

HyperBlade Saber Conversion Guide **Anakin ROTS FX Saber Retrofit**

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Congratulations on your purchase of a HyperBlade saber blade kit! This kit is the ultimate saber upgrade for saber collectors, enthusiasts, role players, and costumers.

Your saber kit was manufactured using the highest grade components available, please handle it with care as not to damage any of the components from static electricity.

NOTICE: There is no warranty on kits. It is your responsibility to install the board. Opened kits cannot be returned. Be careful if you use a battery source that is capable of delivering a lot of current. Contact a professional if you need assistance. Hyperdyne Labs assumes no responsibility for the misuse of this kit.

Anakin ROTS FX Conversion

Below is a pictorial guide on how to retrofit your MR Anakin ROTS FX saber with a Hyperblade blade and sound board.

Tools needed:

- Dremel with barrel sander
- Wire cutters/pliers
- Screwdriver
- Epoxy/glue
- Small allen wrench
- Drill

The first step is to actually take apart your FX saber. This disassembly is not covered here, since there are many sites online that go over very detailed instructions on the disassembly. You may want to reference theforce.net FanForce forums or fx-sabers.com for instructions on dismantling your particular FX saber.

Thus we assume you have gutted your MR saber to the following state:

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Here the hilt is completely gutted and the inner sleeve has been removed. Save the cotter pins and all screws you removed from the saber.

Here is the blade sleeve that you will be working with. The new tubing will go inside the sleeve and the blade will be secured similar to the MR original blade.



The first step is to see if your tubing fits inside the blade sleeve. If you are using our DuelCore tubing, it may be a bit tight to fit inside the inner sleeve. Thus you will have to dremel out the inside of the sleeve until you can tightly fit the tubing inside.

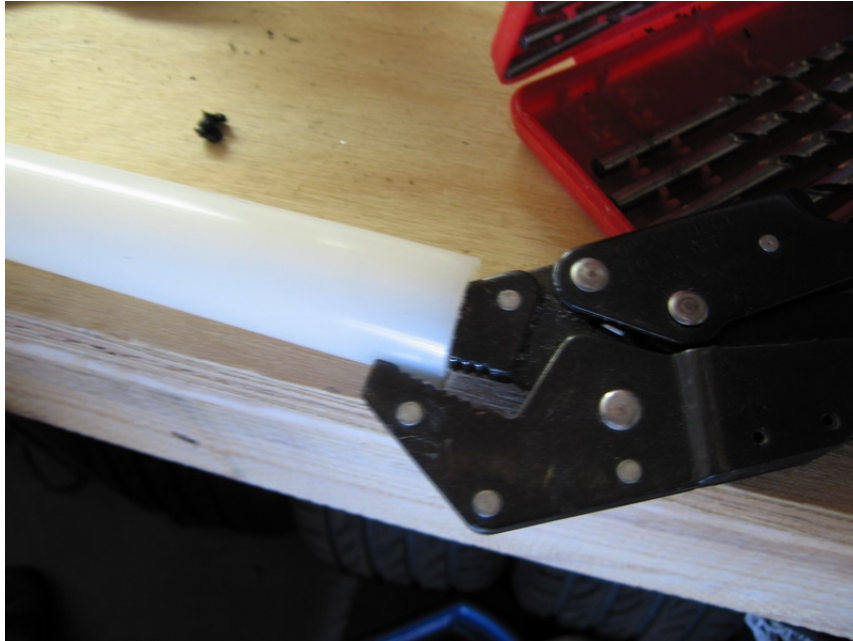
Here you can see the dremeled out area inside the sleeve.



Now fit the outer blade tubing into the sleeve. It will and stop at the raised lip inside the sleeve. Then insert the smaller tubing and line them up.



Next clamp the inner and outer tubing at the top of the blade. This will make sure the inner tube doesn't move around when we drill the pilot holes for the cotter pins.



