How to pass Weapon Checks

What is a Weapon Check?

Weapon Check (formerly Weapon Control) is where some or all of your fencing kit is inspected and tested before fencing starts. It's done to make sure it's safe, fits the rules, and works (in that order).

Weapon Check is done at A-grades, World Cup, World and European Championships and some other events (like the UK School Games). It is done by qualified armourers (in the UK, these will be members of the BFA Armourers' Guild), who are practised in accurate and rapid testing of large amounts of equipment.

The Weapon Check will happen before the event starts. Usually you will hand in your kit a couple of days early and then collect it the day before you fence. If it's a team event you'll usually need to put all the team kit in one or two bags. All the details of when and where you need to hand in and collect your kit will be given to the Team Manager, and will also be available from the event management.

When your kit has been checked there should be a piece of paper included in the bag showing what passed, what failed and why it failed.

Why do we have Weapon Check?

On the piste:

- Your kit is safe to fence with
- Your kit works
- No (or at least fewer) cards

What you need to understand is that **Weapon Check is there to help you**.

It's not trying to “catch you out”, it just lets you know where equipment isn't safe or up to scratch. So that when you get to the piste, you can be confident your kit will work to its best, that it won't cause you penalties, and that you can fence in safety.

Weapon Check spots fencers who:

- don't know how to check their kit
- can't be bothered to check their kit
- deliberately attempt to modify their kit to get around certain rules

Weapon Check shouldn't play favourites, everyone should be treated the same. Of course, like everywhere else in life, the right attitude will get you a long way!

Why shouldn't I argue?

- You aren't the first person to argue today, and won't be the last.
- There are no favourites, but once you argue you certainly go down the list!
- If your kit hasn't passed, there will be a reason.
- Treated nicely, and most armourers will explain how you can fix your kit.
- If there is time (often there is not), they may even fix it themselves.

In the end, the armourers can refer the query to the FIE representative at the event. Be **very** sure of your ground before going this far.

How can I avoid problems?

Check your own kit regularly

You should check your own equipment (clothing, wires and weapons) before every event, whether there is a Weapon Check there or not.

- Some checks are for safety (mainly clothes)
- Some checks are for rules (mainly weapons)
- Most checks take a matter of seconds
- They should get to be a habit when you are putting your kit away

Think about learning to fix your own kit, or find someone in your club to help you with it.

Be honest with yourself about what you see

- A hole in a jacket or a glove is still a hole, no matter how small it is.
- Weapons and wires that *sometimes* doesn't work still need to be fixed.
- Velcro and zips that don't close need to be replaced.

Be nice to the Weapon Checkers

Bear in mind they will often work several hours non-stop doing nothing but equipment checks. Whenever you can save them time, it helps.

- Don't hand in broken or dodgy kit at Weapon Check "just to see if it passes"
- Listen to what they say about your kit
- Get them to write it down if you don't understand
- Ask at a quiet time and they may be able to fix it for you

What can I check?

The following items can be checked with little or no equipment. With practice, a complete check of these will take you no more than a couple of minutes:

Jackets	Plastrons	Breeches
Gloves	Masks	Socks

Lamé jackets, gloves and masks can be checked visually, but you will need a multimeter for a full check. For weapons, once you've done the visual check, you'll need a weight and gauge, and either a test box or a multimeter. You can use these to check wires as well.

Common faults

There are some faults which come up again and again. Nail these and the whole process becomes much less nerve-wracking.

Clothing
800N (CEN Level 2)
No holes or wear (especially under jacket arms)
You can't fit a biro under the sewing on your country colours
Breeches - have country colours

Masks
1600N for FIE events
No dents, broken wires or sharp edges
No holes in the bib, inside and out
Foil / epee - mesh is insulated and the rubber band is secure all the way around
The elasticated band across the back is there and works

Visor masks
Note: As at February 2010, all visor masks are currently banned for FIE foil and epee events. If in doubt, check with the event organisers.
The visor should have no severe damage, nor any cracks or crazing.
All screws and fixings are present.
Date-stamp on visor is less than two years old

Lame jackets, gloves and masks
No holes or bare patches (sabre - check under arms)

Weapons – general points
FIE events, epee and foil blades are maraging only. Sabre blades S2000 or later.
No sharp edges or oxidisation or rust on the guard.

