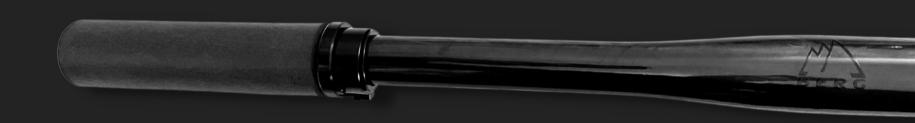
BERG



HOW TO INSTALL ZIRBEL WEOI (AXS) ON BERG HANDLEBAR

A STEP-BY-STEP GUIDE

DISCLAIMER

THE FOLLOWING GUIDE DESCRIBES THE WAY I INSTALLED THE AXS MODULE AND THE ZIRBEL WIOI SHIFTER ON MY BERG HANDLEBAR. I USED THE METHOD WITHOUT THE BLIPBOX, WHERE THE SHIFTER CABLES ARE DIRECTLY SOLDERED ONTO THE PCB FROM THE AXS SHIFTER. THERE ARE MANY OTHER AND EVEN BETTER WAYS TO DO THIS, THAN I DID. HOWEVER, THIS WAY WORKED BEST FOR ME. IN ADDITION, I USED THE OEM BATTERY WITH A MODIFIED BATTERY HOLDER. OF COURSE, YOU CAN USE ANOTHER TYPE OF BATTERY. THEREFORE I WOULD RECOMMEND YOU TO READ THE INSTALLATION GUIDE ON THE OFFICIAL ZIRBEL WEBSITE.

KEEP IN MIND, THAT THIS GUIDE IS JUST AN ORIENTATION OR INSPIRATION. YOU CAN ALWAYS USE YOUR OWN CREATIVITY OR SOLUTIONS FOR THIS BUILD. THE ORIGINAL IDEA FOR THIS SOLUTION CAME FROM GUSTAV GULLHOLM (DANGERHOLM).

FURTHERMORE, BERG AND I ARE NOT LIABLE FOR ANY DAMAGES OCCURING DURING YOUR MODIFICATION. ONLY DO THIS MODIFICATION AT YOUR OWN RISK.

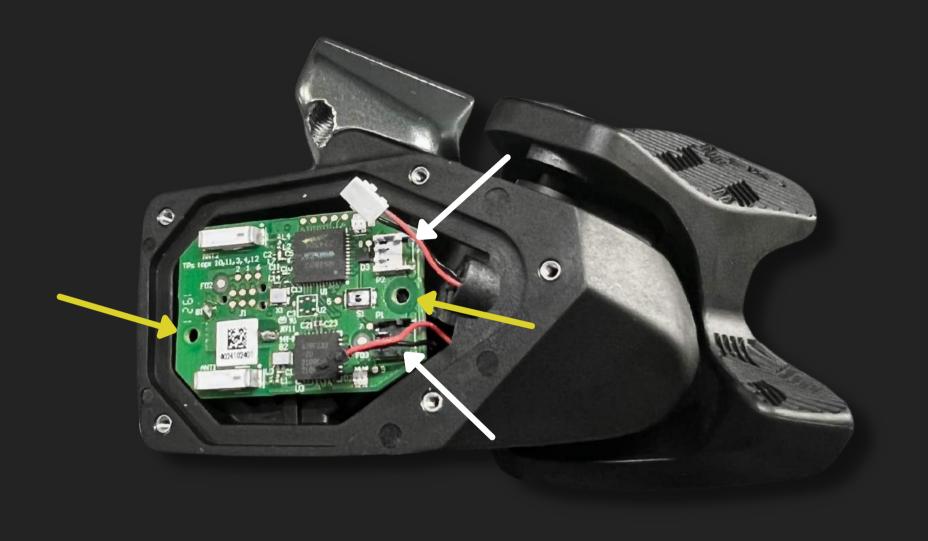
I HIGHLY RECOMMEND TO USE ENOUGH INSULATION MATERIAL FOR THE WIRES. IF YOU HAVE NOT SOLDERED ANYTHING BEFORE, DO NOT WORRY. I DID NOT EITHER. JUST WATCH A SOLDERING HOW-TO VIDEO. THAT IS THE WAY I DID IT.

AT THE END OF THIS GUIDE YOU WILL FIND A FAQ AND A LIST WITH USEFUL ITEMS FOR INSULATION.