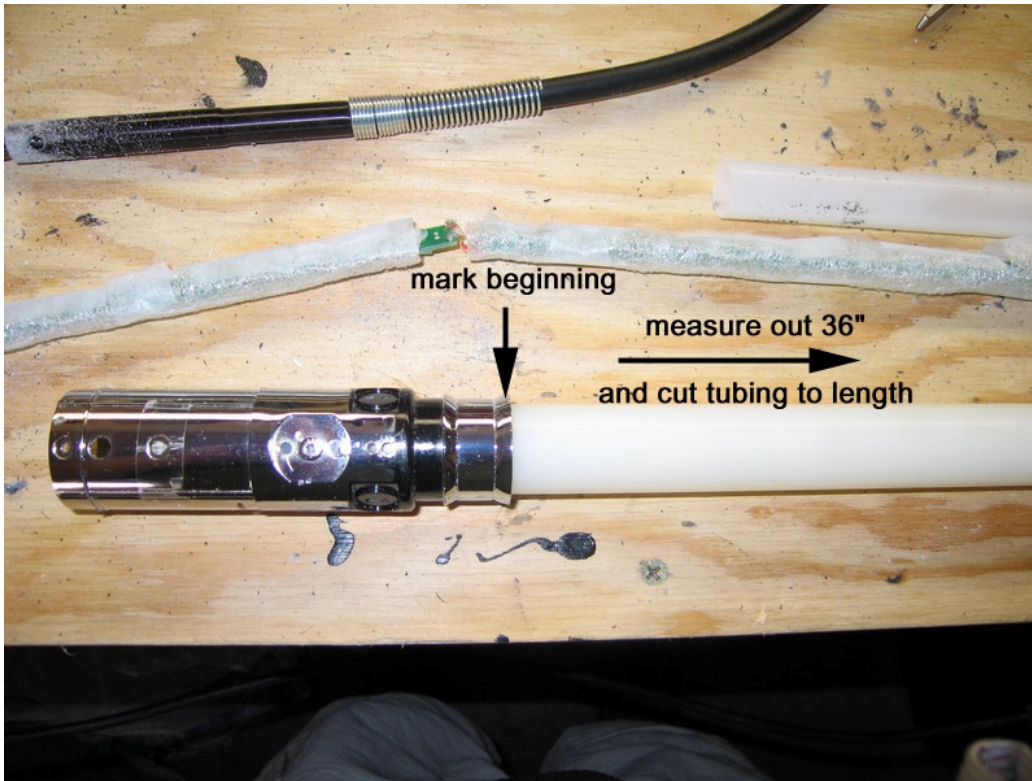
Next, you want to drill holes through the blade in the exact locations that the sleeve cotter pins held in the original MR blade. Drill holes on each side of the sleeve through the blade. Use a smaller drill bit than the holes themselves so you don't destroy the original hole size. *You just want to drill out small pilot holes.*



Here is a closeup of the holes drill out. The cotter pins will be used again to secure the blade inside the sleeve.

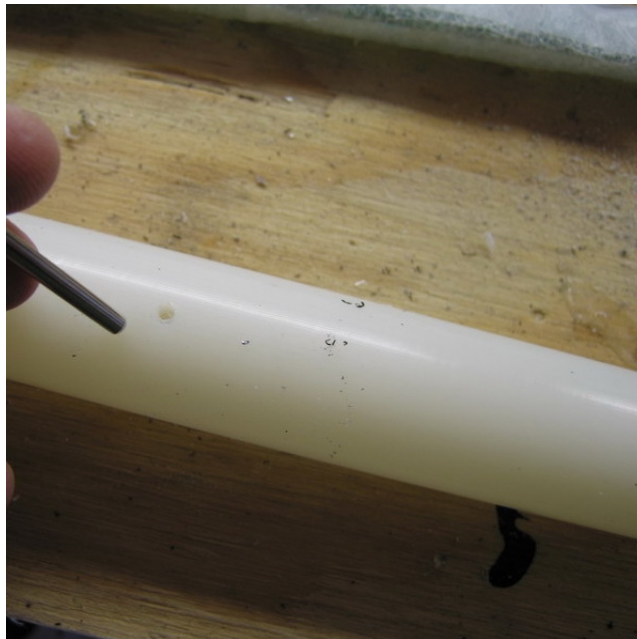


Next you have to cut your tubing so it is 36" long from the emitter opening. Measure from the beginning of the blade (coming out of the emitter) and stop at 36" to the end of the blade tubing. Mark the end of the blade tubing at 36" with a pen or marker. Then remove the blade from the sleeve. Cut off the excess tubing at the end of the blade using a dremel, scroll saw, etc.

