

## INSTALLATION INSTRUCTIONS - PCB version 2

This tutorial is designed to aid you in the installation of a Rapid Fire microchip. This installation requires soldering several wires to small confined spaces. We do not advise attempting this installation if you are a beginner at soldering. We recommend reading through all the instructions and understanding them before beginning your installation.

**Please proceed with this installation at your own risk. We will not be held responsible for any damage to yourself, your controller, your Xbox 360 console or any other equipment.**

### Tools Needed

Soldering Iron with rosin core solder.

Hot Glue gun with glue sticks.

Wire cutters and wire strippers (that can strip 30ga wire).

Small Phillips head screwdriver. (for wired controllers)

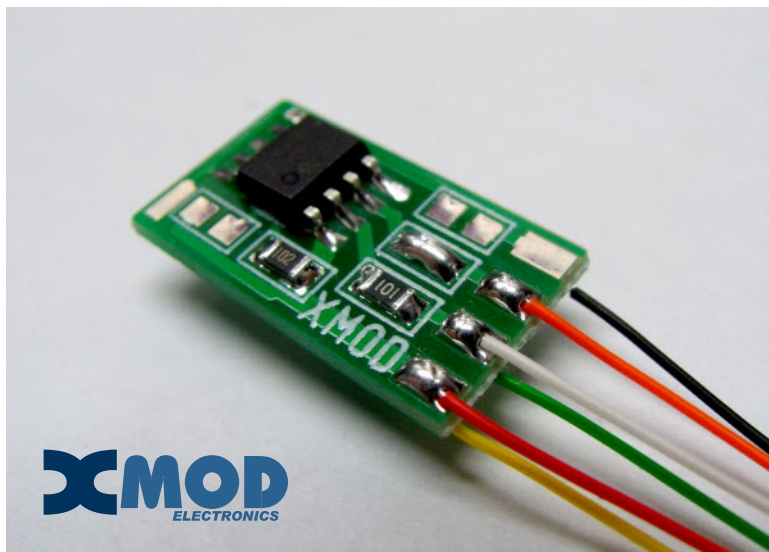
5/32 drill bit

Torx T8 Security screwdriver.

(You may also use a 2.0 precision flathead screwdriver if you can't find a security torx screwdriver).



### PCB version 2



**TACTILE SWITCH**

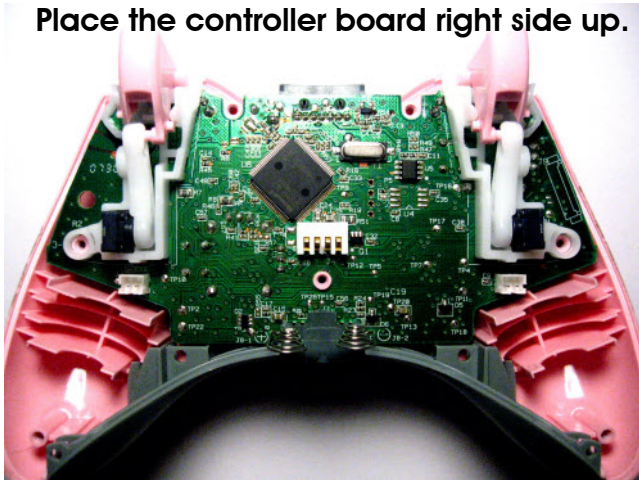


Remove the (7) security screws with the T8 security screwdriver.

Keep the controller upside down and remove the back of the controller shell.

Take the board out of the other half of the shell and place the front half of the shell to the side.

Place the controller board right side up.



**XMOD**  
ELECTRONICS

# Wireless Controller Identification

With the back cover removed it is easy to identify the old and the new style controllers. See the images below.

In the NEW style-CG Controller, you will see a single chip rotated 45 degrees



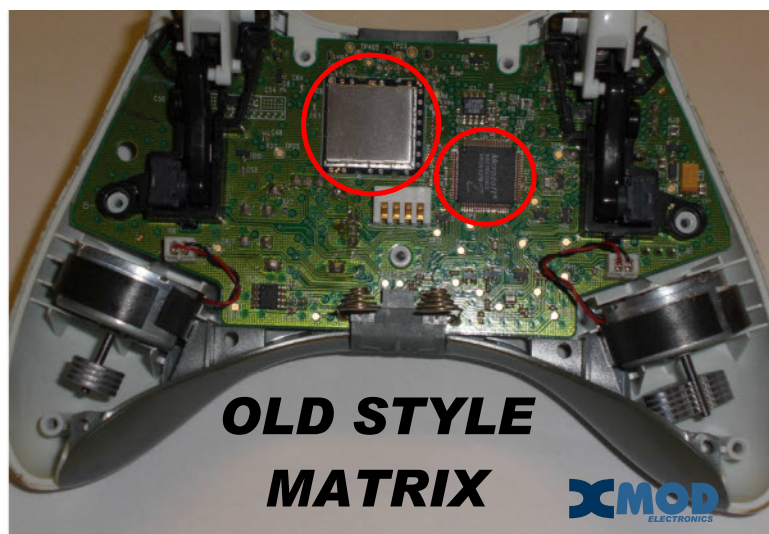
**NEW STYLE - CG**

In the NEW style-CG2 Controller, you will see a single chip .

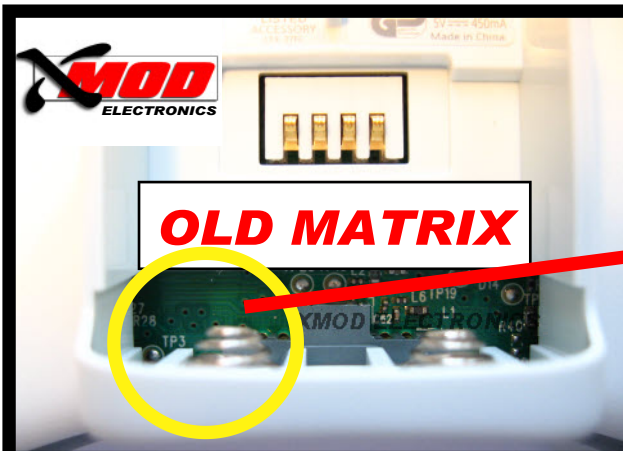


**NEW STYLE - CG2**

In the old style controller There are two chips. Some controllers will not Have the silver shield over the larger chip.



**OLD STYLE  
MATRIX**



## OLD MATRIX-1 WIRELESS BOARD

From the battery door area you can see that there is **NO CAPACITOR** on the left side, while the other two versions do have a capacitor.



## NEW CG WIRELESS BOARD

From the battery door area you can see the **CAPACITOR** is horizontally oriented.



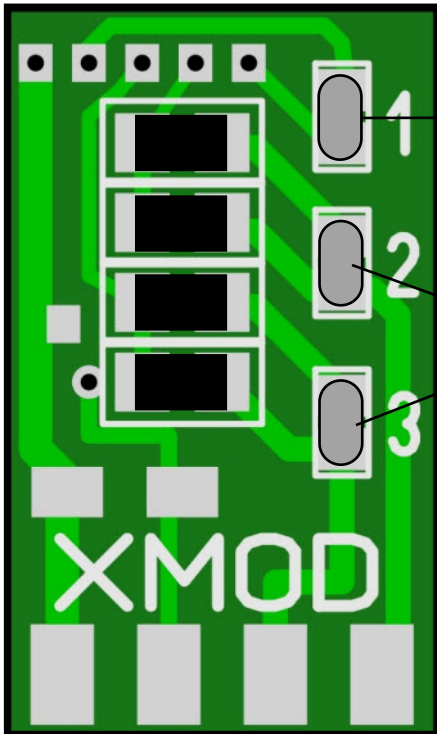
## NEW CG2 WIRELESS BOARD

From the battery door area you can see the **CAPACITOR** is vertically oriented.

# MOD CHIP BOARD SETUP *for New or Old Style*

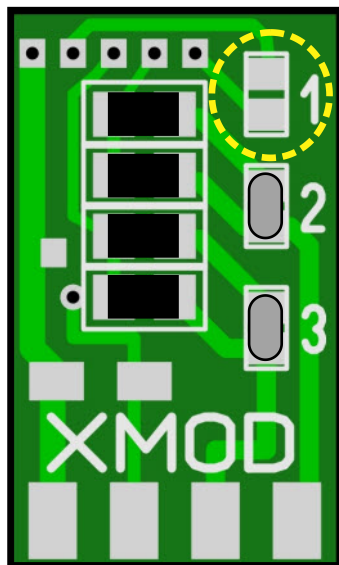
With the help of an soldering iron carefully clean/wipe the solder of the jumpers marked as :

- 1** (for CG-CG2 boards only)
- 2 & 3** (for MATRIX boards only)

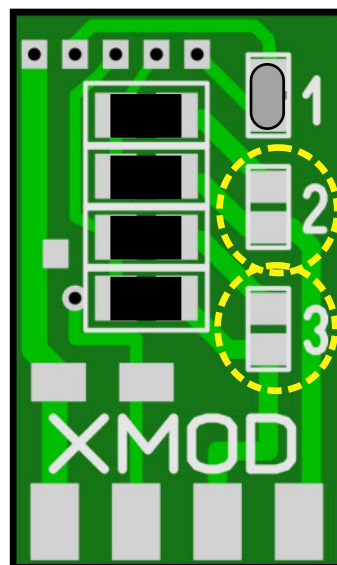


Clean/unbridge this connection for **New CG-CG2** Boards only.

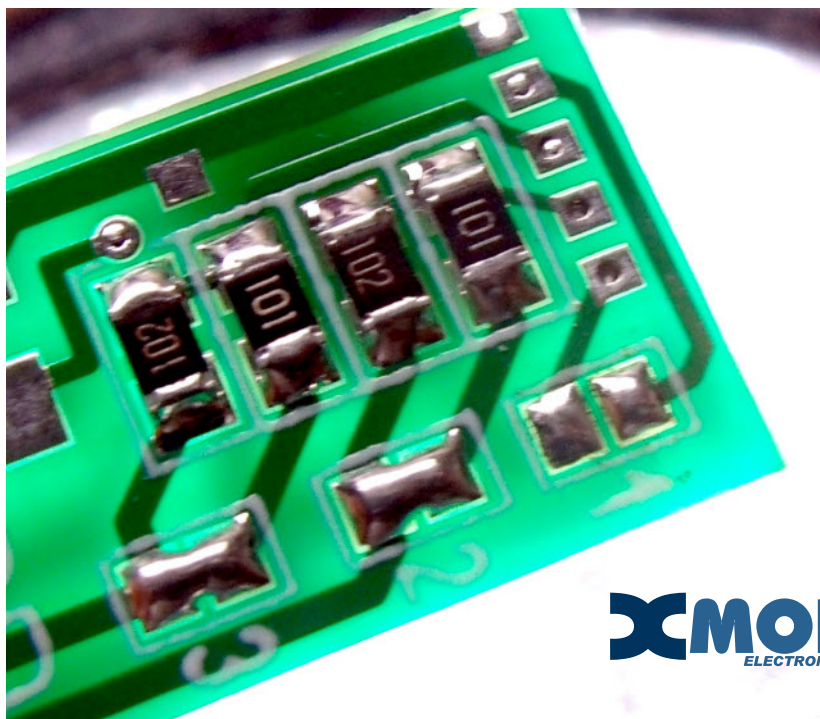
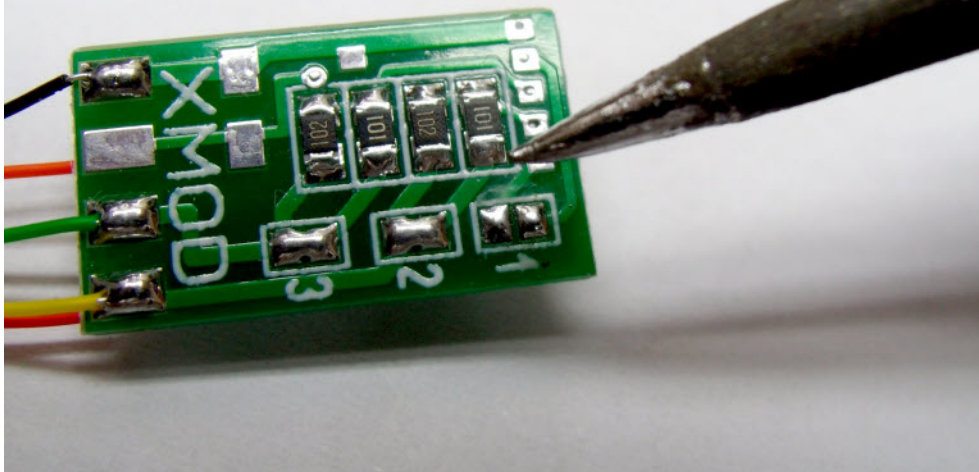
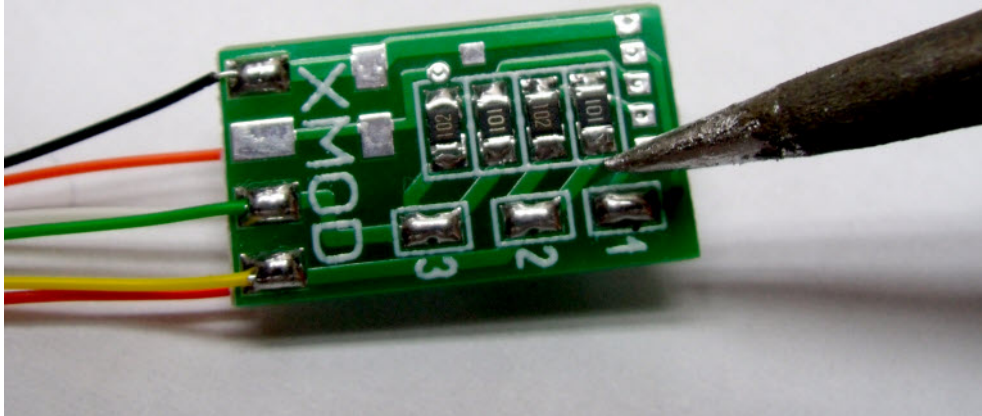
Clean/unbridge these connections for **Old Matrix** Boards only.