HAVE FUN! - CannondalePat

HERE IS WHAT YOU NEED

- SOLDERING IRON
- SOLDER
- ENOUGH CABLES
- BATTERY
- BATTERY HOLDER
- STRIPPER PLIERS
- SCISSORS
- INSULATION MATERIAL (CHECK LIST AT THE END)
- SMALL SCREWDRIVERS (CROSS & TORX)
- NOISE INSULATION



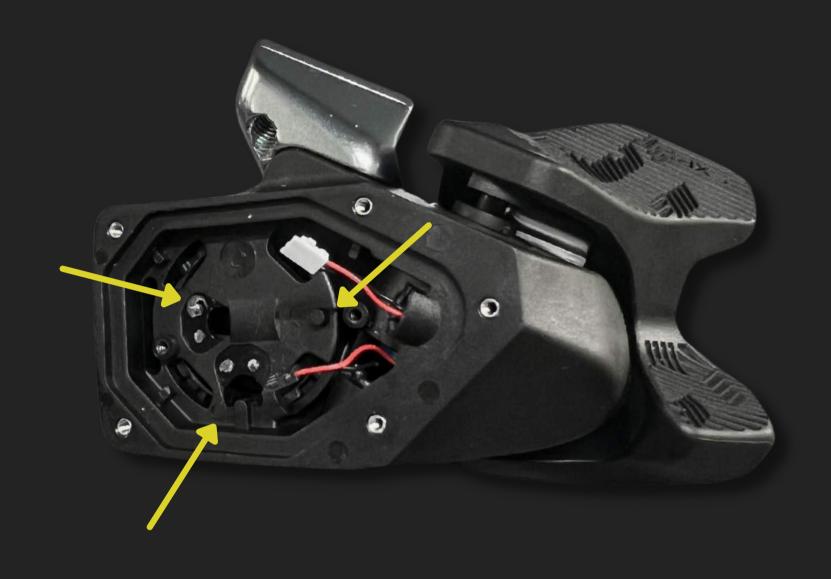
UNSCREW THE TWO BOLTS

UNPLUG THE TWO CABLES FROM THE PCB



GENTLY PRY OUT THE PCB

BREAK THE 3 PLASTIC LINKS
UNDER THE PCB



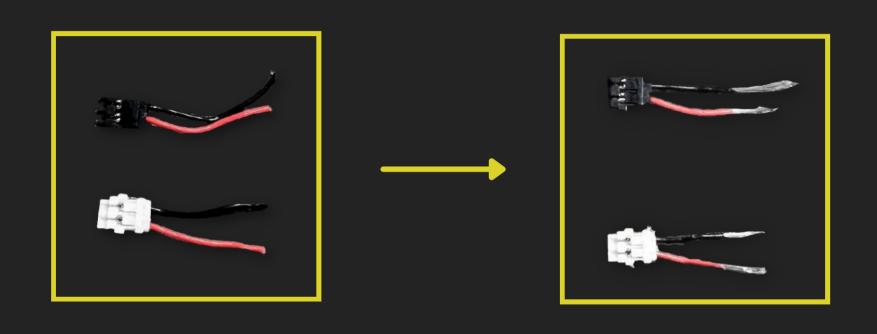
THE PCB IS FIXED TO THE BODY WITH THESE 3 PLASTIC LINKS