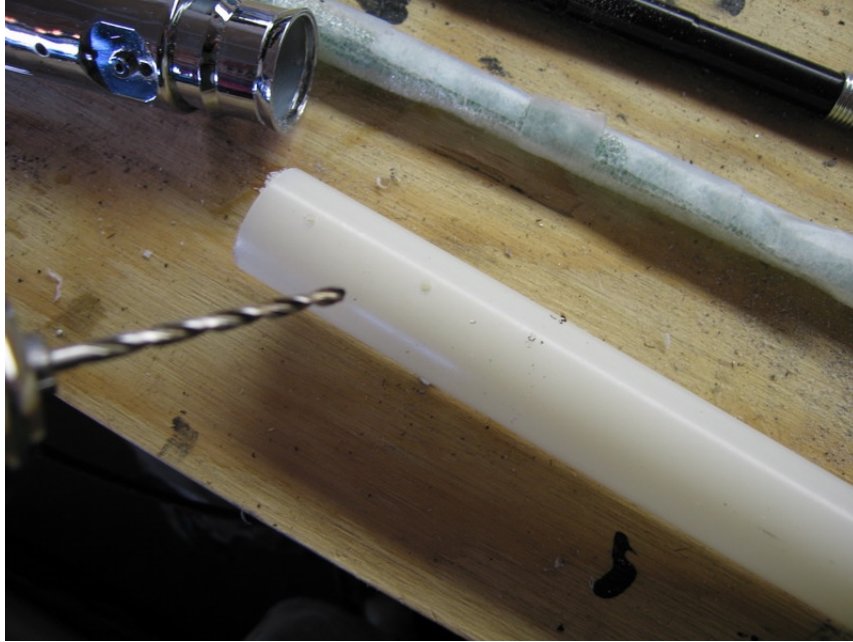


Now your blade stock is the correct length to fit the blade boards.

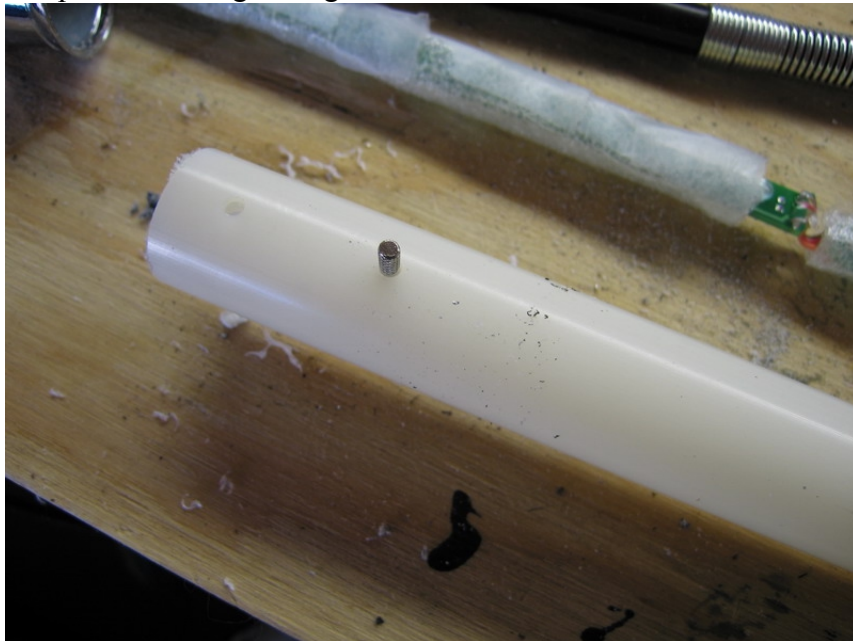
Next line up the holes you just drilled for the sleeve and reclamp the newly cut end of the blade tubing. The cotter pins won't go all the way through yet since we drilled smaller holes than needed.



