

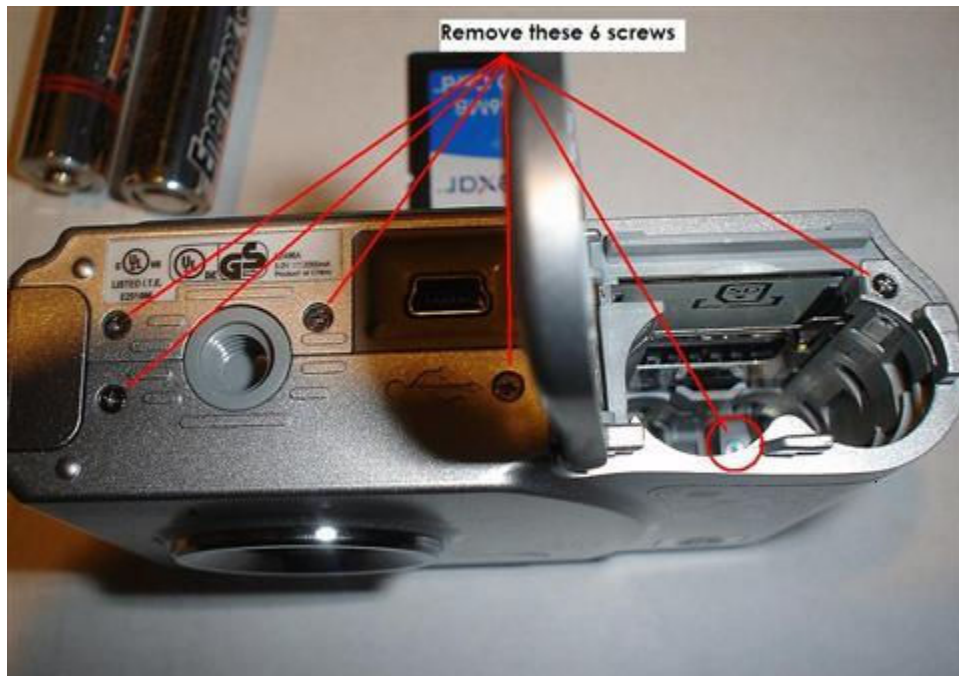
HP E337 MODIFICATION

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BFoutdoors assumes no responsibility for personal injury or property damage resulting from these modifications. Furthermore, modification of commercial products is done at your own risk, and can result in permanent fatal damage to the camera if not properly done. Please use extreme caution since high voltage exists within camera flash units. Take proper steps to assure all energy has been discharged (from the capacitors, etc.), before touching any components inside the camera. You should AT LEAST cover the camera lens and take a flash picture, and then IMMEDIATELY open the battery cover to prevent the flash from recharging. Even so, there will still be some charge leftover that might shock you, or destroy the camera if shorted somewhere!

Before beginning this hack, you need to remove the batteries and memory card from the camera...and save the refreshments for celebration afterwards :)

The first step will be to remove the 6 screws on the underside of the camera, one of them is hiding deep down inside the battery compartment, and it actually holds the Shutter/Power board in place.



The Shutter /Power cover plate needs be removed, or taken off. Start by prying the bottom edge out with a fingernail, then use a small screwdriver to pry it out of a snap lock of sorts, holding it on about halfway up the left side.



Now you slide the Power/Shutter plate off. Note that there is a catch on the top middle section; slide the plate out to the right, as shown, and it will pop off.



You will now see there are 3 more screws you have to remove, 2 on the side, where the Power/Shutter plate covered them, and one on the top of the camera. I have already removed the one on top, but it was in the corner where I circled.