THEY BREAK UNDER PRESSURE



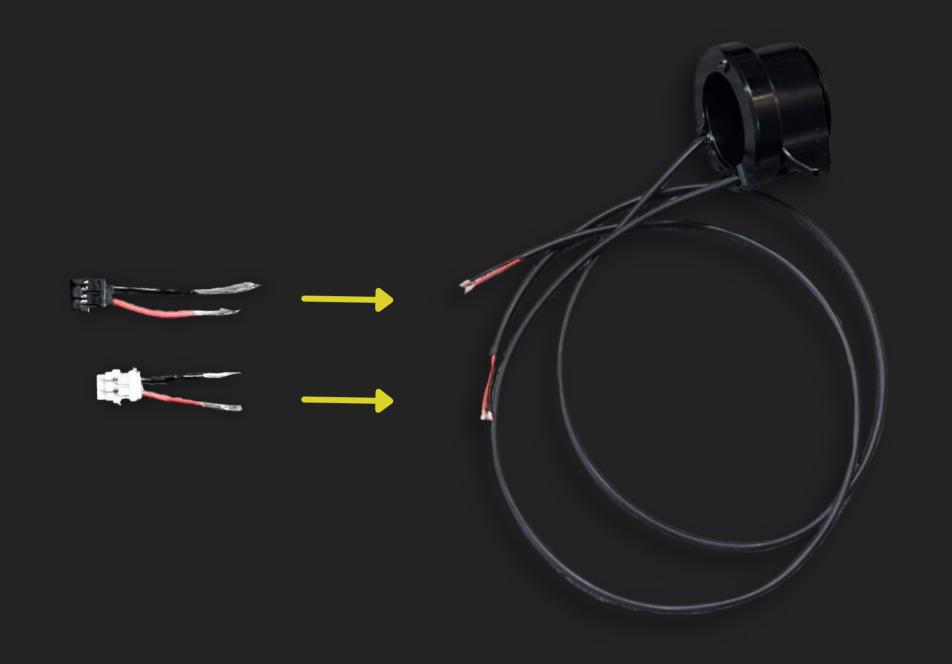
CUT OFF BOTH CABLES

ATTENTION: THE LONGER THE CABLES THE BETTER



CUT OFF THE INSULATION

BE CAREFUL TO NOT CUT THE WHOLE WIRE



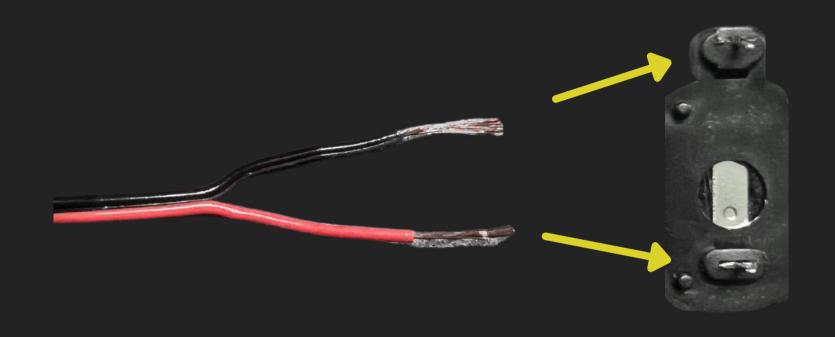
SOLDER THE CONNECTOR WIRES ON THE TWISTER WIRES