You will drill out the holes further so the cotter pins pass readily through the blade holes.



Here is a cotter pin now fitting through the drilled hole



Now get your HyperFlex blade assembly that has already been wrapped in the protection foam (the blade kit document goes over foam wrapping the boards). Unclamp the end of

the blade tubes and insert the assembly up into the smaller diameter tubing – making sure not to twist the board while feeding it.



Now you are done and the blade connector will be at the end of the tubing where the holes are drilled.

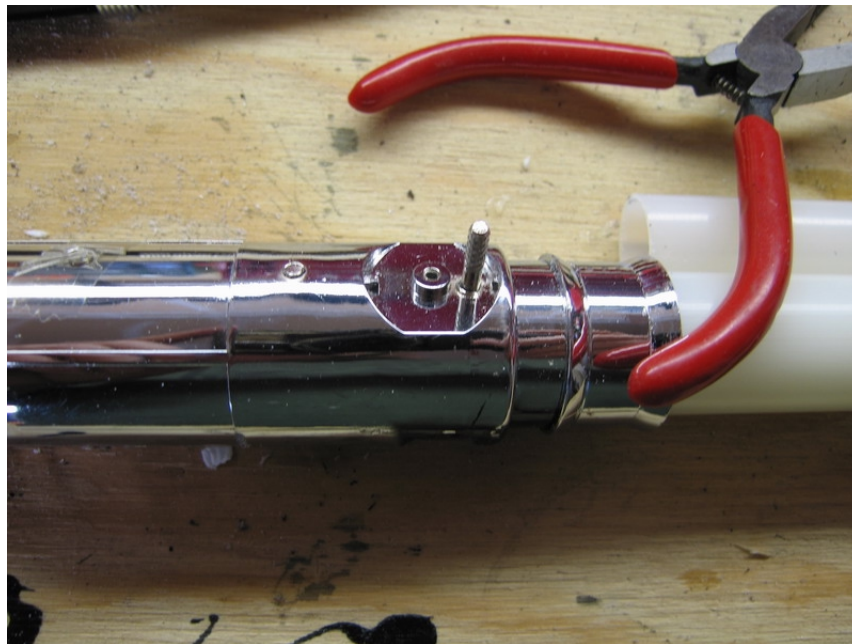


Here is a closeup of the blade and sleeve.

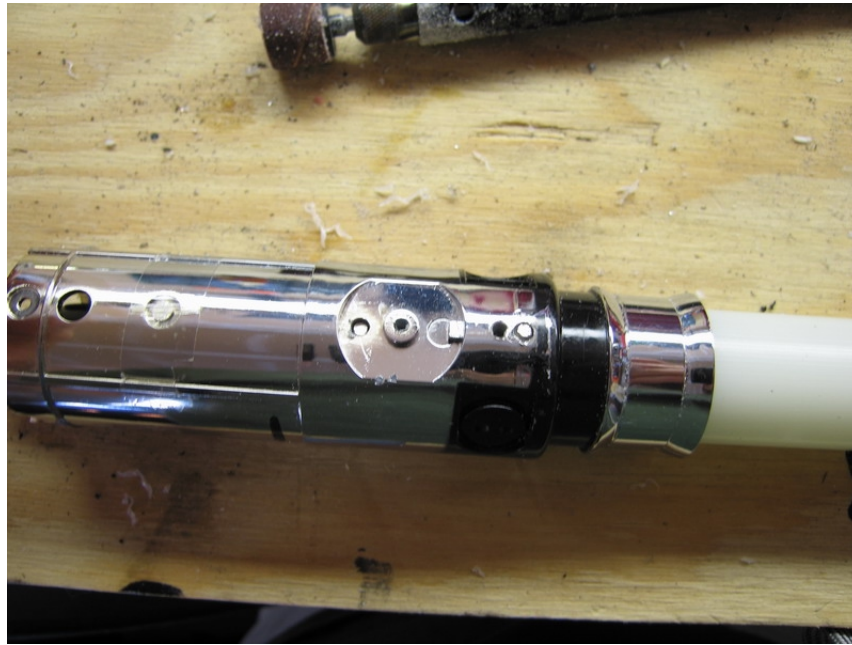


Now line up the drilled holes in the outer and inner tubing. Reclamp the top end of the blade so the holes don't shift between the inner and outer tubes. Insert the blade back into the sleeve and now line up the sleeve and blade holes.