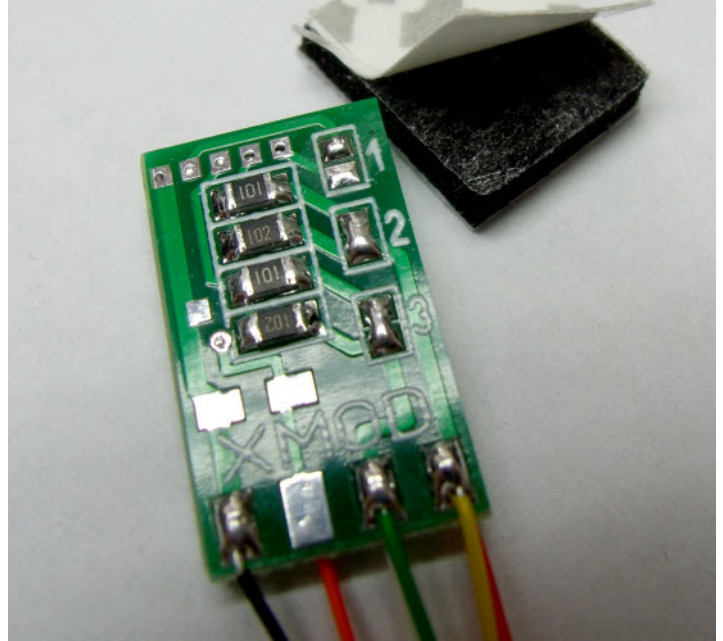
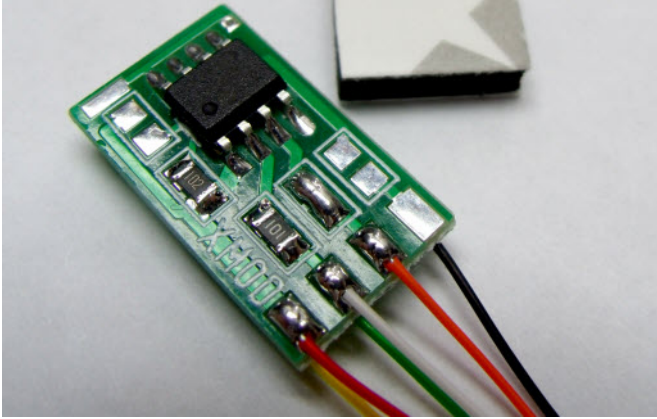


**NEW STYLE  
CG -CG2**

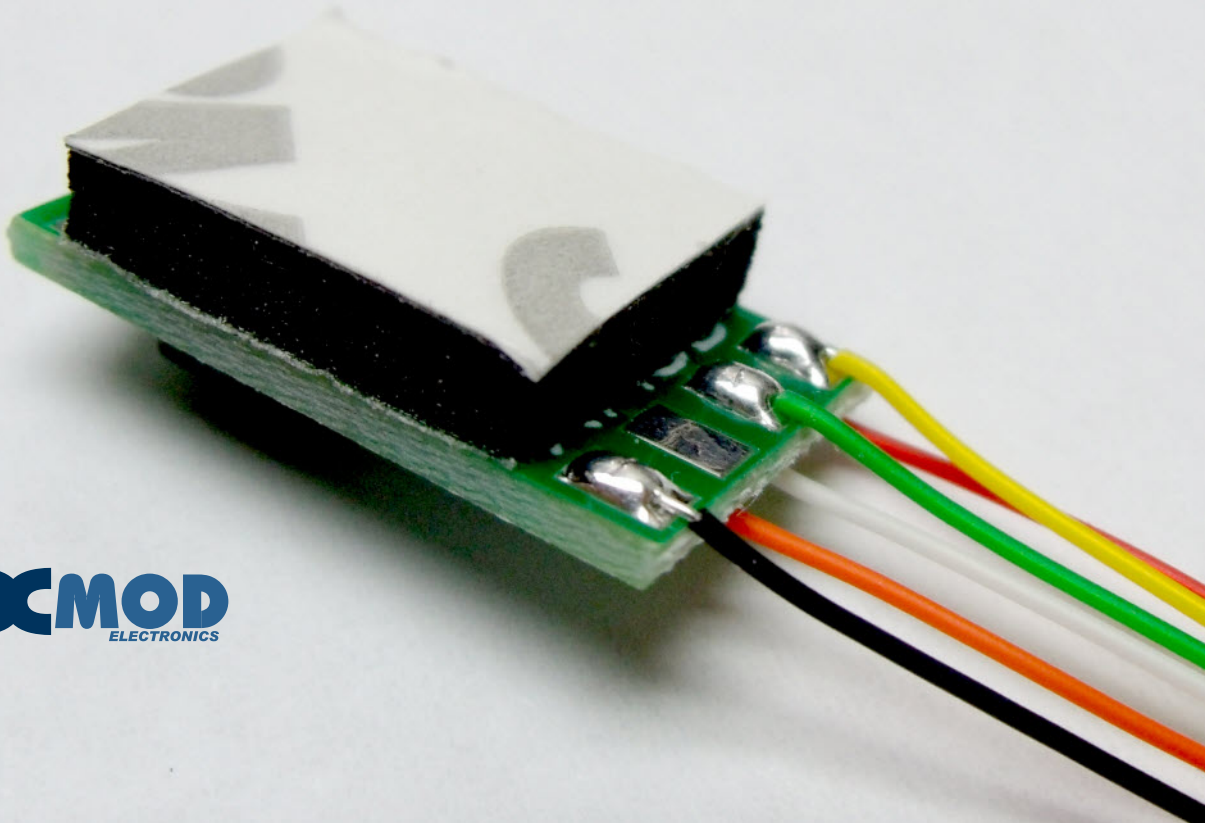


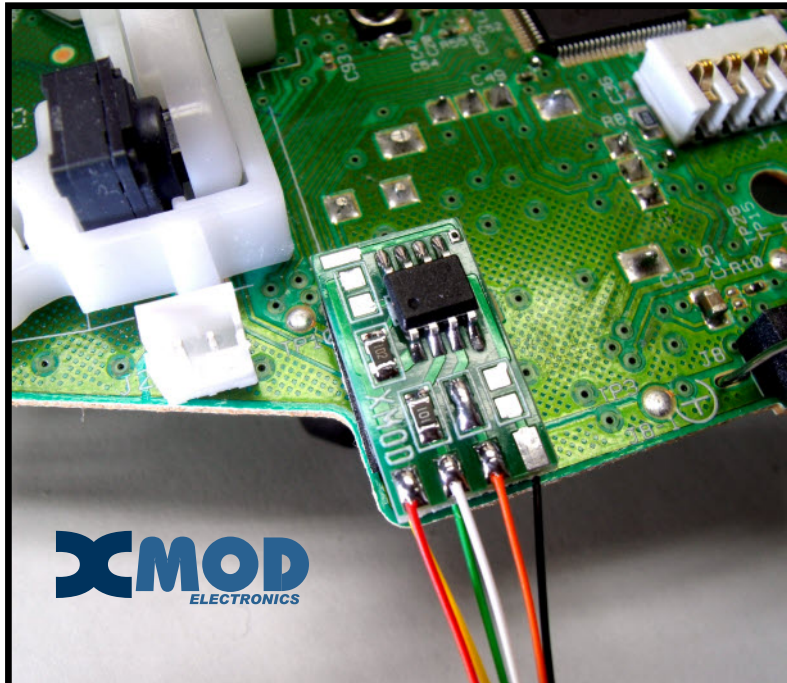
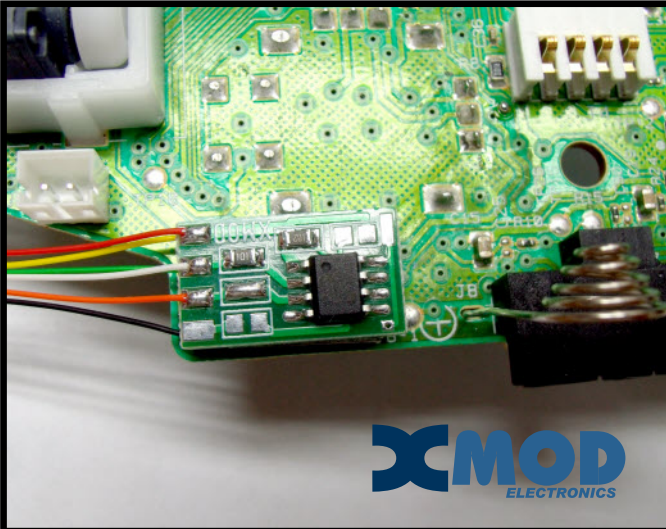
**OLD STYLE  
MATRIX**





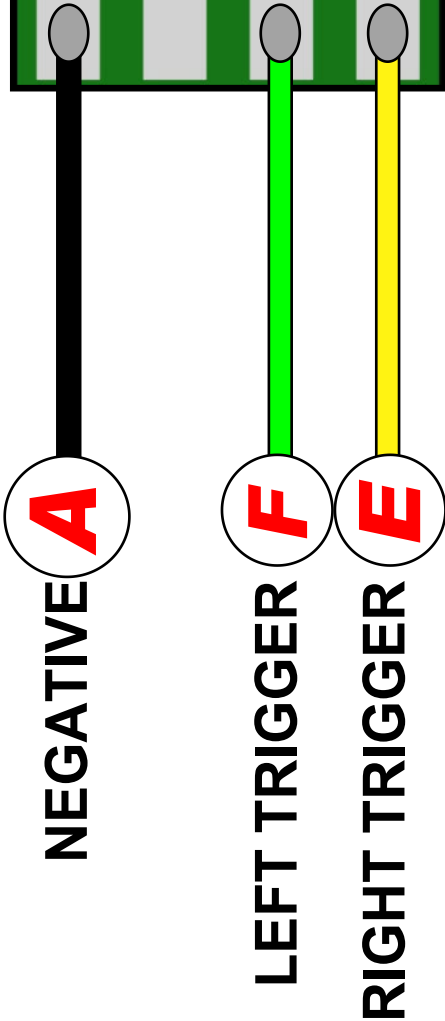
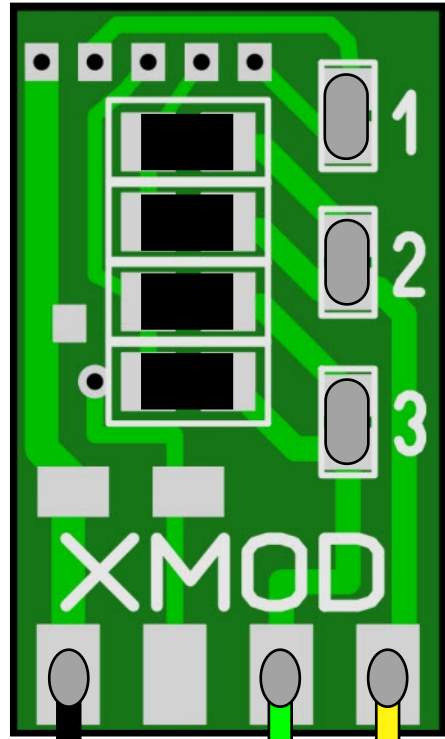
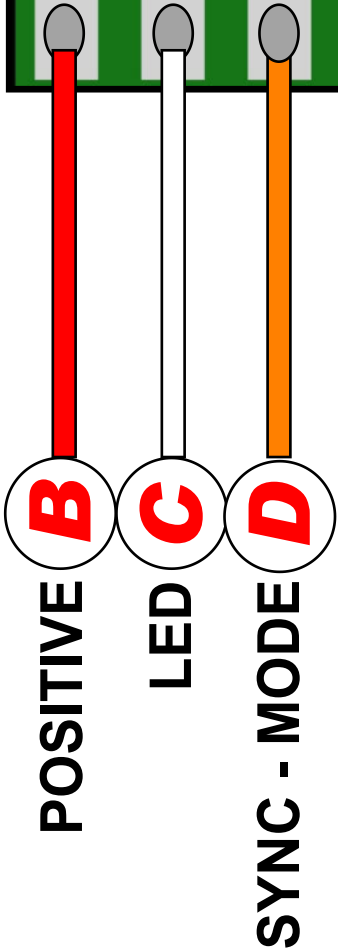
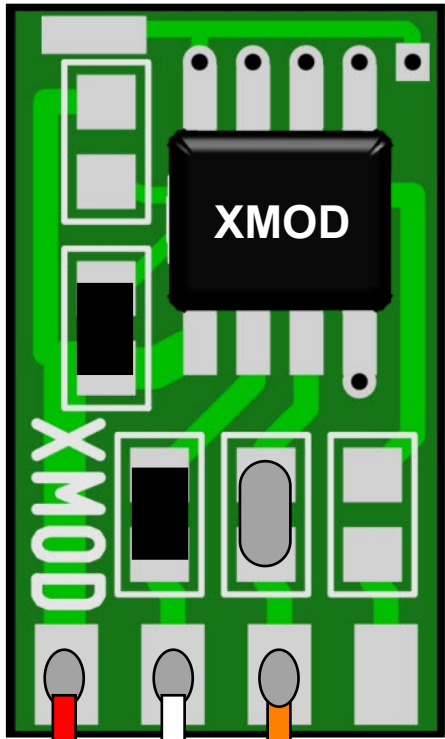
**After** setting the mod chip up for your XBOX motherboard version (Matrix or CG-CG2), you can use the double sided tape to attach both boards.