YOU CAN USE THERMOPLAST FOR INSULATION

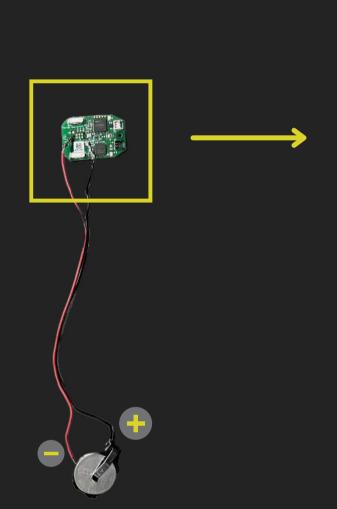


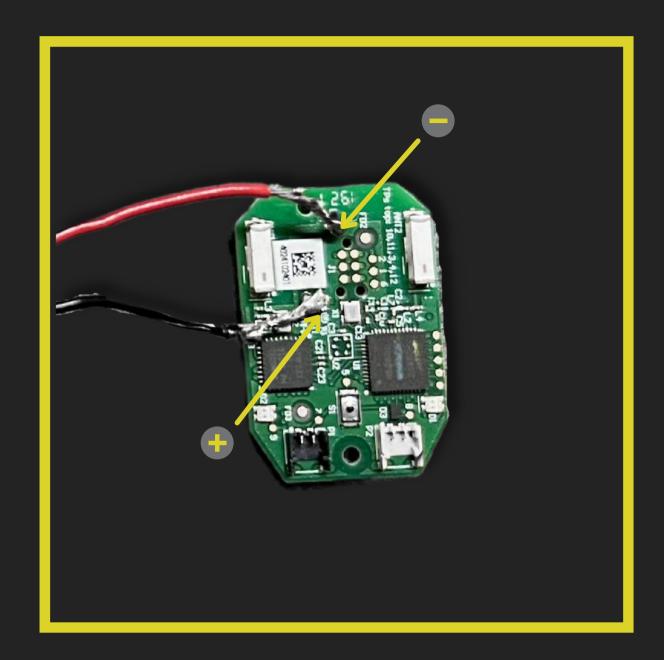
CUT THE SIDES OF THE BATTERY HOLDER

IT SHOULD FIT INTO THE BAR



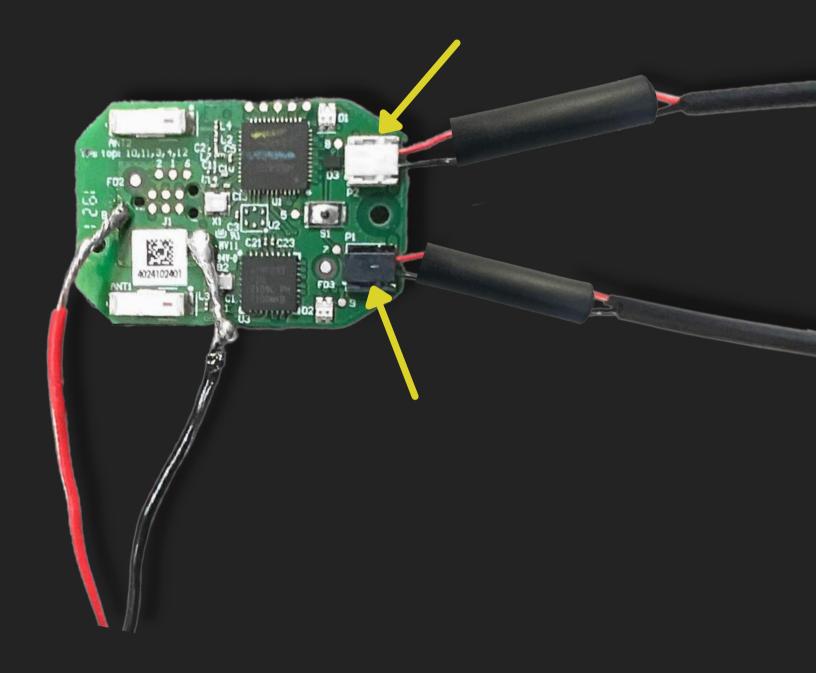
SOLDER THE POWER WIRES ONTO THE CONTACTS OF THE BATTERY HOLDER





SOLDER THE POWER WIRES ONTO THE PCB POWER CONTACTS

MIND THE ANODE & CATHODE



PLUG THE CABLES INTO THE CONNECTORS

CHECK IF THE SHIFTER WORKS



OPTIONAL

COAT THE PCB & CABLES WITH LIQUID RUBBER (PLASTIDIP)