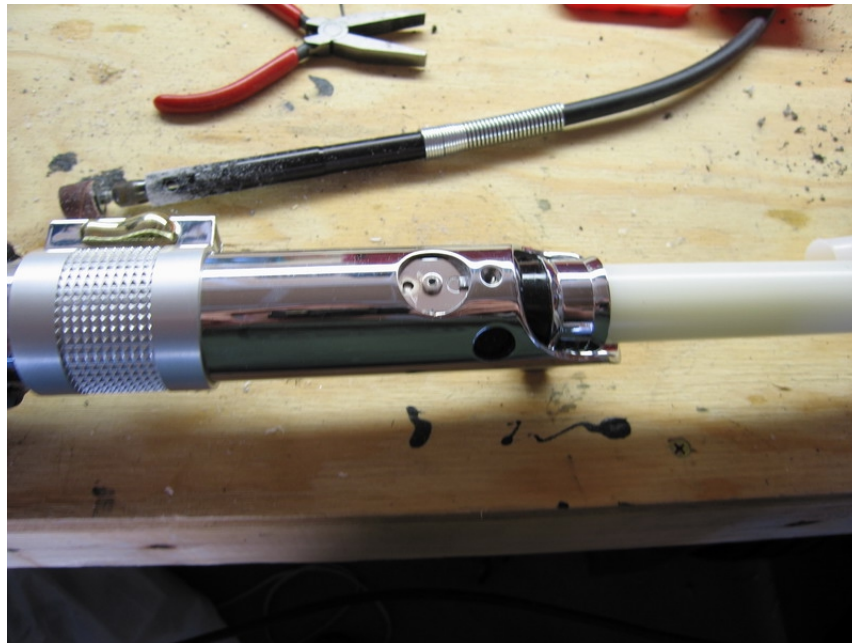
Next insert the cotter pin so it goes through the entire blade. *Make sure the DIN connector cable is not being punctured.* It should move to the side of the inner tube and allow the cotter pin to pass through unobstructed.



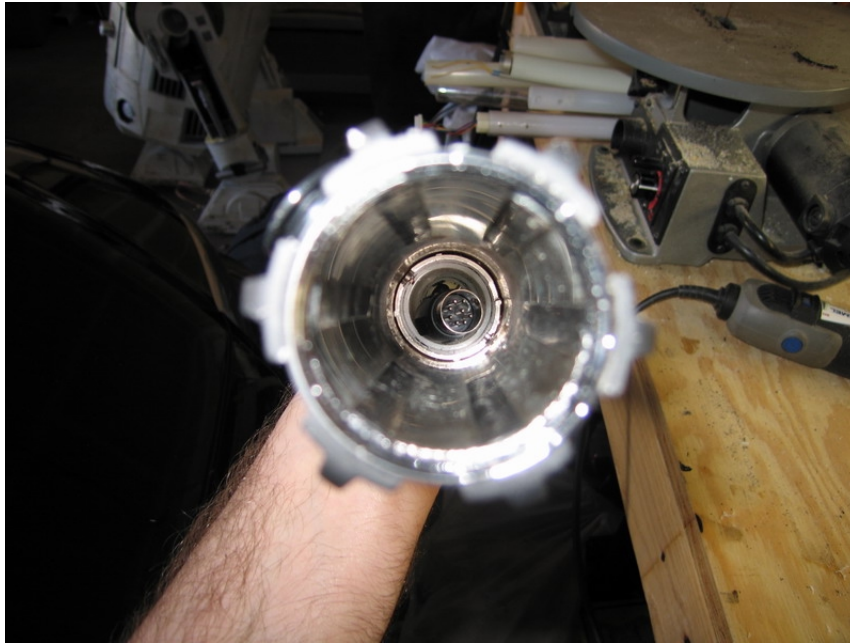
Here is the newly secured blade with both cotter pins re-installed!