Foil
Note – Foils may now need to go to Weapon Check with the tip tape taken off.
- Check the Weapon Check requirements!
The top 15cm of the blade is insulated.
Weapon passes the foil weight test.
No sideways or "S-shape" bends

Epee
Weapon passes the epee weight and gauge tests.
No tape, leather or other covering on pistol/orthopaedic grips.
There is no tape over the wires inside the guard.
No sideways or "S-shape" bends

Sabre
The pommel is insulated, as is the first 7-8cm of the outside of the guard, and the **entire inside of the guard**.
No up or down bends.

Body wires and Mask wires
All crocodile clips are soldered to the wire
The croc clip is a minimum of 8mm wide
Foil mask wires must be white or clear

A note on blades

There are some epee blades currently supplied by manufacturers which are either too long, or too stiff. There is generally nothing you can do about these blades in the time you have at Weapon Control. It doesn't matter how much you bend them, rub them, heat them, or otherwise play around with them, they will still fail if tested correctly.

Similarly, there are currently some sabre blades which are too thin near the tip, or whose tip is too small. Both of these faults can be dangerous, and will fail the Check. There is nothing you can do to correct these.

In both these cases, I'd recommend that if you bought them in the UK, they should simply be returned, as they are not according to the FIE rules.

Detailed checks

This is a short list of the things Weapon Checks look for. There are other checks which need specialised equipment, and some Weapon Checks look for more than others!

Clothing – general points

- General good condition, with no holes, and all seams should be intact.
- No “trapping hazards”. This is where a blade could catch, and may bend and break. In general, if you can insert a biro, it will fail. This mainly applies to makers labels, club/sponsor patches, and country colours, but anything which could catch a blade will be checked.
- Where there are fastenings, e.g. velcro and zips, they should be working.

Plastrons

- 800N (CEN Level 2) for electric fencing.
- No holes, no modifications.
- Especially check condition under the sleeve, and all seams.

Jacket

- 800N (CEN Level 2) for FIE events.
- Country colours are optional but should match each other for team events.
- Check for wear, especially under the arms. If the top layer of fabric is worn through, the jacket will fail. Even though the bottom layer may still be there, the jacket isn't 800N any more.
- The groin strap is present and working.
- For epee, the name is printed on the back, in dark blue, and not peeling off.

Breeches

- 800N (CEN Level 2) for FIE events.
- Must have country colours.
- As with jackets, the item will fail if the top layer of fabric is worn through.
- Elastic or other fastenings round the knees must be in good condition.

Gloves

- No holes or loose stitching. This is important even at sabre.
- Especially check between fingers.

- Velcro and elasticated cuffs must stay fastened.

Masks

- 1600N for FIE events, and the manufacturer and date are on the FIE Homologation list.
- No dents or broken wires in the mesh.
- No sharp edges on any metal parts of the mask.
- For foil and epee, the mesh is insulated and the rubber or elasticated band must be secure all the way around the mask. If not fixed in place, it can trap a blade, or in extreme cases, allow it through to the inside of the mask.
- Bib is in good condition, inside and out. For damage inside, tape or fabric can be used to mend it. Damage outside requires the mask to be re-bibbed.
- The elasticated band across the back of the mask must be present and must not be slack.

Visor masks

Note: As at February 2010, all visor masks are currently banned for FIE foil and epee events. If in doubt, check with the event organisers.

- Same as "Masks" section above, but the visor should have no severe damage, nor any cracks or crazing.
- All screws and fixings are present.
- Each visor is date-stamped (fails if not dated), and will be rejected if dated over two years old, whatever the condition. So when you buy a mask, check the date on the visor.
- On a mask with two layers, any damage to the inner visor needs it to be replaced.
- Don't keep the mask in a plastic bag or store anything in it - PVC can weaken the visor
- Don't clean it with anything other than water - no chemicals, no scourers

Socks

- Should have no holes in the leg.
- Long enough to overlap under the breeches

Lame jackets, gloves and masks

- All lame material should be in good condition, with no bare patches.
- The name on the back should be printed in dark blue, and clearly visible.

- Electrical resistance between any two points should be less than 5 ohms.
- For jackets, check each panel, especially the collar and (for sabre) under the arms.
- Sabre masks should be checked as for foil/epee masks, and all external surfaces (other than the visor) must be conductive as above, the same goes for overlays and sabre gloves.
- On foil masks, the conductive part must be FIE approved and on the Homologation list. Electrically conductive, including the tabs where the mask wire attaches.