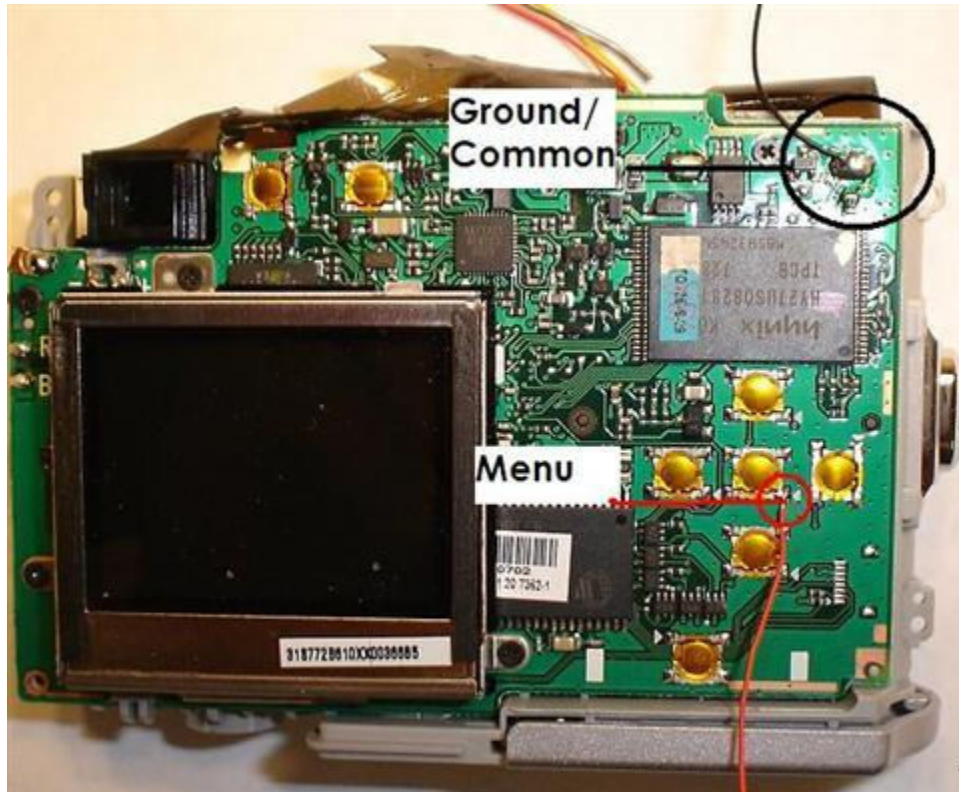


After removing these next 3 screws, you can finally take the front section off of the camera. Start this from the side where we just removed two of the screws. The other side clips in place, and it can be stubborn, but gentle twisting as you open it will help it come off there.

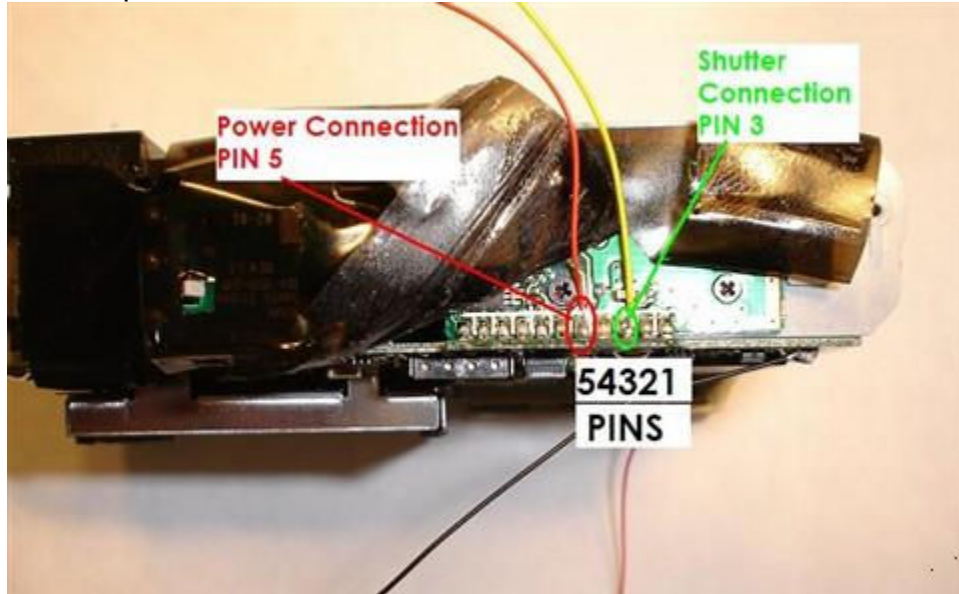


The back case should come right off now, and we can get to main board.

Using an ISO setting of 400 makes for much better night pictures, and I feel this is needed. I found that when we set this camera to sports mode, it will go to ISO 400, but when we power it off, it returns back to the default setting of ISO 200. I found we could prevent this if we press the menu button while turning the camera on. So, we want to solder a control wire to the Menu button. This wire will later be twisted to, and connected to, the power wire on the opposite side of the servo connector... or at the controller boards Power connection. By adding this menu wire, and connecting the power and Menu wires outside the camera, the camera will still work normally outside the trail cam. We will start the hack by soldering the ground/common wire to the big solder lug circled in black. Solder the menu wire where I have circled in red.