Take the blade sleeve and reinsert it back into the Anakin hilt. It should just slide back down the hilt and you can realign the screw holes.



Here is what the hilt looks like looking up through the bottom. You can see the blade connector.



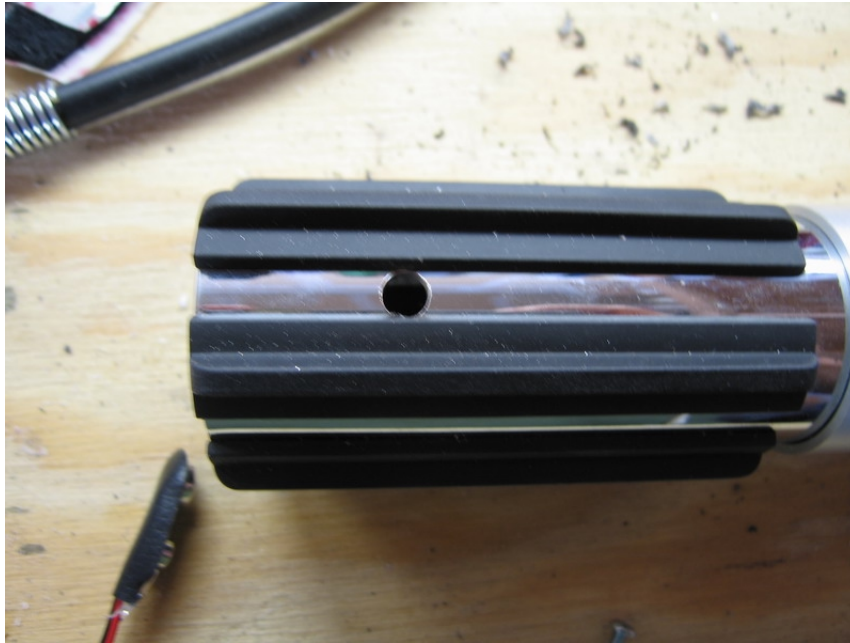
You are now 60% done with the retrofit!

Take out the sleeve again.

Now we need to do some work on the hilt to fit the switch and the recharge jack. First you want to remove the Covertec clip, we will use that hole for the recharge jack.

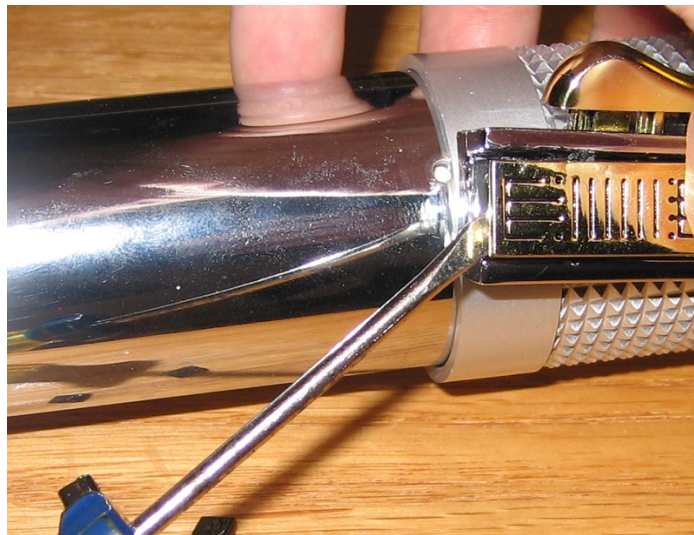


Now drill out the existing hole so it will fit the recharge jack (if you are using our battery system).