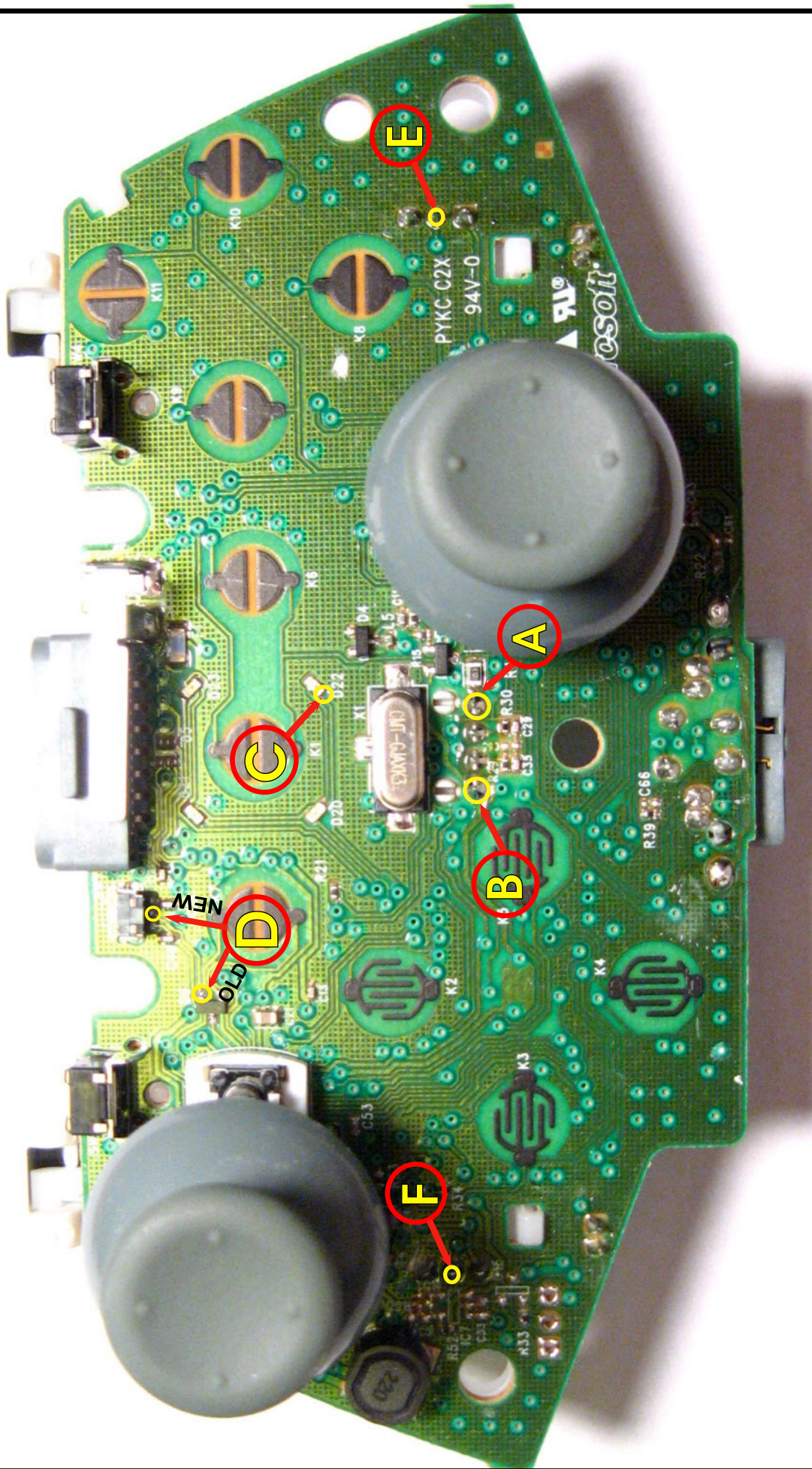


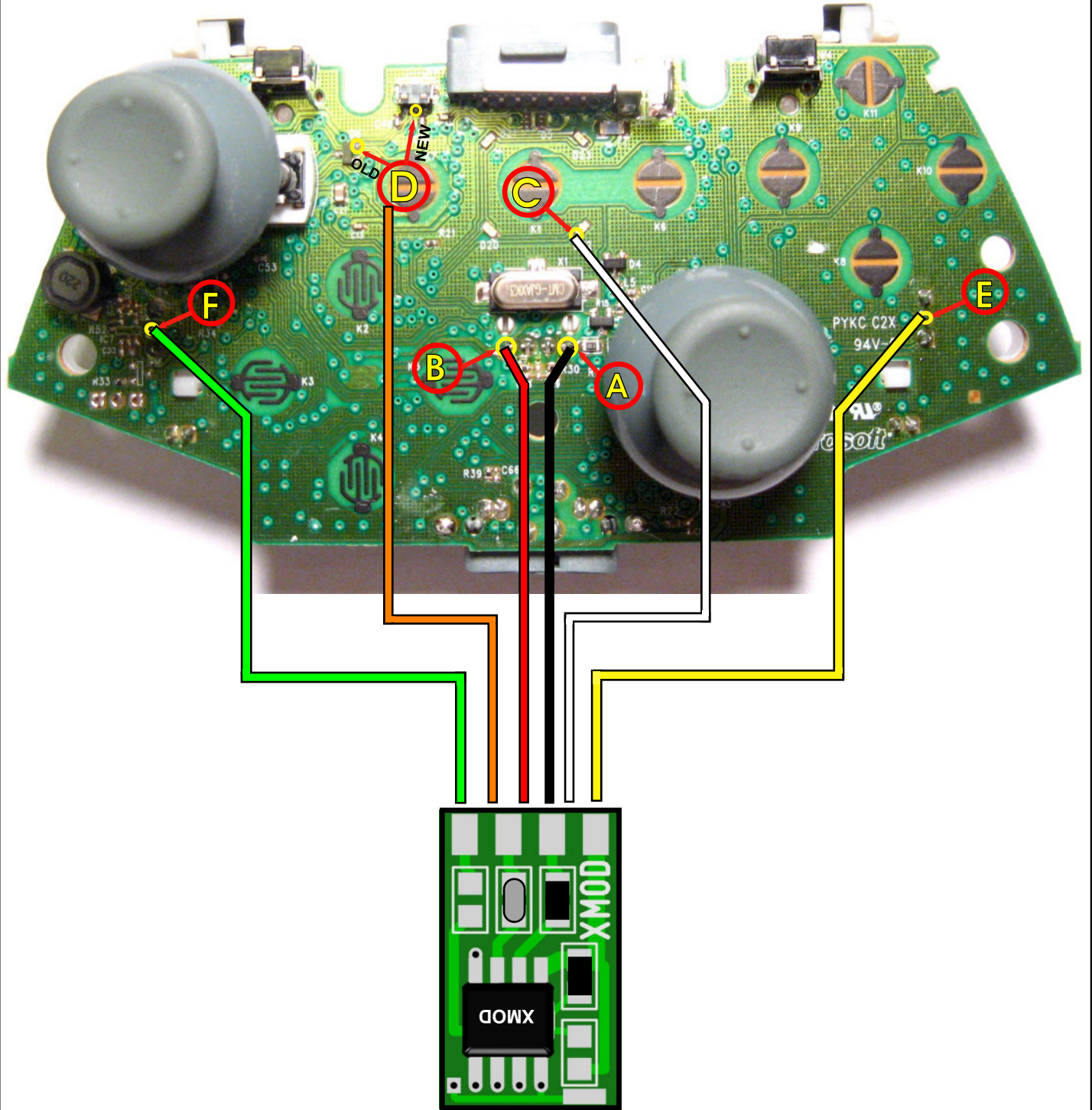


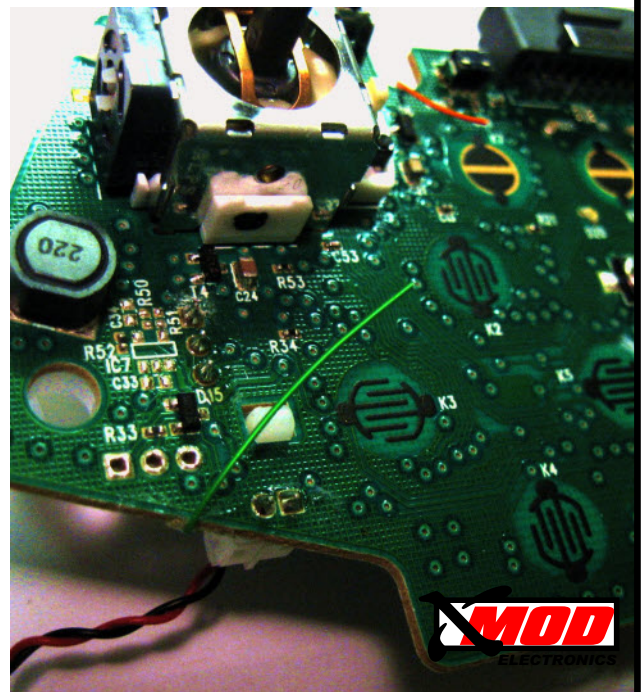
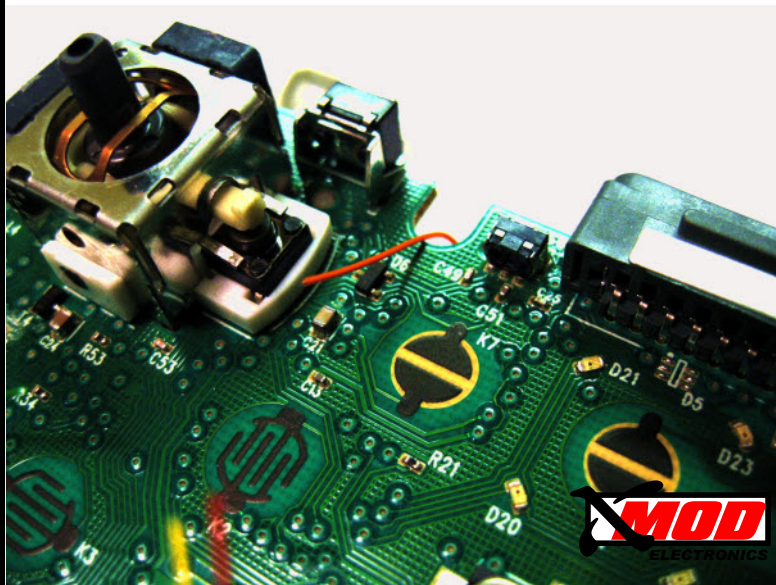
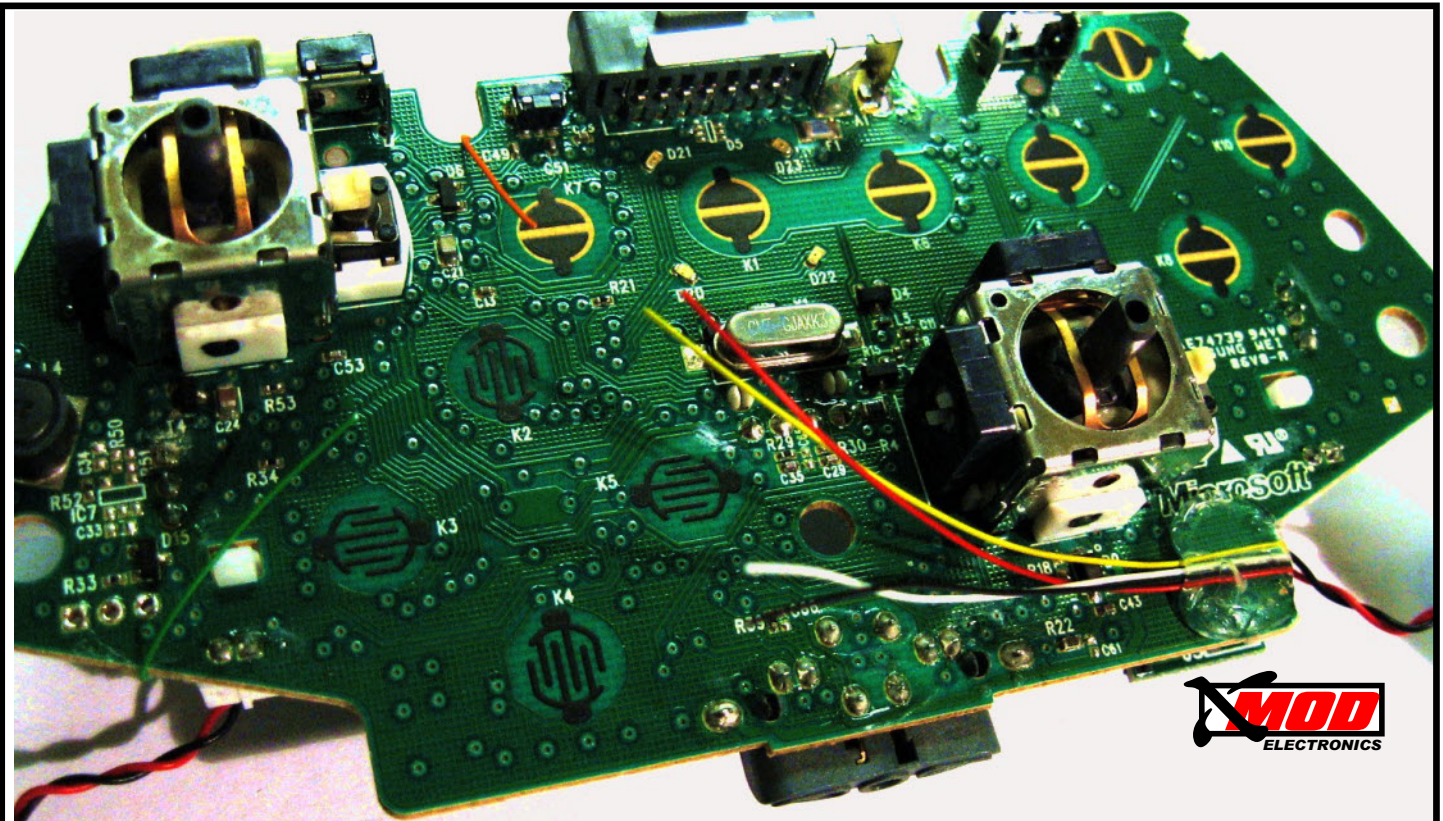


**MOD CHIP PC BOARD version 2**

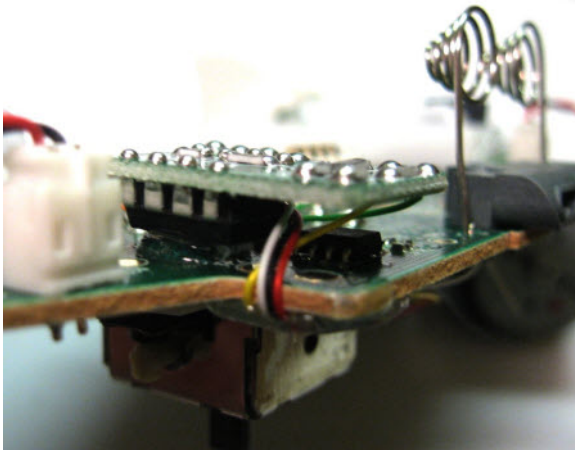
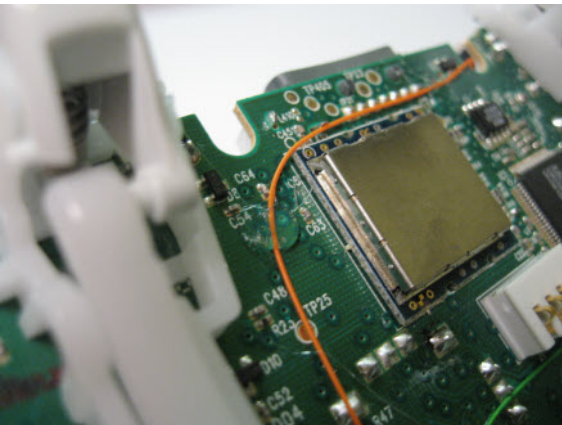
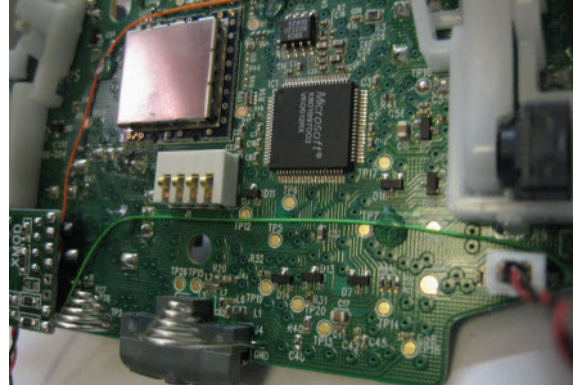
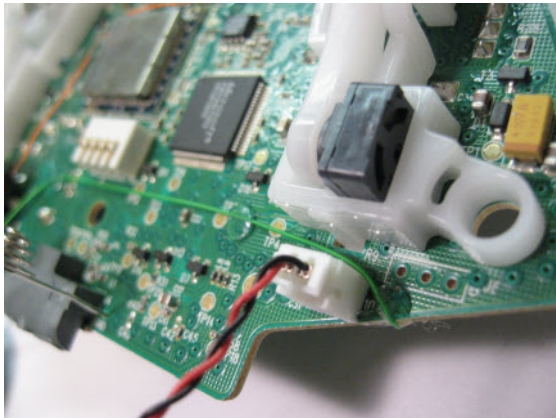
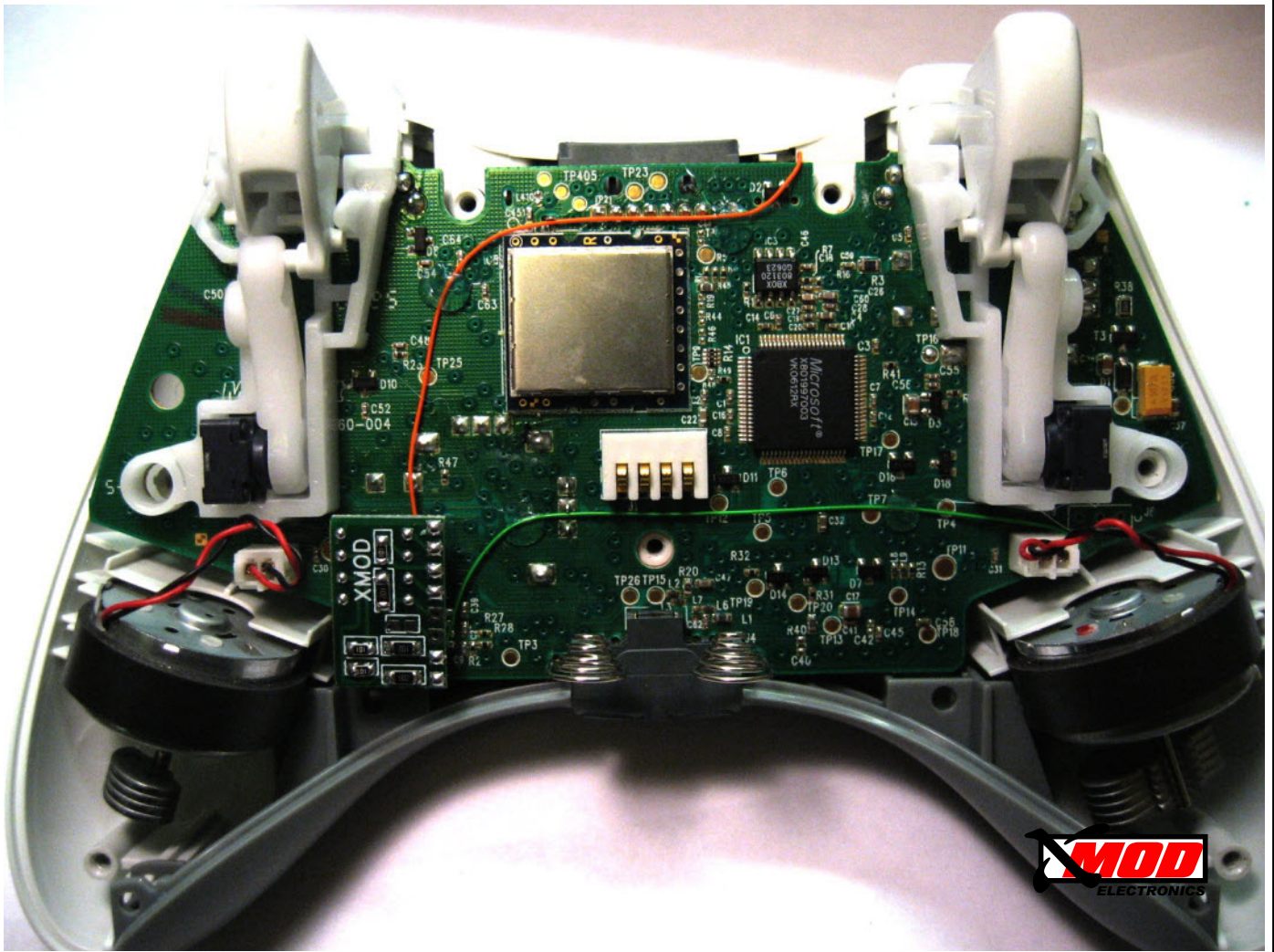


