

Repair and Rewire

Blade Re-wire

Place the weapon upside-down in a vice, undo the hex nut and remove the handle, pad, guard socket and guard from the tang.

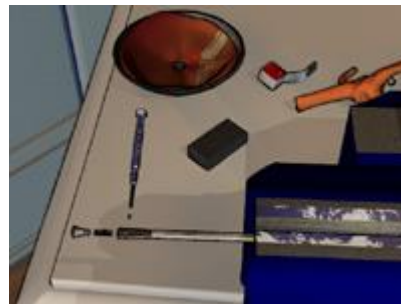


Zoom

Rotate the blade 90 degrees in the vice and peel off the protecting tape around the tip.

Dissassemble the point by removing the tip, grub screws, tension spring and point top.

Put them on a small magnet, so that they don't fall on the floor.



Zoom

If you have a hot-air paint stripper, this part is easy. Grasp the end of the wire in a pair of pliers and heating the blade gently, pull the wire out of the groove of the blade.

Remove any remaining wire and glue from the blade with the help of a craft knife or some similar sharp instrument. (If a hot-air paintstripper is not handy, then you will have to use a broken hacksaw blade or a craft knife)

You should then have a clean, rough surface along the whole length of the blade, ready for glueing.



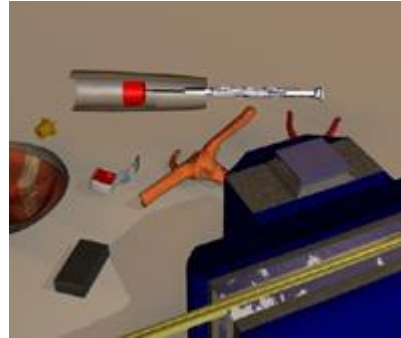
Zoom

Wrap masking tape around the blade tang (approximately 3" from the shoulder) to prevent damage to the insulation when tying off the wire during glueing.



Zoom

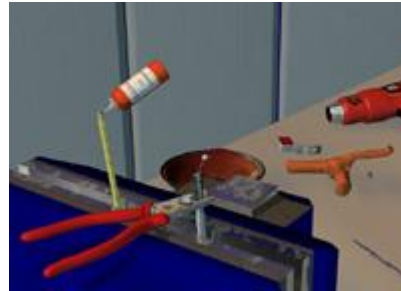
Examine the base of the foil point and check that all of the plastic insulator is out. If not, it should be possible to push the nylon cup out from the base using a paperclip or small screwdriver.



Zoom

Rotate the blade 90 degrees in the vice, with about 4cms showing above the jaws. Apply a locking resin (such as loctite, but not superglue!) to the thread to avoid the barrel loosening with use.

Thread the blade wire into the barrel base, but do not insert the plastic cup into the foil barrel. Using pliers or an adjustable spanner, tighten the base onto the foil blade.



Zoom

Pull the wire down gently towards the tang, making sure it is parallel to both sides of the barrel base to prevent the insulation being damaged as it passes through the narrow hole. When the wire has fully passed through and the nylon cup is against the top of the barrel base, hold the blade in a vice and push the cup firmly down into the bottom of the barrel base using a point setting applicator or screwdriver. When pushing the cup into the barrel base pull the wire gently to prevent the wire becoming trapped in the point.



Zoom

Pull the wire straight down the groove and wrap around the tape covering the tang several times, passing the last turn under the tape so that the wire is kept taut in the groove ready for gluing.



Zoom

Re-assemble the point. The weapon should now be checked for continuity and short circuits before continuing by using an ohmmeter or test box.

Glue the wire into the groove by the shoulder using a small amount of THIN super glue and allow to dry.



Zoom

Undo the wire from the tang (the dab of super-glue will keep it in place), and using string or chain, bend the blade like a bow, this will ensure that the wire stays in the groove and that it will not break as easily on the first extreme lunge.

Keeping the point uppermost, drip several drops of the super glue into the groove, taking care to completely cover the wire.

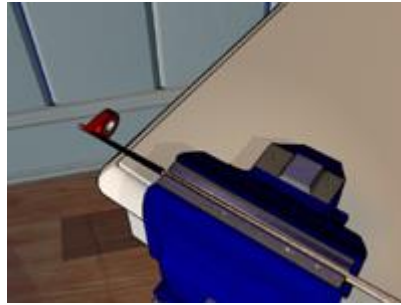
Do not allow the glue to overflow beyond the wire onto the threaded tang.



Zoom

Allow 20 minutes or so for the glue to set completely, keeping the blade point uppermost to prevent the glue from sticking the point together. When completely dry release the string and remove tape from tang and test electrically once more.

Foil blades should then be taped for 15 cm from the tip with insulating tapes.



Zoom

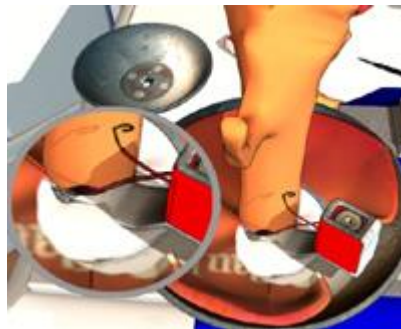
Invert the blade in a vice with the tang vertical with the blade groove facing towards you. Thread a piece of wire insulator onto the foil wire, ensuring that you have sufficient margin for errors(about 10cms should do).

Now thread the guard onto the tang, making sure the blade wire runs inside the indent. Then slide on the inside-guard socket making sure the insulated blade wire is inside the guard socket's hole (otherwise the wire would be trapped between the guard and the socket, and split). Then push the wire flat against the guard so it runs directly away from the blade

Next replace the foil pad with the insulated blade wire running between the guard socket and pad.

Now slide on the handle.

ENSURE THAT THE INSULATED BLADE WIRE PASSES THROUGH THE GROOVE IN THE HANDLE; OTHERWISE THE WIRE WOULD BE TRAPPED BETWEEN THE GUARD AND THE ALUMINIUM HANDLE AND WOULD BREAK. FOR FRENCH GRIPS A SLOT MUST BE MADE BY USING A ROUND FILE



Zoom

After place the nut on the tang, tighten it with an Allen key. If the handle is loose because the tang is too short, try adding a split pin washer. For French grips, slide on the handle, then place the brass inset on the tang, and then tighten the pommel by hand.

Lift the foil pad out of the way so the wire and inside guard socket screw can be seen. Using a match or lighter, burn off the white cotton and underlying insulation that covers the end of the blade wire.

Wrap the exposed copper wire underneath the screw, between the plate and small washer, then tighten the small screw. Remove the excess copper wire and tuck the red blade wire under the guard pad.

Push the pad back into place and check the tightness of all the nuts, and check for the presence of 15 cm of insulating tip tape.