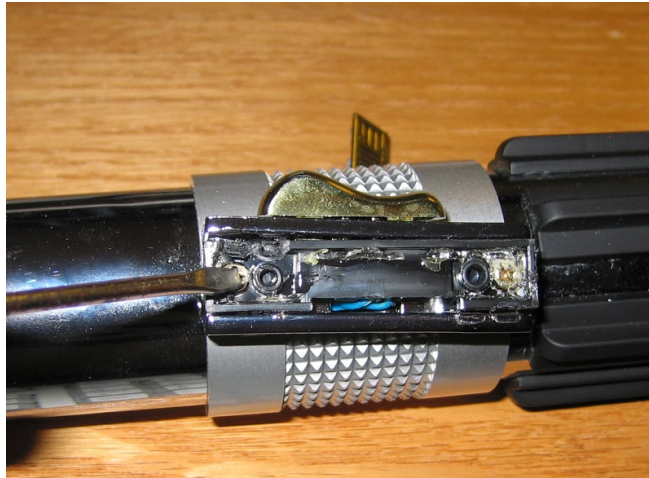


Next you want to remove the original switch located on the side of the activation box that is used for the on/off. *NOTE: You don't have to install the button here but we found it to be convenient.*

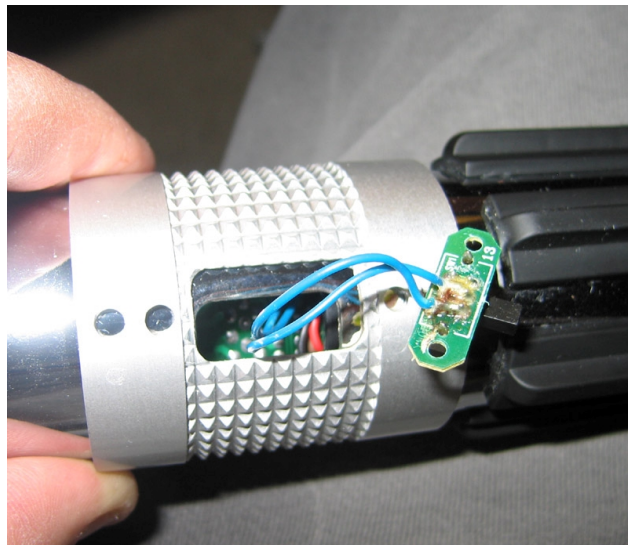
Take a small screwdriver and pry the faux circuit board that sits on top of the activation box.



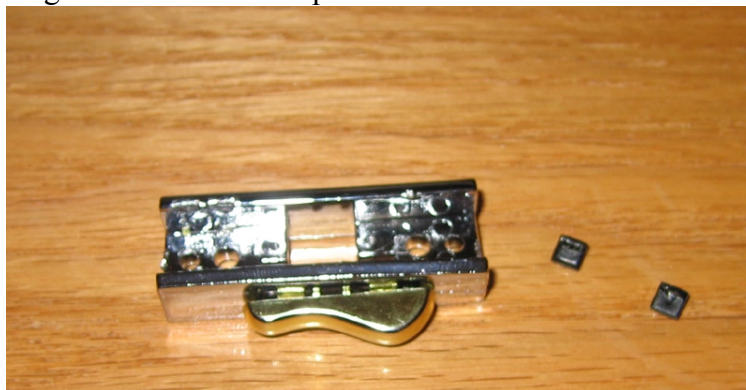
Now you will see 2 screws on the inside of the activation box.



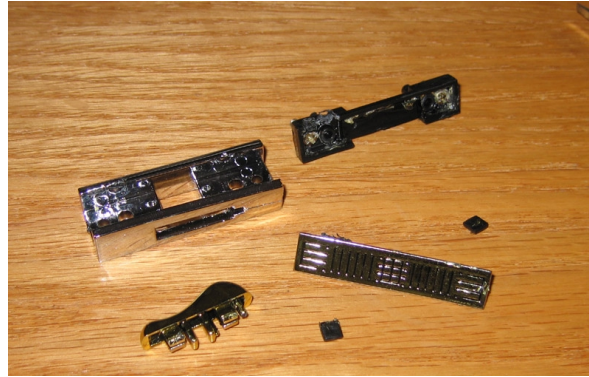
Remove them and the box will come free from the saber hilt. Remove the 2 tiny screws holding the slide switch in place.