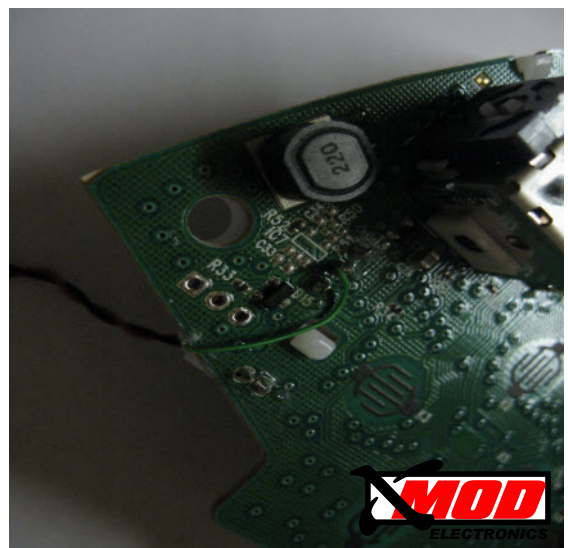
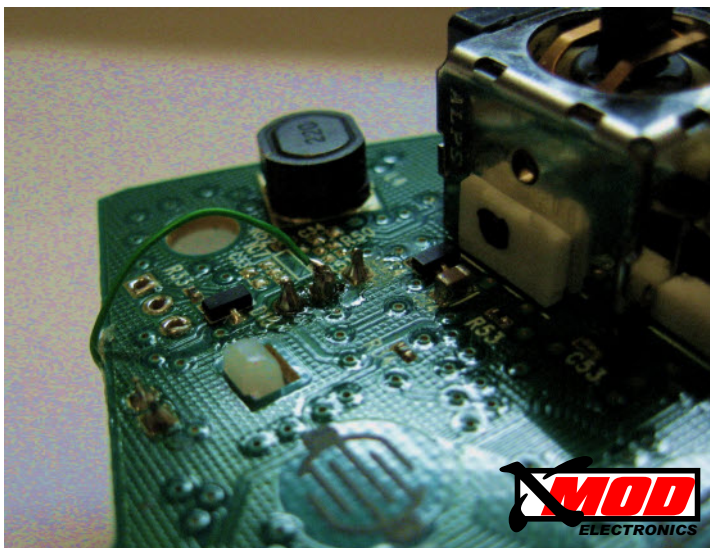
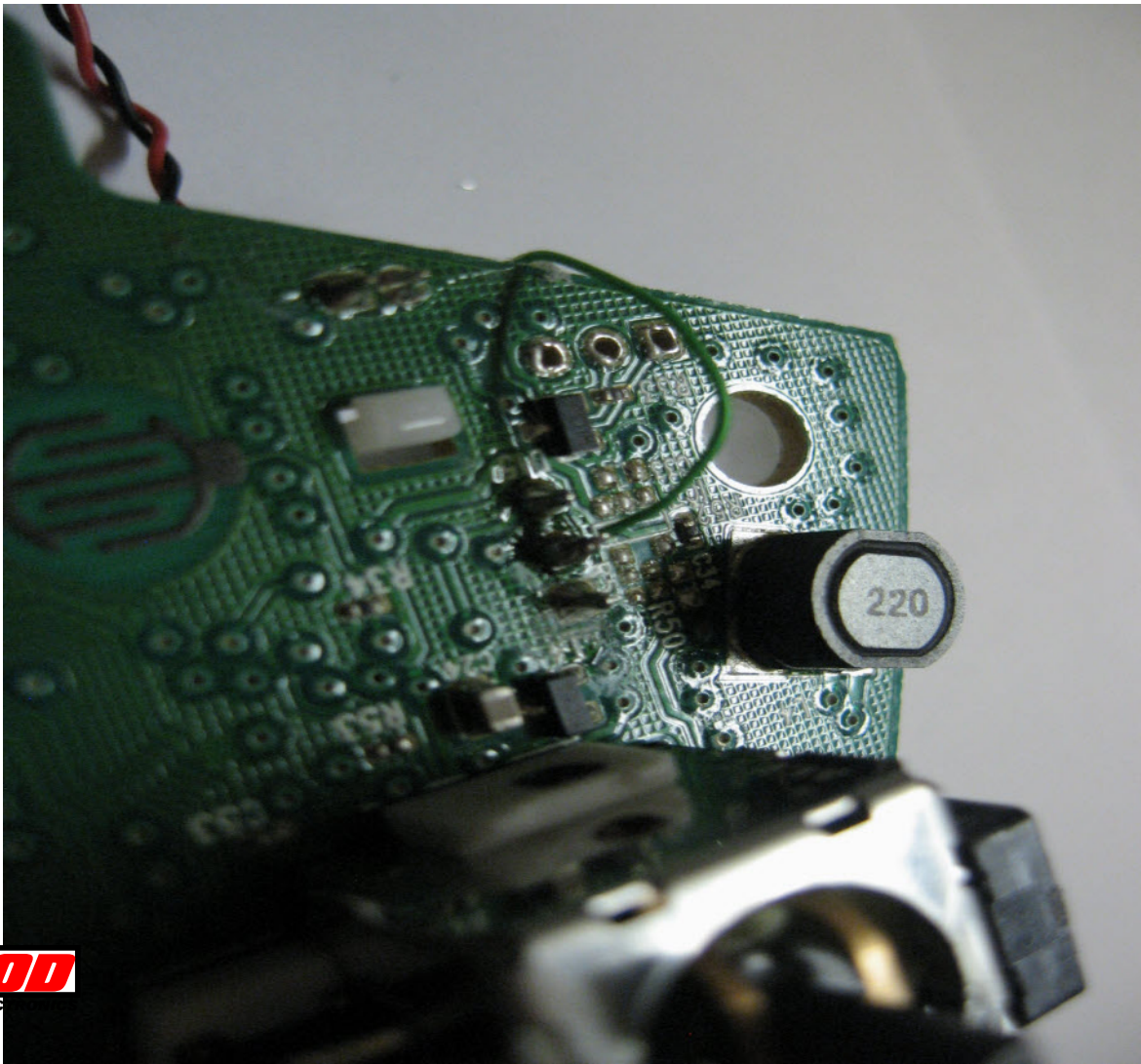






Trim your wires so they are only as long as you need, then strip the end and solder into place. Long wires will just cause a place for something to snag when closing the controller.

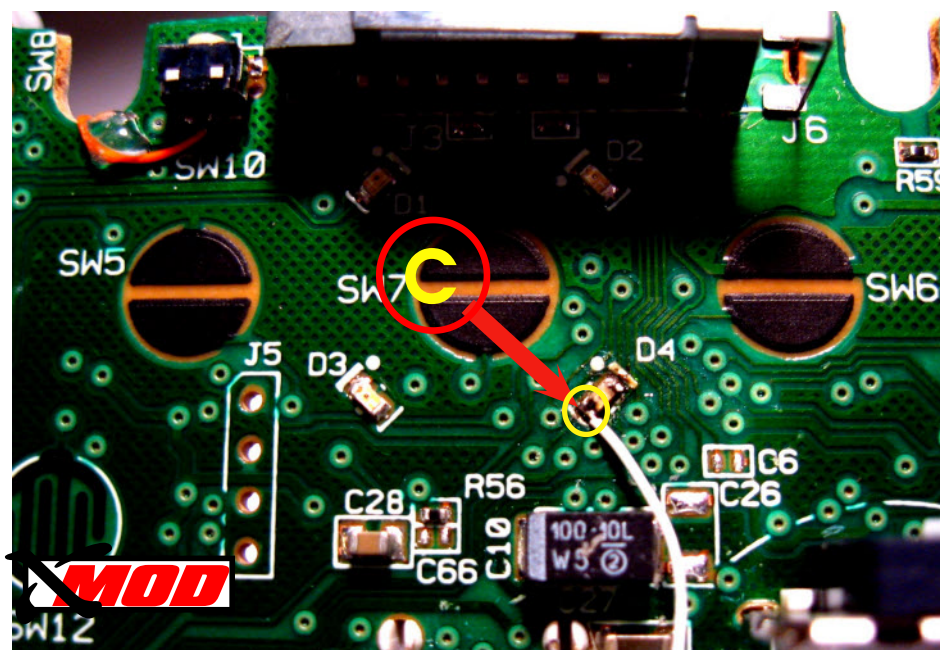




Solder the wires as shown in the images



**NEW  
&  
OLD  
STYLE**

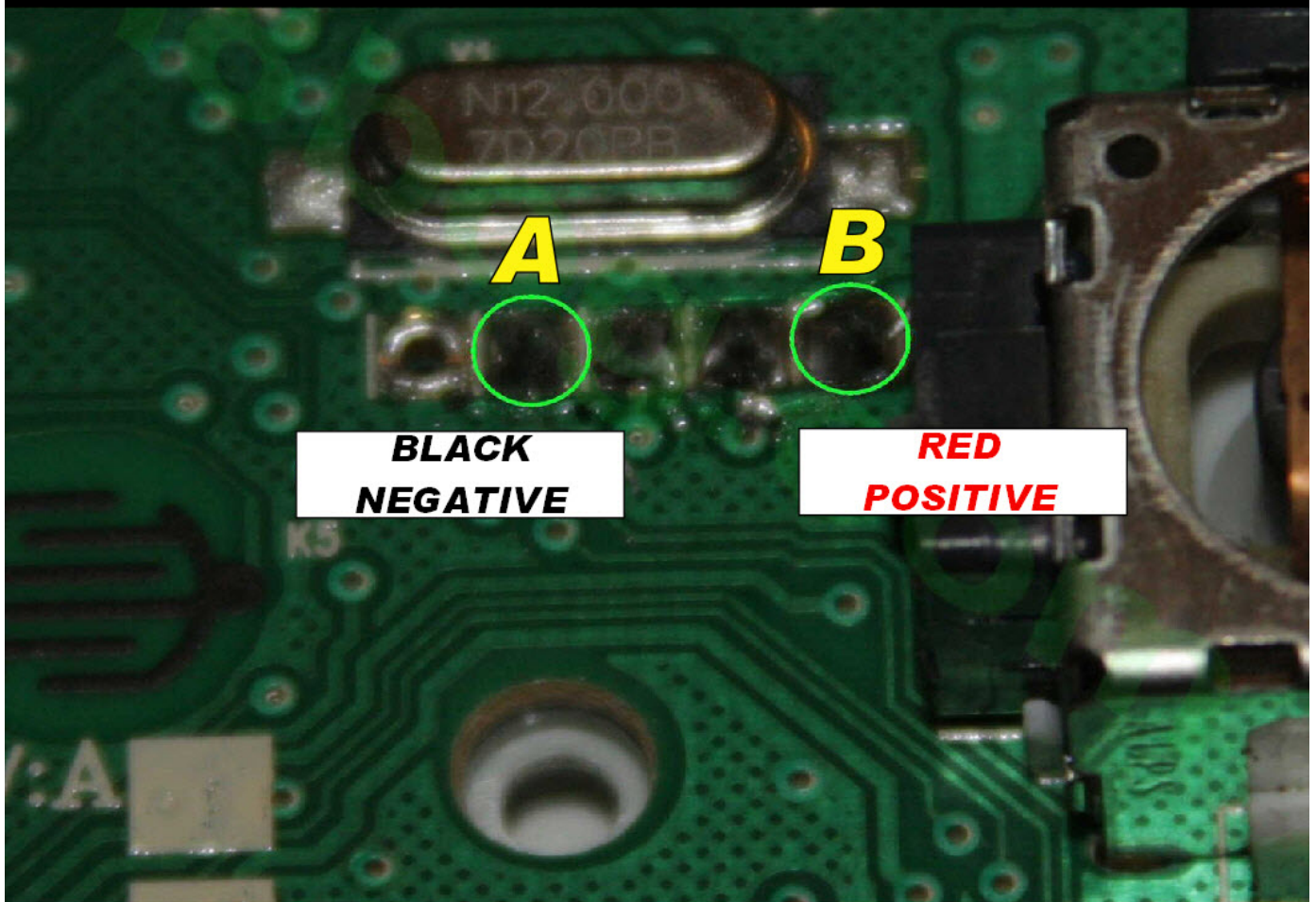


**4 PLAYER LED  
NEW & OLD  
STYLE**

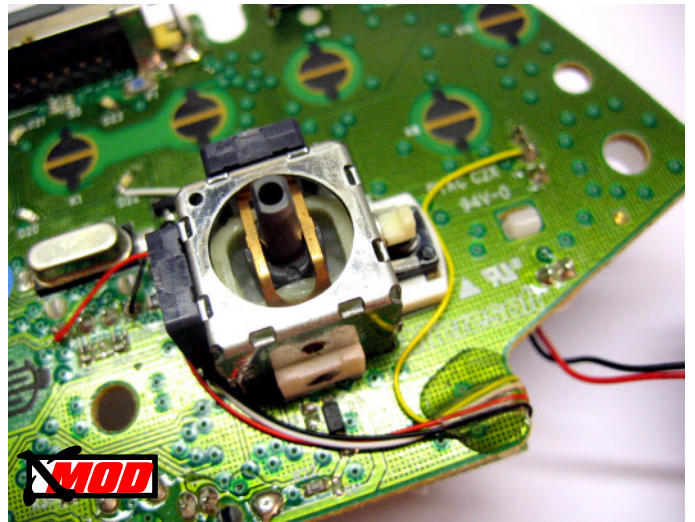
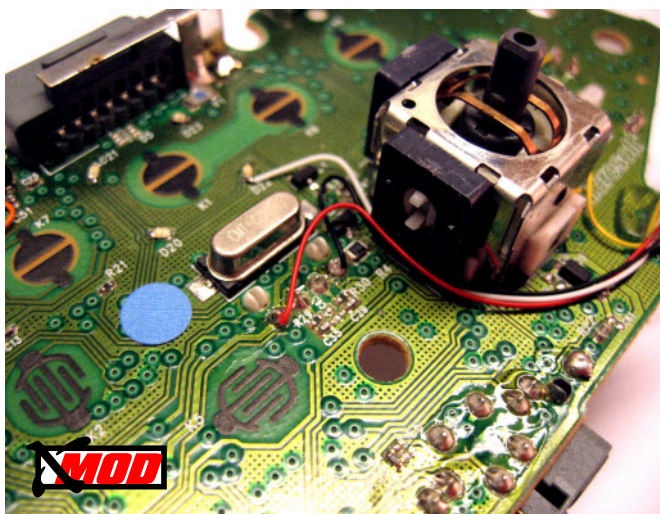
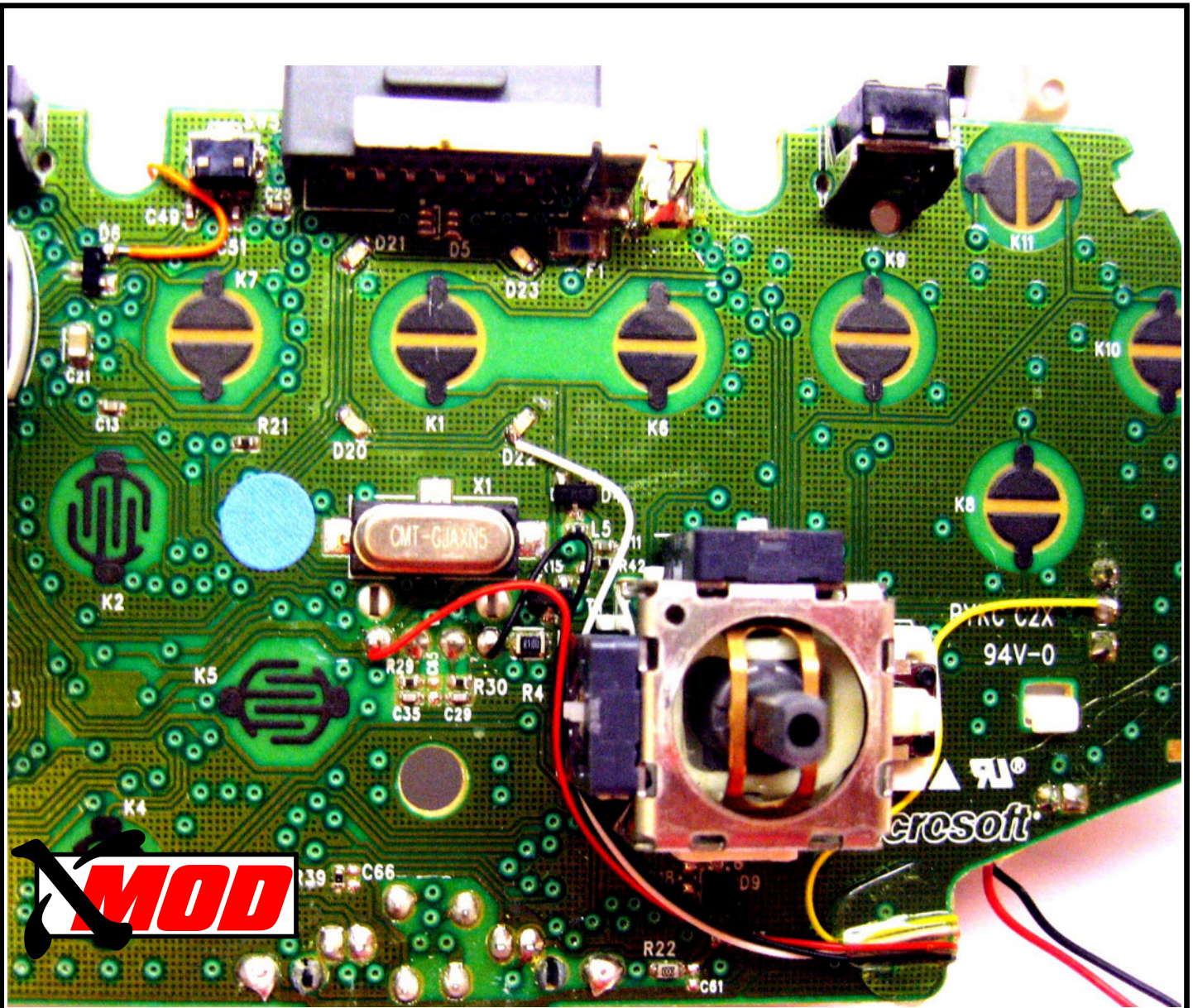
## **XBOX 360 WIRED CONTROLLER**