Weapons – general points

- FIE events, epee and foil blades are maraging only, and have an FIE approved Homologation mark (on the FIE list). Sabre blades stamped S2000 or later.
- Weapon in general good condition, with no sharp edges or oxidisation or rust on the guard.
- Where there is a reinforcing washer at the base of the blade, this must be flush with the guard, so that a blade or point could not get caught in between.
- Blade length and stiffness will be checked. There are some blades currently supplied by manufacturers which fail these tests. There is generally nothing you can do about these blades in the time you have at Weapon Control. It doesn't matter how much you bend them, rub them, heat them, or otherwise play around with them, they will still fail if tested correctly.
- All weapons should have a “security device” on the inside guard socket. In practice, some two-pin systems have the device on the bodywire instead. Either way, it must exist and work.

Foil

- Note – Foils may now need to go to Weapon Check with the tip tape taken off. - *Check the Weapon Check requirements!*
- A foil has a maximum resistance of 2 ohms. It is possible that a resistance of up to about 5 ohms will be allowed.
- The top 15cm of the blade is insulated.
- Weapon passes the foil weight test.
- The handle is completely insulated, including the pommel.
- Wires inside the guard have double insulation
- Blade can bend up or down by up to 1cm, but must not bend sideways

Epee

- Resistance for epee is the same as for foil.
- Weapon passes the epee weight and gauge tests.

- No tape, leather or other covering on pistol/orthopaedic grips.
- There is no tape over the wires inside the guard.
- The wires should enter the socket on its outside (between the socket and the guard).
- Blade can bend up or down by up to 1cm, but must not bend sideways

Sabre

- Weapon passes the sabre gauge tests. There are currently some sabre blades which are too thin near the tip, or whose tip is too small. Both of these faults can be dangerous.
- The pommel is insulated, as is the first 7-8cm of the outside of the guard, and the entire inside of the guard.
- Blade can sideways by up to 4cm, but must not bend up or down.

Body wires and Mask wires

- Each wire should have a resistance of less than 1 ohm. It is possible that a resistance of up to 5 ohms will pass the tests.
- When pulled slightly, faulty wires may show a break near the plug, inside their insulation.
- All crocodile clips are attached to the wire and soldered in place. The croc clip is a minimum of 8mm wide.
- Foil and sabre bodywires have the target wire separated from the other two for at least 40cm.
- Foil mask wires must be white or clear

Useful references

http://www.leonpaul.com/armoury/armoury_home.htm
http://www.leonpaul.com/fencing_support/support_rules/fencing_rules.htm
http://www.armory.usfencing.org/?q=fencing/equipment/armory
http://www.fie.ch

Armourers' Guild

British Fencing

Becoming an Armourer
The Guild of Armourer's is responsible for the protection and development of Armourer's within British Fencing. It is ultimately answerable to the BFA Board, via its committee. There are four grades of membership, open to members of the BFA, NIAFU, SF or WF:

Apprentice Armourer On recommendation from a Club Committee, Armourer or a Master Armourer. Learning the trade, applicants must be seriously interested in acquiring the requisite skills and must aspire to eventually qualify as an Armourer. The minimum age is 12, though apprentices under 18 may not work unless under the supervision of a Journeyman or above. (Yellow Badge)

Journeyman Armourer Having had at least one year's experience and on the personal recommendation of a Master Armourer, or by examination. Must be able to cope with the ordinary tasks of a club armourer and assist at Opens, minimum age 18. (Green Badge)

Armourer After suitable experience, by examination. Must be able to fully run the armoury at a Club and a UK Open event. Must be fully aware of all the requirements of weapon control and such skills within the armoury as could be reasonably expected. (Blue Badge)

Master Armourer By invitation from the Master Armourers. In addition to the skills required of an armourer, a Master Armourer should be fully capable of running an Armoury, or a Weapon Control, at a Full International Event (World Cup, European or World Championship). (Red Badge)

The Committee and Membership:
The committee consists of the Officers, who must be either Armourers or Masters, together with other co-opted members.

The British Armourer's Guild was established in 1996 and has been vital to British fencing. Joining the Guild is a great way to get involved in the technically challenging and genuinely rewarding world of fencing.

For further details on any aspect of the armourers guild please contact:

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