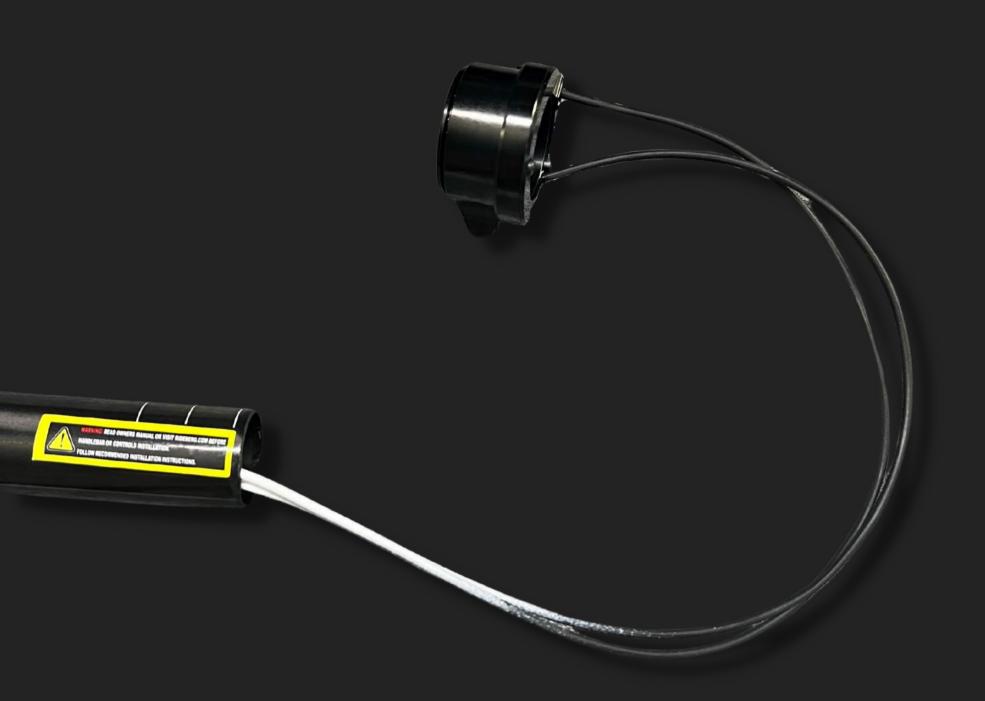
ADD ADDITIONAL INSULATION

E.G. INSULATION TAPE OR THERMOPLAST



GENTLY PUSH THE PARTS INTO THE BAR

IF THE PARTS HAVE PLAY, ADD NOISE INSULATION



WHEN EVERYTHING SITS PROPERLY, PULL IT OUT AGAIN

PUT THE SHIFTER ON THE DESIRED POSITION



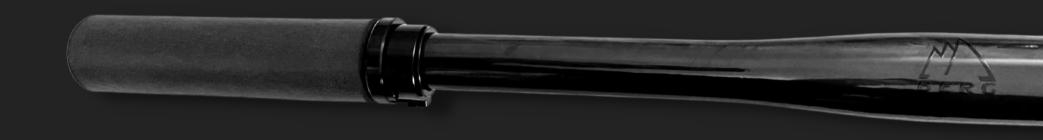
PUSH THE PARTS BACK IN

ROUTE THE CABLES TO THE BAREND AND FIX THEM



CUT A NOTCH INTO YOUR BAREND PLUG FOR THE CABLES

BE SURE TO AVOID THAT THE CABLES ARE SQUEEZED



CONGRATULATIONS!

YOU HAVE SUCCESSFULLY COMPLETED THE INSTALLATION



MY PCB DOES NOT FIT INTO THE BAR. WHAT CAN I DO?

YOU CAN SLIGHTLY SAND THE EDGE OF THE BOARD WITH FINE SANDPAPER

IS THIS BUILD WATERPROOF?

WITH MY BUILD, I CANNOT GURANTEE YOU 100% WATERPROOFNESS. HOWEVER, PLASTIDIP STATES THAT THEIR COATING IS IP67 WATERPROOF. YOU CAN ALSO ADD MORE INSULATION TO YOUR BUILD. SOME PEOPLE PUT THER PARTS INTO BALLONS OR ADD SILICONE BUSHINGS TO THEIR BAREND PLUGS. CHECK THE FOLLOWING LIST FOR MORE INSULATION POSSIBILITIES.

HOW CAN I REDUCE THE NOISE IN THE HANDLEBAR?

I RECOMMEND TO USE SOME SORT OF TEXTILE TAPE, THIN FOAM OR WADDING.

HOW LONG WILL THE OEM BATTERY LAST?

SRAM STATES A LIFESPAN OF 2 YEARS, DEPENDING ON USAGE.

CAN I STILL USE THE AXS BUTTON AFTER THIS MOD?

YES, EVEN WITH MY RUBBER COATING THE AXS BUTTON IS WORKING TO 100%.

MY PARTS ARE STUCK IN MY HANDLEBAR. HOW CAN I GET THEM OUT OF?

BE SURE TO NOT PULL THE CABLES TO HARD, THEY MIGHT BREAK OR DAMAGE THE CONNECTORS. USE LONG-NOSE PLIERS TO GENTLY PULL THE PCB OUT. BE SURE NOT TO DAMAGE ANYTHING ON THE PCB WHILE GRABBING IT. I DO NOT RECOMMEND THE USAGE OF TWEEZERS.

INSULATION & TIPS

- INSULATION TAPE
- THERMOPLAST
- LIQUID RUBBER COATING (PLASTIDIP)
- SILICONE CONFORMAL COATING (THX TO ALEIX)
- CORROSIONX (THX TO ALEIX)
- BALLOON
- SILICONE BUSHINGS FOR THE BARENDS

FOR A MORE CONVENIENT INSERTION AND EXTRACTION OF YOUR INTERNALS, YOU CAN FIX THE PCB AND THE BATTERY ON A SMALL BOARD OR PIECE OF METAL. SO YOU HAVE ONE SOLID PIECE YOU CAN PULL OUT OF YOUR HANDLEBAR WITHOUT DAMAGING CABLES ETC.