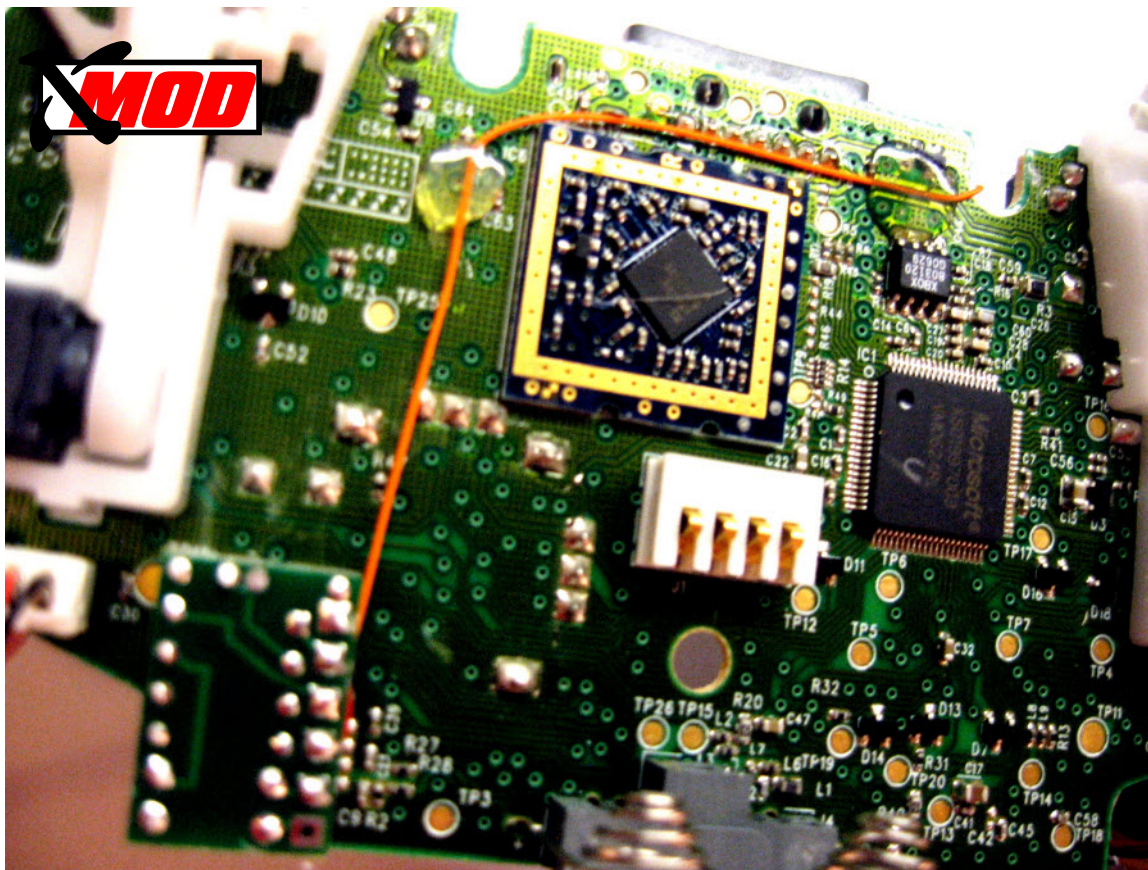
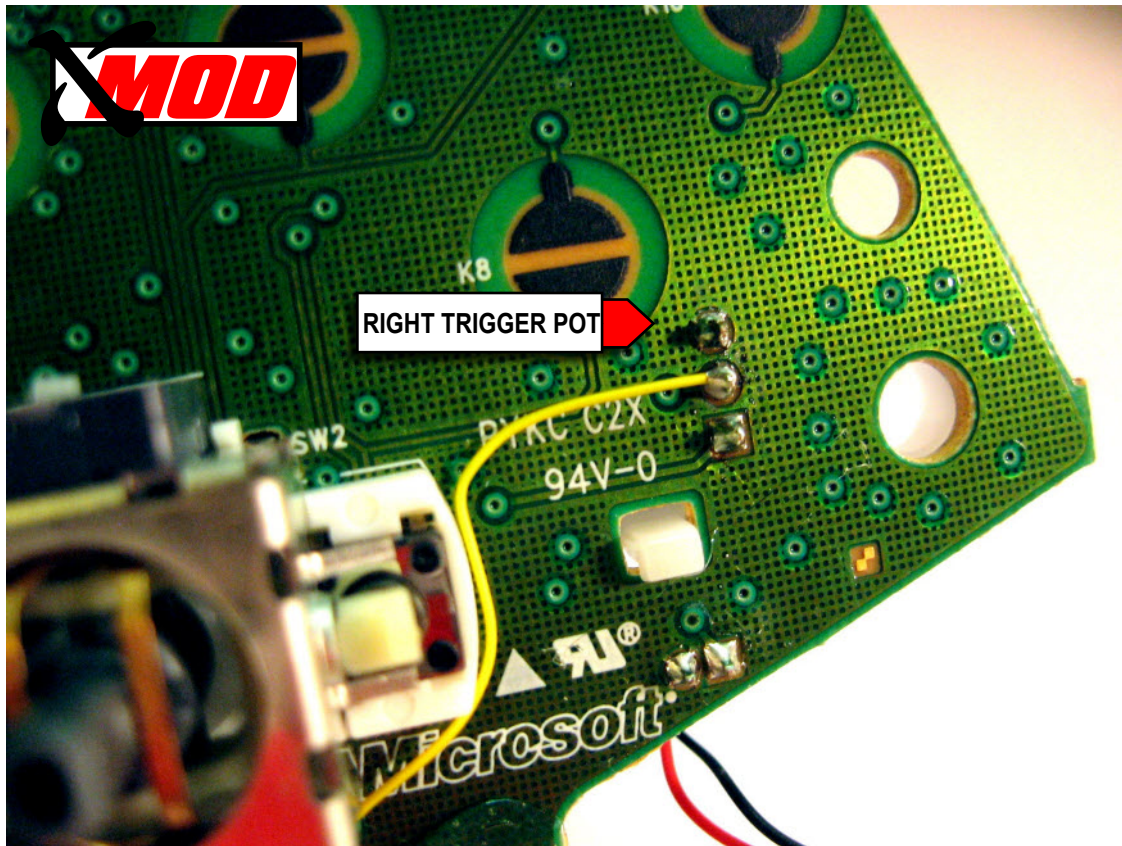
If you are installing the XMOD Rapid Fire Mod on a wired controller, refer to the next step below. The RED and BLACK wires must be connected on different points.

