the standard.
- New marking requirements must include size pictogram, number of standard, date of manufacture and warnings about coloured markers and an explanation as to why they are incorporated. The Beta Label is to be attached to the outside of the BP in such a way that the entire label is visible.



BODY PROTECTOR FEATURES

ALL CHAMPION BODY PROTECTORS FEATURE:

- Flexibility 4 panel foam using PVC Nitrile foam for maximum flexibility.
- Lightweight Low density high performance foam.
- Breathability The outer fabric is fully breathable and durable.
- New BETA Standard BETA Standard Level 3 2009 and EN:13158:2009
 Level 3
- Polygiene This treatment will control bacteria growth therefore stopping odours from developing, it can last up to 50 washes and is environmentally friendly.
- Sizing Up to 9 sizes with 3 back lengths (Short, Regular, Long). Size ranges vary between styles. (See size chart on the BP for fitting)
- Buckles Buckles are replaceable.
- Shoulder protectors BETA Standard Level 3 2009 and EN:13158:2009.
- Anatomically designed

Available in Black or Navy.



BODY PROTECTOR STRUCTURE



Polygiene® Silver Treatment

Cut-Flex® System Foam

Washable



Latest 2009 Standards

Anti-Bacterial Treatment

- Supreme Flexibility
- Maximum Breathability
- Ultra Lightweight
- Regular, Short, Long back available



Hinge Tek® System

Provides unparalleled fit

STEP BY STEP GUIDE TO FITTING

- Zip or Tabard? Find out the customer's preferences.
- Correct attire The protector should be fitted over a T-shirt or similar.
- Measure Measure (1) the chest, (2) waist and (3) over the shoulder waist to waist. See next page for diagram.
- **Size Chart** Refer to the size chart on the body protector.
- Fitting Place the body protector onto the customer and loosely close the fastening
- Shoulder straps Adjust the shoulder straps making sure the coloured warning markers are covered. At the front, make sure the top of the BP reaches the top of the Sternum. At the back, make sure the BP covers the prominent bone at the base of the neck.
- Shape the back Place one hand in small of the customers back, take hold of the bottom of the BP with the other hand, push into the small of the back and at the same time ease the bottom out. This enables the body protector to follow the shape of the body.

- Waist Adjust the waist until a snug secure fit is achieved; check that the warning markers are fully covered. If not try the next size.
- Ribs Ask the customer to locate their bottom ribs. At the ribs lowest point they should be 1 inch above the bottom of the protector. If this is not achieved it may be possible to achieve this by adjusting the shoulder straps as long as this does not show any markers, if this does not work try the next size up.
- Back length Check the back length. This is best done by sitting the customer on a saddle similar to their own; there should be at least 1.5 to 2 inches between the bottom of the protector and the saddle. If this is not possible, sit the customer on a chair and aim for 3 to 4 inches between protector and chair, this will allow for the shape of the saddle. If it is too short try a long back, but if the protector is just slightly shorter this is not a problem as it is only there to protect soft tissue and if too long will cause the protector to push up into the neck which could be uncomfortable.

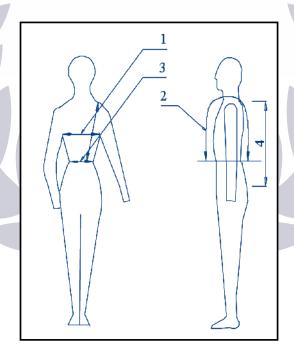


USEFUL TIPS

Always talk through the process with your customer. This ensures that they know what to expect next and also gives them the comfort that you know what you are doing.

Give the customer time to get used to the feel and remember that the protector will form to the shape of the body as it warms and may need to be re-adjusted to maintain a snug fit.

Advise the customer to keep the instructions on the ticket for further reference.







FOR FURTHER INFORMATION

www.championhats.co.uk Telephone: 0113 270 7000