You can also remove the toggle switch from the box and then take out the small black spacers holder the gold switch cover in place



Now you can remove the gold cover from the activation box. Here are all the parts from the disassembly



You may choose to extend the button wires on the LED driver board, as you want to feed the switch up through the hole where the activation box sits.

Install the momentary pushbutton from the Hyperblade driver board inside the activation box and then reassemble the activation box. Screw the box back to the hilt.

You can epoxy the switch in place first before doing any of the other electronics install. Here is a pic of the result:



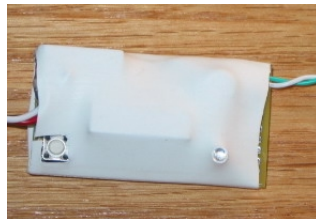
Alternate button location:

If you want to keep the gold lever switch in place, you can drill a small hole in the opposite side of the activation box and install the switch there. This is a more clean button install:



Next make sure you protect the circuit boards with tape or heat shrink wrap. You don't want a bare board inside the hilt, as the metal can short out the board and destroy it!!

You want to use heat wrap to cover each board like so:



Next if you are using the optional sound board then connect it up to the driver board.

Then connect up the HyperBlade driver board to the blade connector.

To connect your blade assembly to the driver unit, simply hook together the 2 DIN connectors. The DIN connectors are keyed and can only be plugged in one way. Be careful not to force the connection, rotate one of the plugs until it engages the other connector, then push gently to make a firm connection. Here is a pic of the connection:



Now take the sleeve and feed it back down into the outer metal hilt (feed from the top). The boards will end up being at the bottom of the hilt. Now you are ready to mount these inside the hilt.

The battery and driver board can be sandwiched together and mounted up into the FX hilt. It will be a tight fit but you should be able to move the board and battery far up into the hilt near where the sleeve ends. Also make sure to connect the battery 9V snap to the driver board's 9V snap. This connects the battery to the circuit.

Next install the recharge jack into the drilled hole. Use the tap washer to secure the jack from the outside:



WARNING: DO NOT look directly at the LEDs on the Hyperflex blade with unshielded eyes or when not installed in the blade tubing. Directly looking at the LEDs may damage your retina.

Now test out the pushbutton to make sure the blade lights up. If it does then great! If not then you have a short or other electrical problem. Take out the boards, test them outside the hilt until you get them working, and try again.

If you are using our optional sound board, then install it inside the hilt right underneath the recharge jack. You can see the recharge jack protrudes into the inside hilt space. The sound boards are skinny enough to fit around the jack.

In-hilt sound board:

If you are using the in-hilt sound board w/ vib motor and mini amp, then you will have to install those around the jack as well. The fit will be tight but is doable.

Bluetooth sound board:

If you are using the Bluetooth sound board, only install that board and make sure the antenna is facing down towards the bottom of the hilt. This is imperative for good reception (the antenna is on the same side with the 4-pin gray cable header).

Here is the max amount you can fit inside the FX hilt (in-hilt sound board, mini amp, vib motor, speaker)



Now take the existing endcap and fit the speaker through the hole in the cap. Screw the cap back on. You can then pressure fit the speaker into the hole. You can either use some tape to secure it or glue the speaker down. You can even put some scotch tape on the sides of the speaker so the pressure fit becomes quite tight.



YOU ARE DONE!!!

You can now power your saber on and off using the momentary pushbutton. While your saber is not in use, you can use the 1/8" key plug as an on/off mechanism so the battery doesn't run down. Insert the key to remove power physically from the circuit. Once you remove the plug, power is applied to the circuit and the saber will become active to button presses!

***WARNING:** DO NOT look directly at the LEDs on the Hyperflex blade with unshielded eyes or when not installed in the blade tubing. Directly looking at the LEDs may damage your retina.*

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