### **WIRED CONTROLLER**

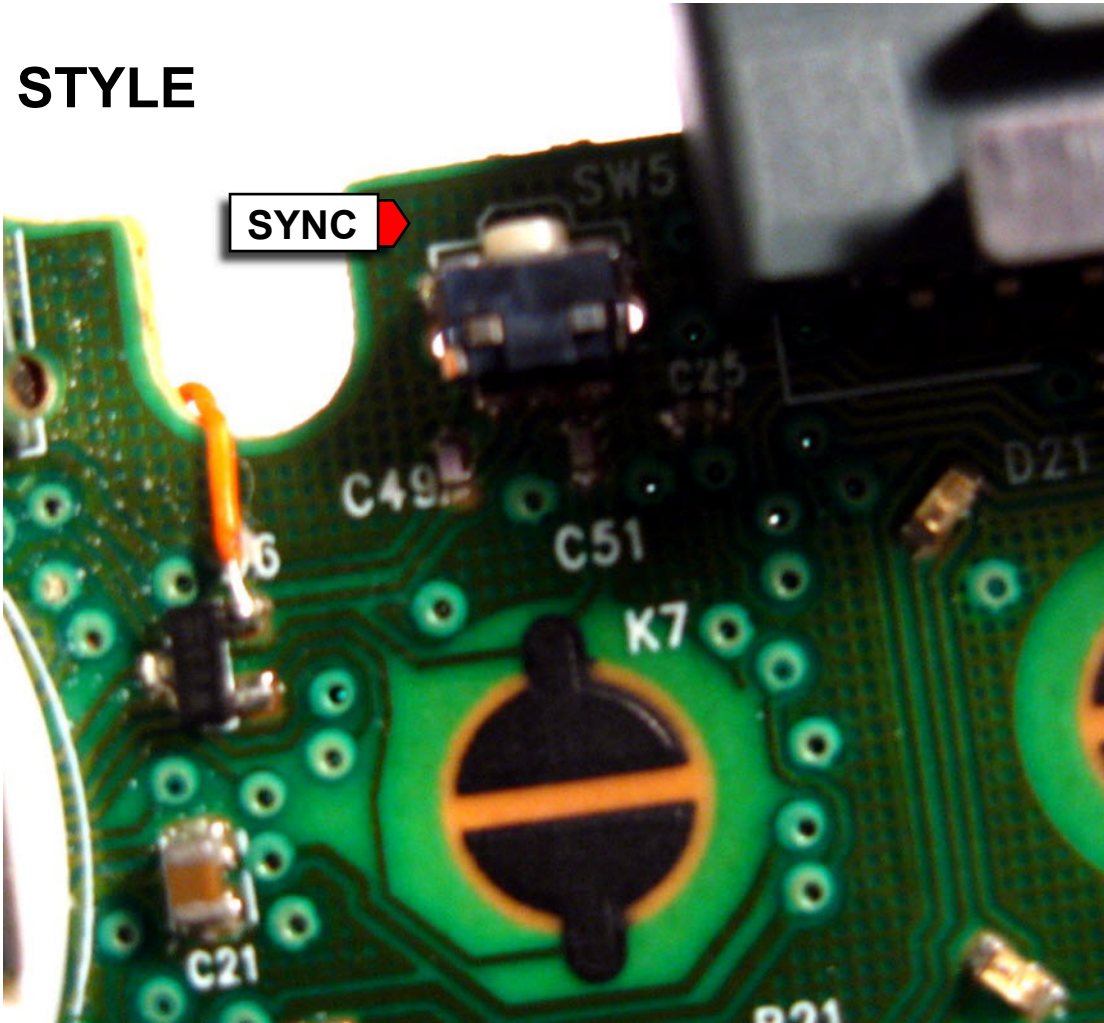




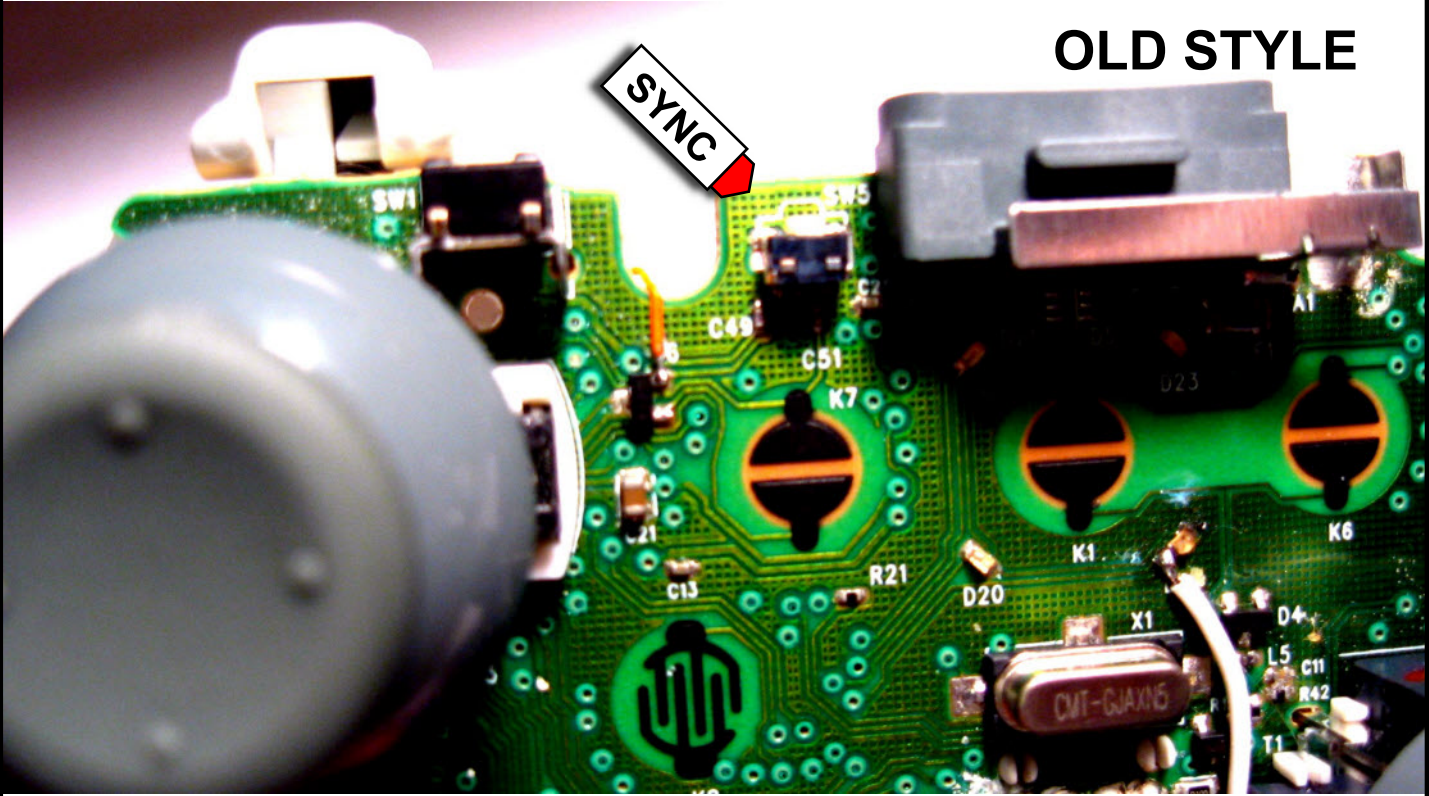




**OLD STYLE**

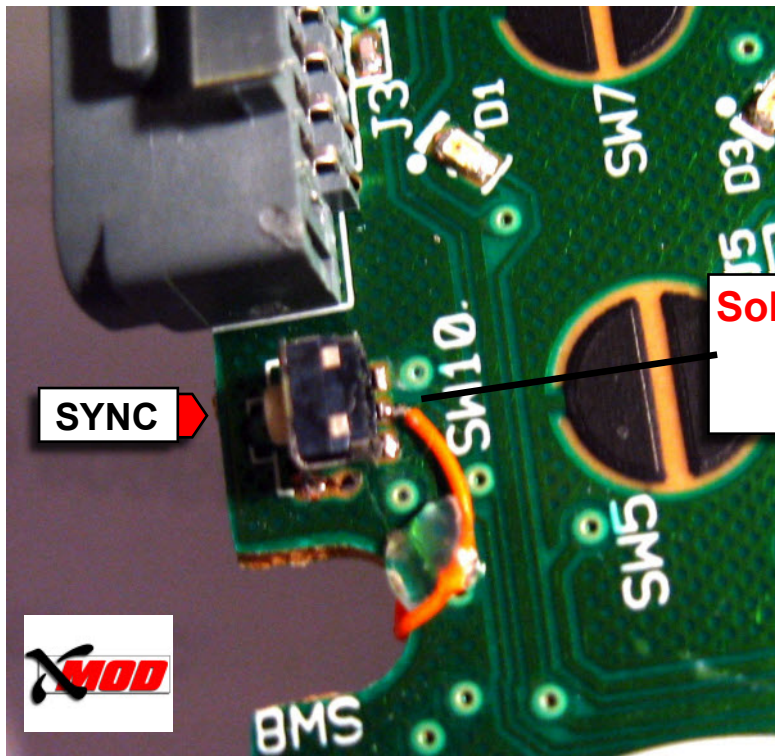


**OLD STYLE**

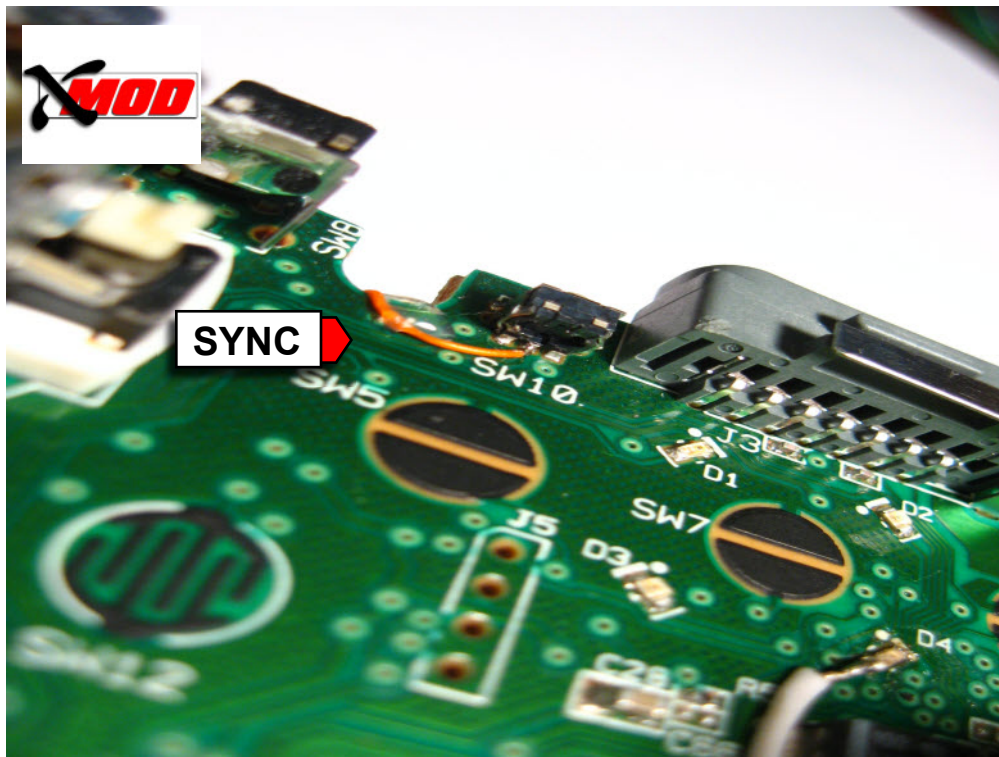


On the NEW STYLE controllers it is a little hard to make a good connection if you don't have soldering experience and the right tools (pencil soldering iron, magnifiers), you can easily make a short circuit between the legs of the SYNC button, causing a malfunction of the controller and the Mod Chip. In this case we recommend you install the Tactile push button (provided) to use it to change modes.

NEW  
STYLE  
CG  
CG2

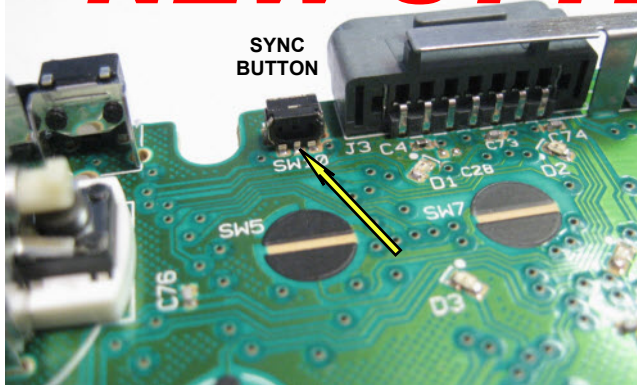


NEW  
STYLE  
CG  
CG2

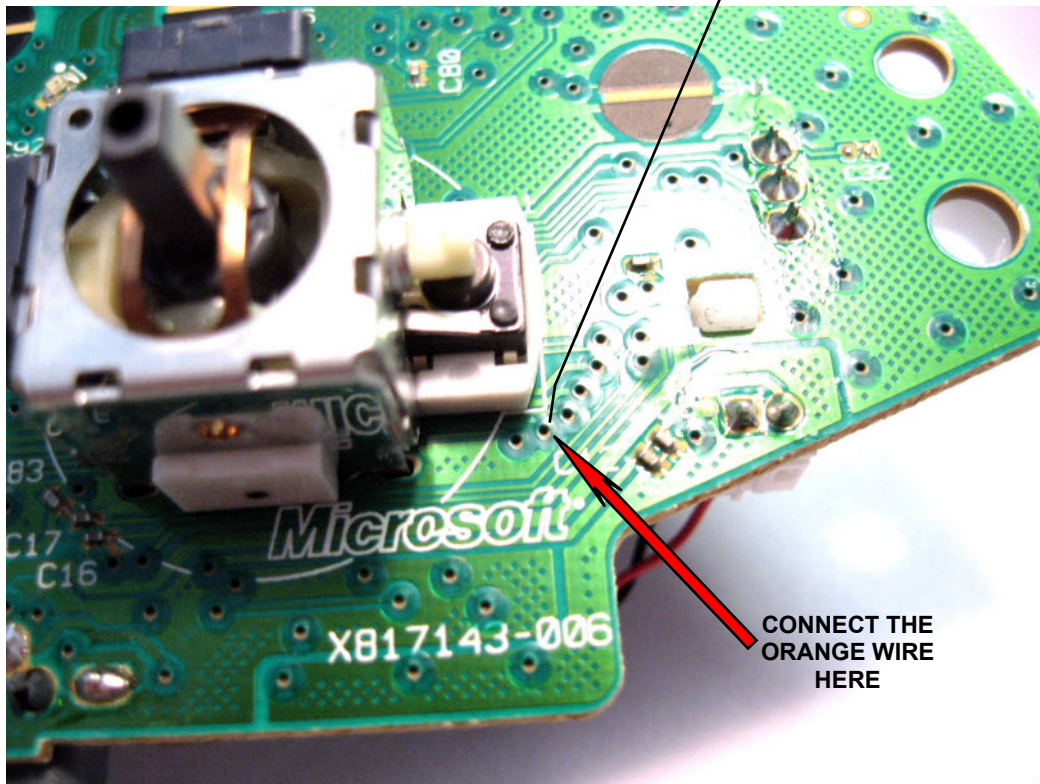


In the **CG2** controllers, the **ORANGE** wire can be connected to a different point (see page 19)

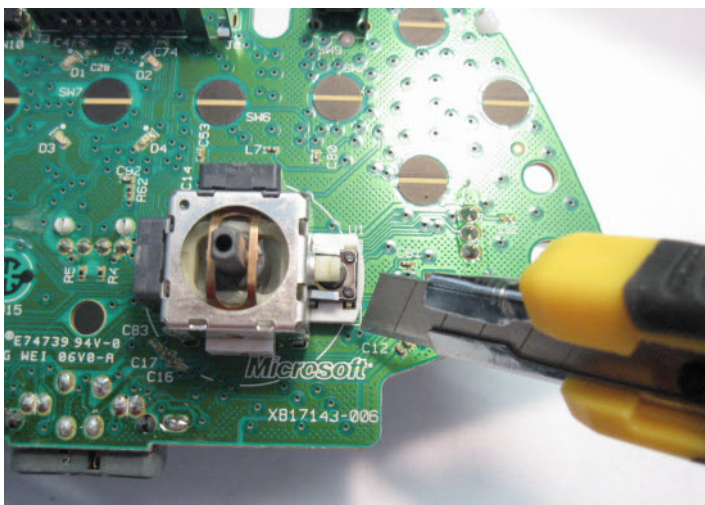
# NEW STYLE - CG2



In the NEW Style - **CG2** controller, you can connect the **ORANGE** wire to the middle leg of the **SYNC** button, **OR** you can solder it to this point



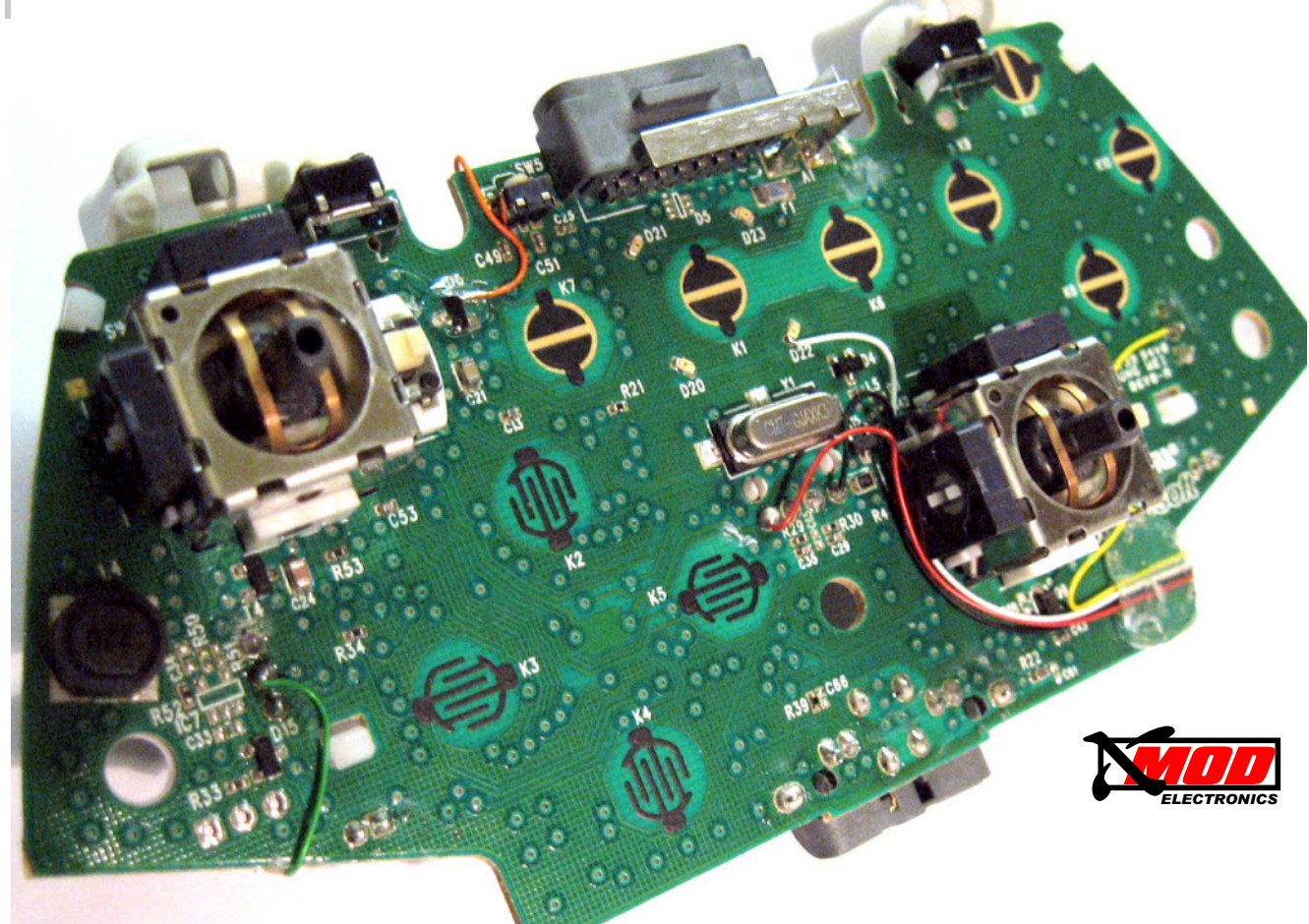
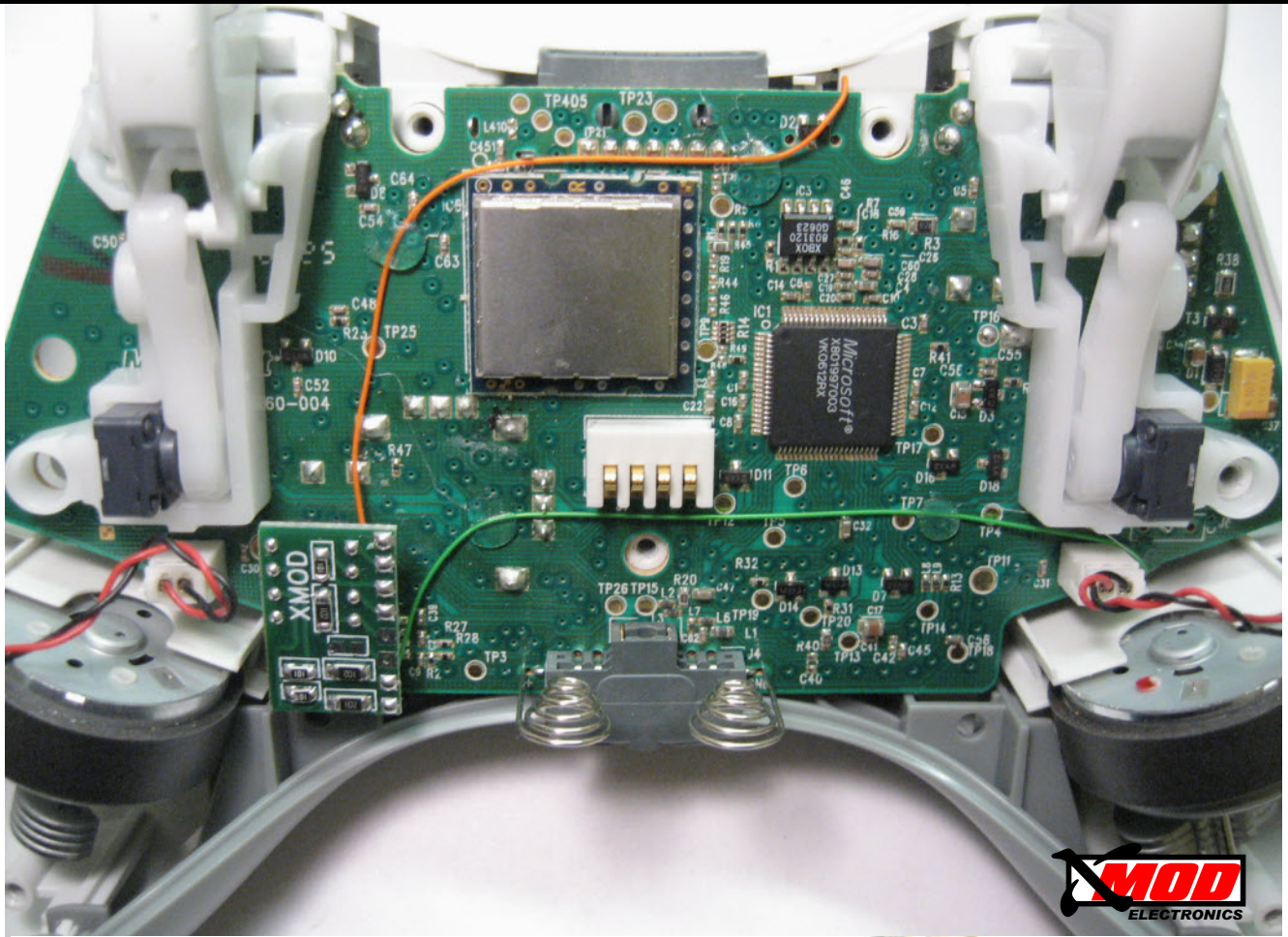
CONNECT THE ORANGE WIRE HERE



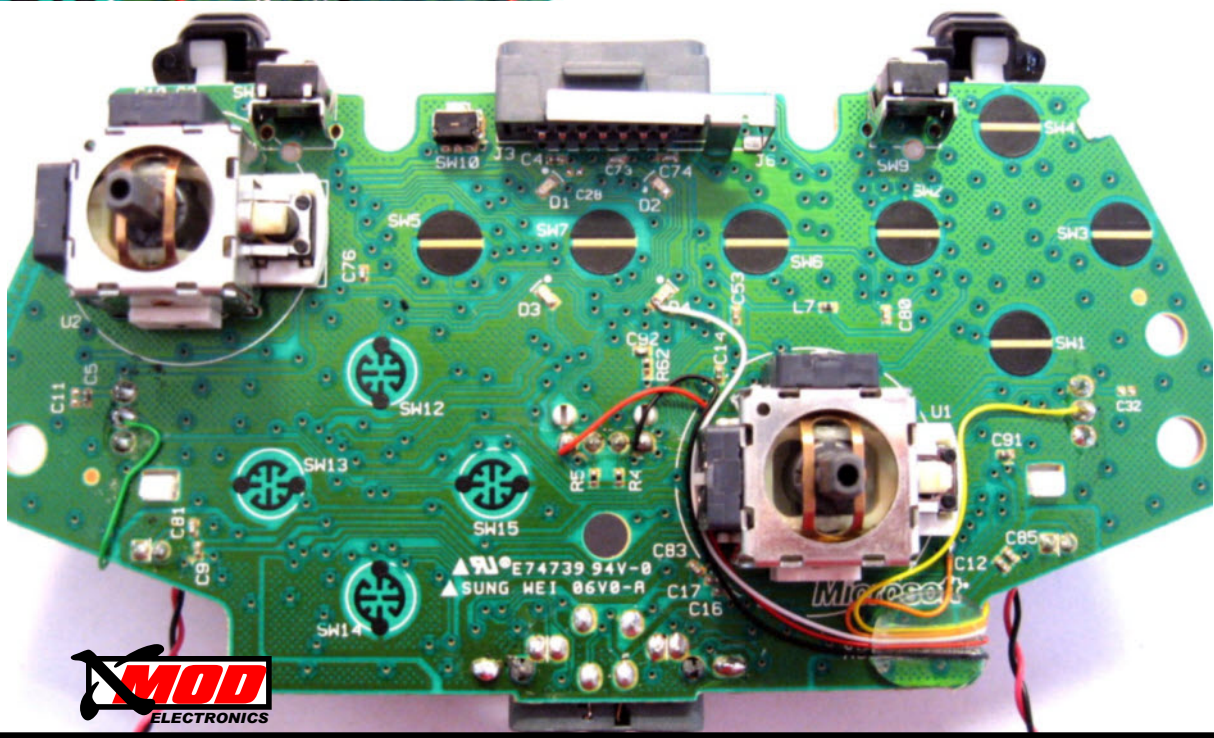
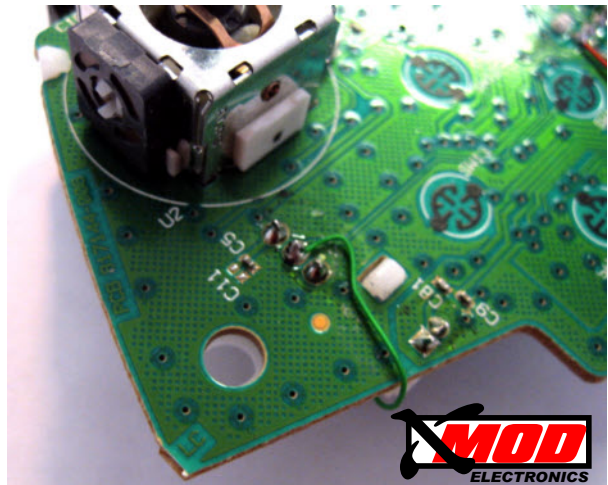
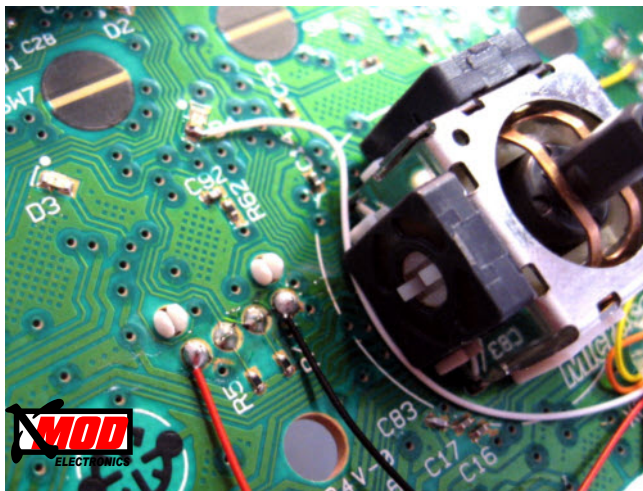
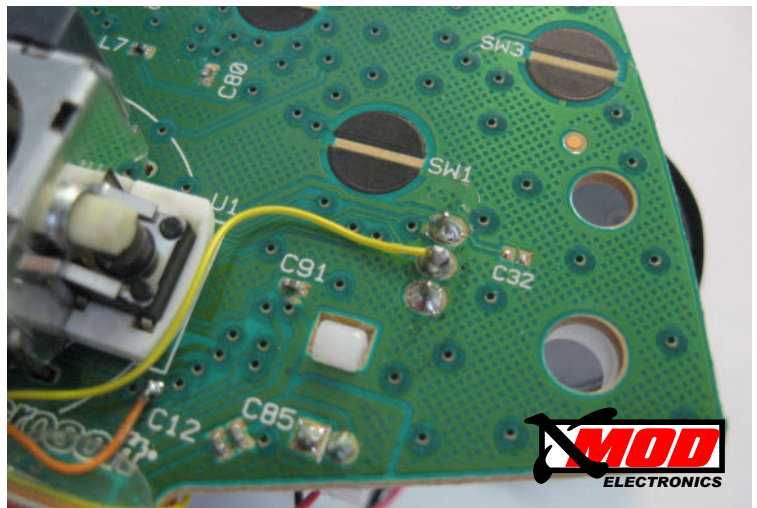
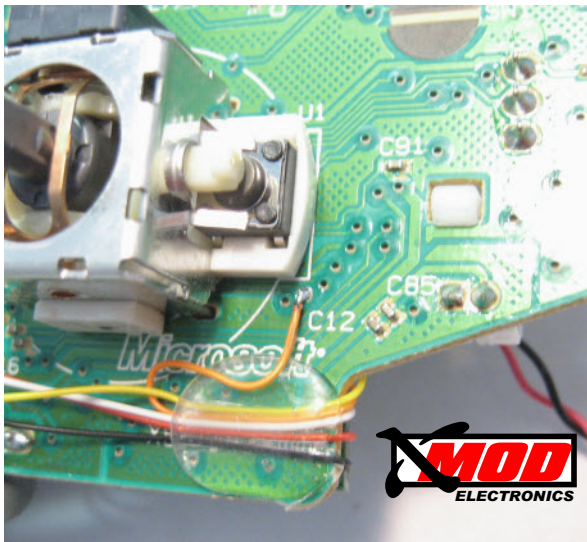
Carefully, with a small knife, clean the solder point. Don't press hard or you will cut the copper trace.



Apply a little bit of solder



# NEW STYLE - CG2





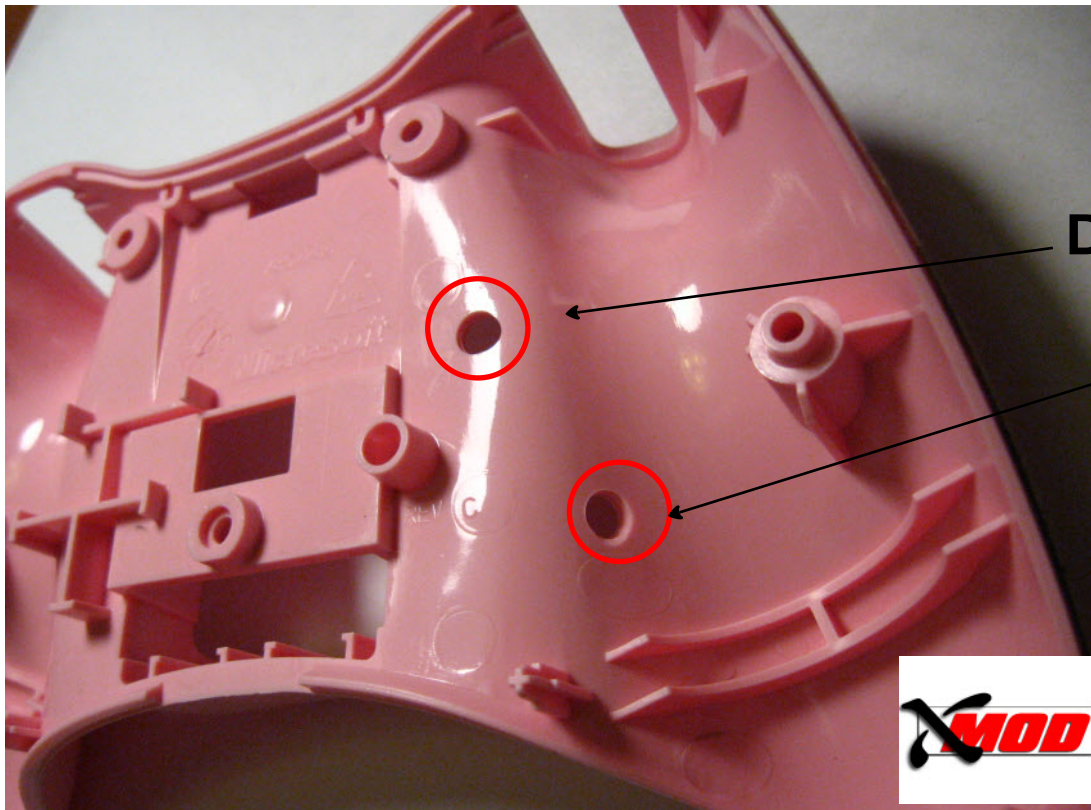
### OPTIONAL MODE SWITCH

If you want to use the TACT SWITCH instead of the SYNC BUTTON to change the Fire Mode Rate:

Drill one hole with a 5/32 drill bit.

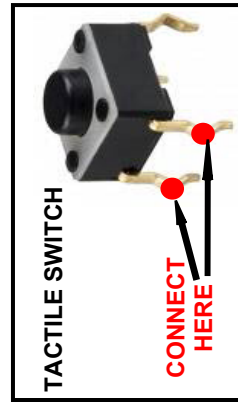
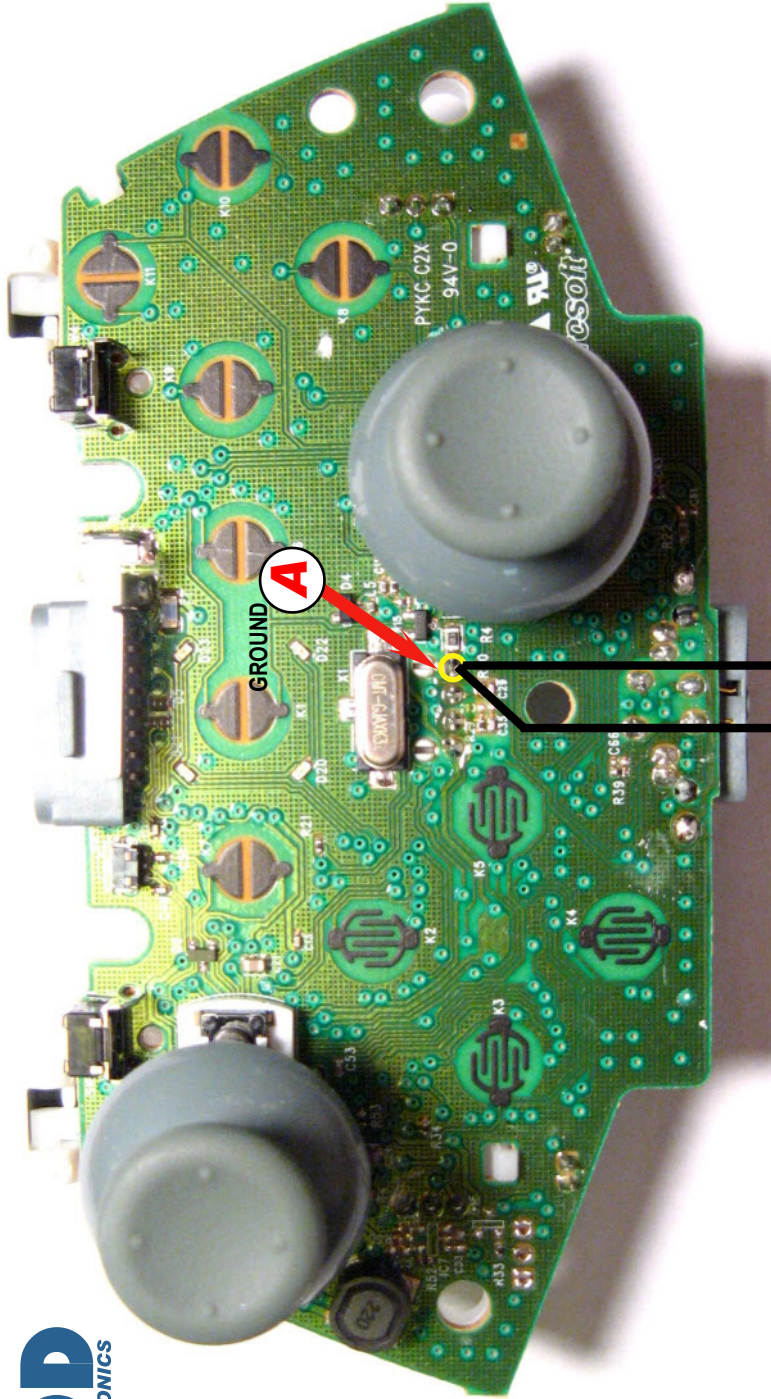
Next use hot glue to secure the button in place. **Do not** attempt to use Super Glue or any other adhesives as it will soak into the button mechanism and cause it to stop working.

Connect one pin of the Tact switch to the ORANGE wire and the other pin to GROUND.



**DRILL HERE  
OR  
HERE**





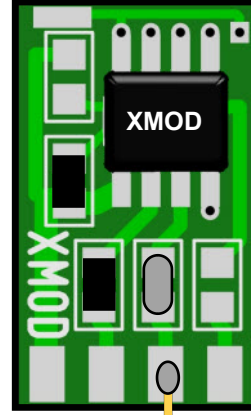
TACTILE SWITCH

CONNECT TO POINT A  
GROUND - NEGATIVE

PUSH BUTTON  
MODE SWITCH

ORANGE

BLACK

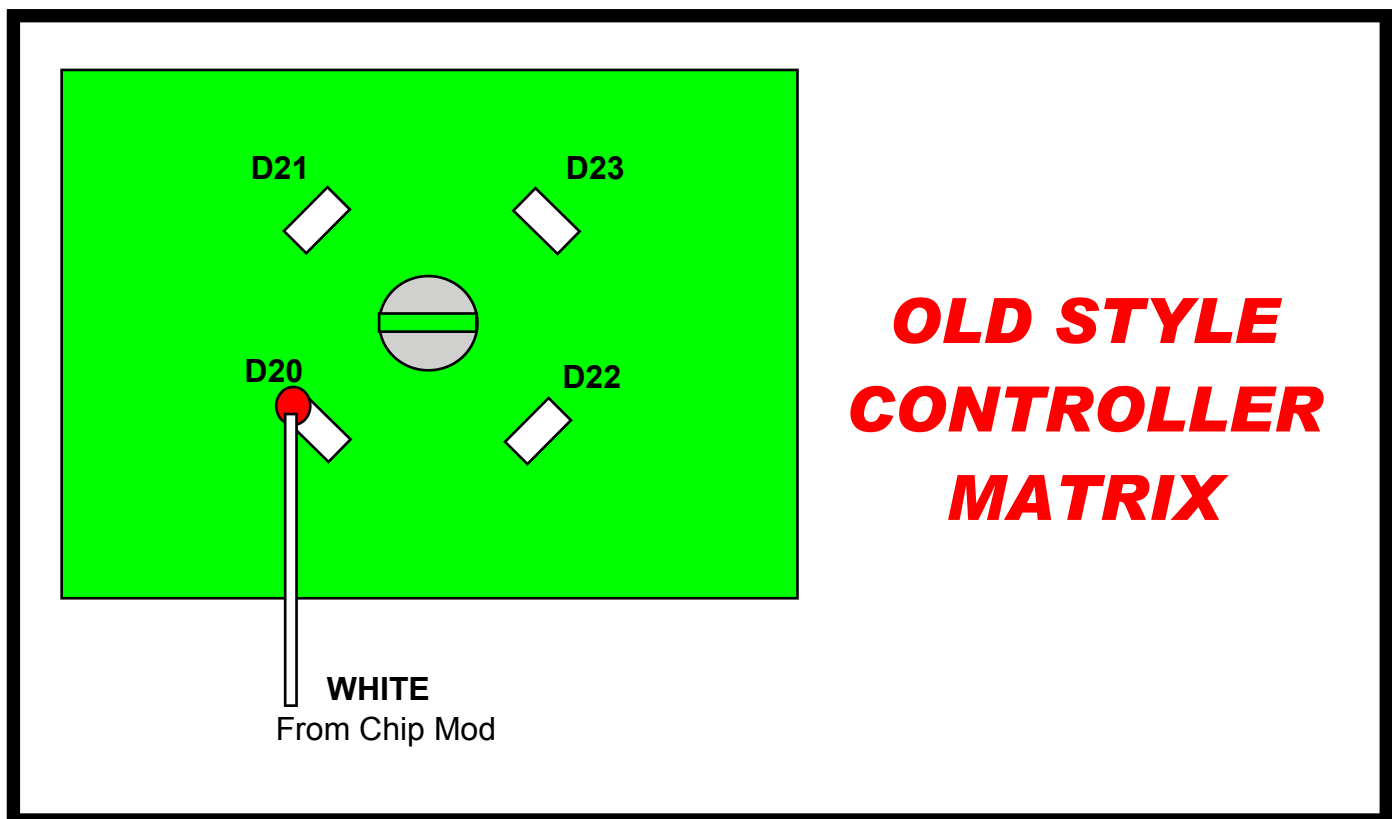
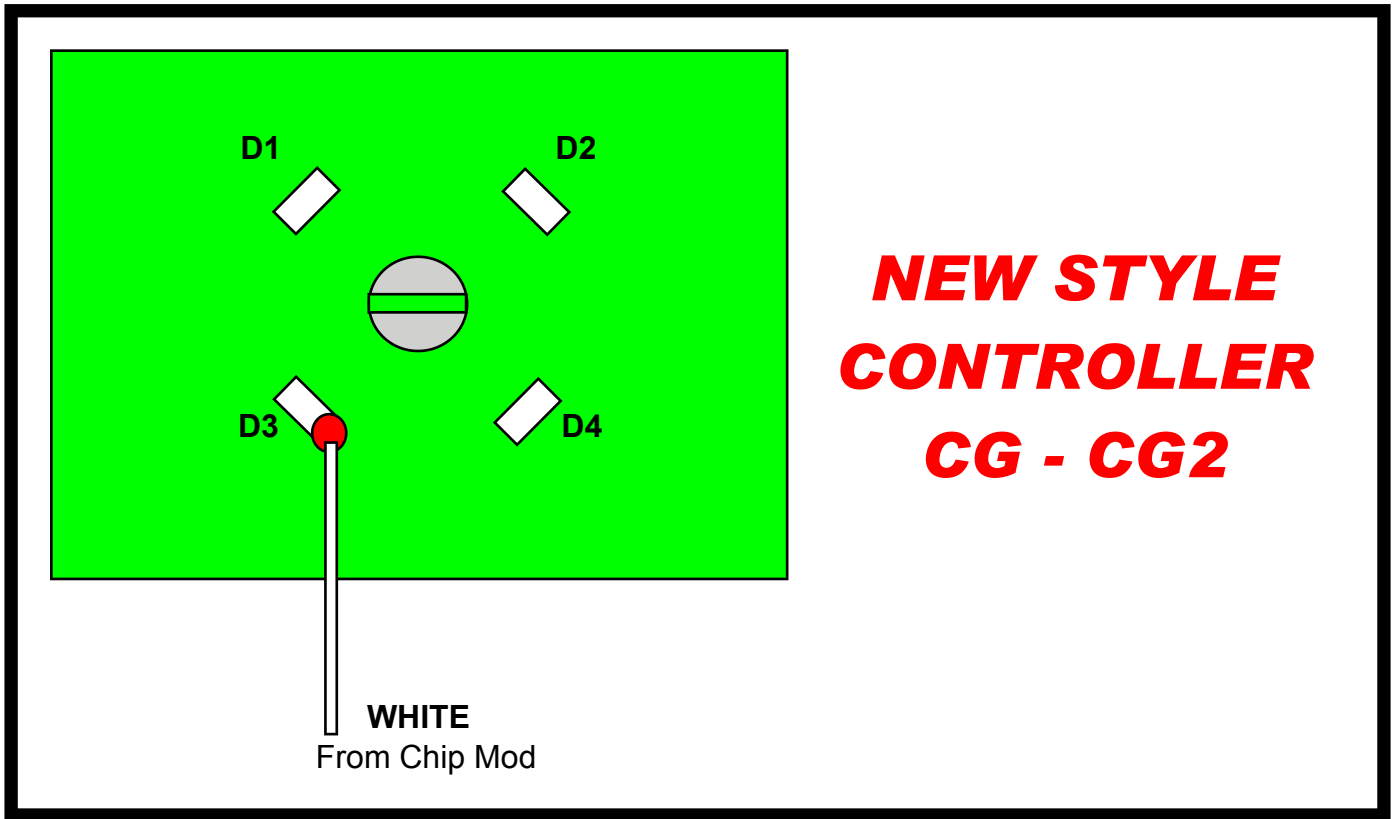


## OPTIONAL PUSH BUTTON MODE SWITCH

The installation of this switch is OPTIONAL.

If you install this pushbutton, **don't** connect the **ORANGE** wire to the **SYNC** button.

### 3rd PLAYER LED ALTERNATIVE INSTALLATION



The last thing you need to do is reassemble everything. The easiest way we found to do this is to leave the top piece face down so all the buttons do not fall out, and hold the PCB to the back of the controller and flip it over on the top case. Align the rumble motors so they are in their holders and lay the PCB and back of the case onto the front of the case. Keep it face down and use your finger to work the thumb sticks through the holes and work the case closed. Do not force it, you may have wires preventing the case from closing entirely. Just go slow and look at any areas to see what is stopping it from closing all the way. Now just screw the controller back together and your done.



### RAPID FIRE MODES

Just TAP the **SYNC** button or the **MODE** button underneath to cycle through the modes . At which point the player 4 LED will flash indicating the MODE you are in. The chip will remember the speed mode (no BURST/AKIMBO), even when you turn your controller off or remove the batteries.

SYNC - MODES CYCLE	LED BLINKS	BURST	AKIMBO
MODE 1 - SLOW		YES	YES
MODE 2 - MEDIUM		YES	YES
MODE 3 - FAST		YES	YES
MODE 4 - PROGRAM.		YES	YES
MODE 5 - COD5 - SLOW		NO	NO
MODE 6 - COD5 - FAST		NO	NO

### TURN THE RAPID FIRE ON/OFF

Press and Hold the **LEFT TRIGGER** and tap the **SYNC/MODE** button to activate/deactivate the rapid fire Mod Chip.

RAPID FIRE ON / OFF	LED BLINKS	
Press & Hold  + Tap		RAPID FIRE: <b>ON</b>
Press & Hold  + Tap		RAPID FIRE: <b>OFF</b>










## SPECIAL MODES: AKIMBO-MIMIC / BURST FIRE (3 round shots)

To activate/deactivate any special mode (AKIMBO/BURST):

- **Press & Hold** the **RIGHT TRIGGER**.
- Tap the **SYNC/MODE** button.
- **RELEASE** the **RIGHT TRIGGER**
- The **LED** will stay **SOLID**, waiting for your input.
- Tap the **LEFT TRIGGER** to activate/deactivate the **BURST FIRE**.
- Tap the **SYNC/MODE** button to activate/deactivate the **AKIMBO** mode.
- Tap the **RIGHT TRIGGER** to **cancel/exit** and go back without any change.

*\*BURST and AKIMBO cannot be activated on COD5 Compatible Modes.*


















*\*Due to the special signal applied to the LEFT TRIGGER on the AKIMBO mode, you cannot aim/scope correctly when you fire and the akimbo function is active.*

SPECIAL MODES	LED BLINKS	
Press & Hold  + Tap 	 SOLID	Press and hold the <b>RIGHT TRIGGER</b> to enter on Special Modes. The <b>LED</b> will stay <b>SOLID</b> waiting for your input: Burst, Akimbo or Cancel.
Tap  for AKIMBO	  + MODE	Tap <b>SYNC</b> to activate/deactivate the <b>AKIMBO</b> mode.
Tap  for BURST FIRE	 + MODE	Press the <b>LEFT TRIGGER</b> to activate/deactivate the <b>BURST</b> fire.
Tap  to CANCEL		Press the <b>RIGHT TRIGGER</b> if you want to cancel the Special Modes input

## MODE 4 - USER PROGRAMMED MODE

The fire speed of this mode can be adjusted/programmed from 5 to 35 shots/sec in 60 steps. To enter in the programming mode:

- Turn the Rapid Fire **OFF** (press and hold the **RIGHT TRIGGER** and tap the **SYNC** button)
- **Press and hold** the **LEFT & RIGHT TRIGGERS at the same time** and tap the **SYNC** button.
- The LED will blink 4 times.
- Press the **LEFT TRIGGER** to decrease the firing speed.
- Tap the **SYNC** button to increase the firing speed.
- You can **TEST** the speed pressing the **RIGHT TRIGGER** at any time.
- The **LED** will blink faster when you reach the **minimum** or **maximum** speed.
- **Press and hold** the **RIGHT TRIGGER** and tap de **SYNC** button to save and exit.

USER PROGRAMMED MODE	LED BLINKS	
Press & Hold  + Tap 		<b>RAPID FIRE: OFF</b>
Press & Hold  + Tap 		Press & Hold <b>RIGHT &amp; LEFT</b> Triggers and <b>TAP SYNC</b> To <b>ENTER</b> Programming Mode
Tap  to DECREASE Speed	  LED flashing when reach <b>MINIMUM</b> SPEED	Press the <b>RIGHT TRIGGER</b> to <b>TEST</b> the firing speed. 
Tap  to INCREASE Speed	  LED flashing when reach <b>MAXIMUM</b> SPEED	Press the <b>RIGHT TRIGGER</b> to <b>TEST</b> the firing speed. 
Press & Hold  + Tap 		Press & Hold the <b>RIGHT TRIGGER</b> and Tap <b>SYNC</b> To <b>SAVE</b> and <b>EXIT</b>



# RAPID FIRE MOD - XBOX 360

www.xmodelectronics.com

SYNC - MODES CYCLE	LED BLINKS	BURST	AKIMBO
MODE 1 - SLOW		YES	YES
MODE 2 - MEDIUM		YES	YES
MODE 3 - FAST		YES	YES
MODE 4 - PROGRAM.		YES	YES
MODE 5 - COD5 - SLOW		NO	NO
MODE 6 - COD5 - FAST		NO	NO

RAPID FIRE ON / OFF	LED BLINKS	
Press & Hold  + Tap		RAPID FIRE: <b>ON</b>
Press & Hold  + Tap		RAPID FIRE: <b>OFF</b>

SPECIAL MODES	LED BLINKS	
Press & Hold  + Tap		Press and hold the RIGHT TRIGGER to enter on Special Modes. The LED will stay SOLID waiting for your input: Burst, Akimbo or Cancel.
Tap  for AKIMBO	+ MODE	Tap SYNC to activate/deactivate the AKIMBO mode.
Tap  for BURST FIRE	+ MODE	Press the LEFT TRIGGER to activate/deactivate the BURST fire.
Tap  to CANCEL		Press the RIGHT TRIGGER if you want to cancel the Special Modes input

USER PROGRAMMING MODE	LED BLINKS	
Press & Hold  + Tap		RAPID FIRE: <b>OFF</b>
Press & Hold  &  + Tap		Press & Hold RIGHT & LEFT Triggers and TAP SYNC To ENTER Programming Mode
Tap  to DECREASE Speed	LED flashing when reach MINIMUM SPEED	Press the RIGHT TRIGGER to TEST the firing speed.
Tap  to INCREASE Speed	LED flashing when reach MAXIMUM SPEED	Press the RIGHT TRIGGER to TEST the firing speed.
Press & Hold  + Tap		Press & Hold the RIGHT TRIGGER and Tap SYNC To SAVE and EXIT

## TROUBLESHOOTING



### No Rapid Fire, No LED Blinks:

Check Power connections (**RED & Black** wires)

### Rapid Fire, No LED Blinks:

Check your soldering on the **WHITE** wire. Make sure not to apply too much heat while you are soldering the LED, it will cause a malfunctioning or you can easily burn the LED. If the LED is burned, you can use the 3 Player LED or install an extra LED (see instruction).

**NO Rapid Fire, LED Blinks when you change modes:** Check to see if **YELLOW** and **GREEN** wires are connected to the middle points (potentiometers) of the RIGHT and LEFT triggers respectively. Check for short circuits.

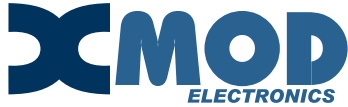
**Rapid Fire, Led Blinks, CAN'T change modes:** Check your soldering on the **ORANGE** wire. On the **NEW STYLE** controllers it is a little hard to make a good connection if you don't have soldering experience and the right tools (pencil soldering iron, magnifiers), **you can easily make a short circuit** between the legs of the SYNC button, causing a malfunction of the controller and the Mod Chip. In this case we recommend you to install the **Tactile push button** provided ([see instructions](#)) to use it to change modes.

**NO Rapid Fire, Led lit all the time:** The 4 player LED is dedicated exclusively to the Rapid Fire Mod. It will stay **OFF** all the time and blinks just when you change modes. If the LED is lit all the time, see the instructions "**RAPID MOD CHIP SETUP**", check the **#1 jumper(NEW Style)** or **#2 & #3 jumpers (OLD Style)**. - [See page 5](#)

*Each game, and sometimes each weapon within each game, require a different and specific speed setting to achieve the proper firing rate. Although this chip is very fast, you are still limited by how fast the game allows a weapon to shoot.*

*Shooting speed in some games are also limited in game by the weapon's rate of fire and animations. You can slow down full automatic weapons to pinpoint precision or even speed single shot weapons.*

*In some Call of Duty games you must set the fire rate just **below the allowed limit** for some weapons, otherwise, **if your fire speed is too fast for the game, your weapon will be blocked.***



**Additional information about CALL OF DUTY 5:** This mod chip does not disable or change the detection of rapid fire in Call of Duty 5, this could not be done from a controller. By understanding how the rapid fire detection in the game works we have been able to create the fastest rapid fire possible. But this also means that the rapid fire is not totally immune to the game detecting it. Quickly pulling the trigger multiple times while the rapid fire chip is turned on can cause it to limit your rate of fire as the game will see the rapid fire from the mod chip as well as your manual trigger presses which can sometimes activate the detection within the game and limit your firing rate. But under most circumstances this will not happen.

### **CALL OF DUTY 4**

Infinity Ward released a new patch for this game on 09/03/09, limiting your firing speed. Although this chip is very fast, you are still limited by how fast the game allows a weapon to shoot.

**TIP:** You can use a **DOUBLE TAP** feature (**second tier Perk**) to increase the rate of fire on some weapons (G3, pistols, etc)

### **FEEDBACK: Get your XMOD Rapid Fire Chip for FREE!**

You can get your XMOD Rapid Fire Chip for free just by leaving the **BEST** feedback along with **5 out 5 star Detailed Seller Rating (DSR's)** which includes : **Item As Described, Communication, Shipping Time and Shipping an Handling Charges**. Once a month, we pick three of the **best feedbacks** from this current month and refund **100%** of their purchase price an shipping. So, be **CREATIVE** and you can be this month winner!

We value all of our customers and their opinions and feedback. In the rare instance that you feel that negative feedback needs to be left, please allow us the opportunity to work with you to correct any misunderstanding to avoid this situation. Customer satisfaction is our number one priority and we will work diligently with you to resolve any unforeseen circumstance. We will return all feed-backs as they are left. Email us at

[support@xmodelectronics.com](mailto:support@xmodelectronics.com)

Thank you,  
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