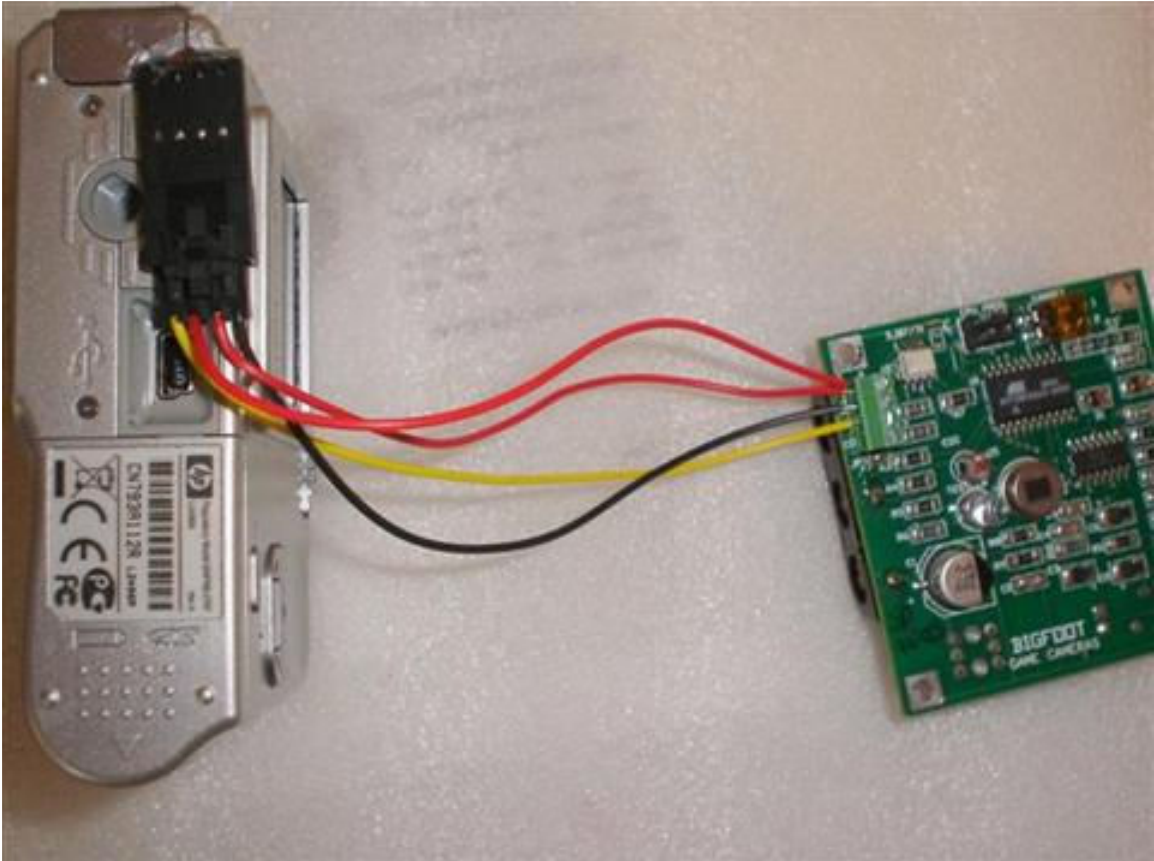
Now peel back the protective foil covering the top right back edge of this board, and solder the power and shutter control wires as shown.



When routing the wires out, take care so that they won't interfere with any of the buttons and switches on the board. Then reverse our steps and reassemble the camera.



As I said we run a 4-wire connector at the camera, here is where I installed it. On the controller board side we will join the RED power and menu wires, so that when connected to the controller, the camera will always turn on in ACTION Mode, and keep the ISO 400 setting. Here the black wire is common ground, and yellow connects the shutter.



Camera Settings and setup

Most settings will be the default settings there are only 2 that will help.

1. Turn the camera on and press the menu button. Scroll through the options and there is one that allows us to make the LCD screen darker. Since it can't be turned off this is a valuable power savings option. Once set this setting seems to remain in the camera.
2. With camera on, again press the menu button. You will see SHOOTING MODE; in this you will choose ACTION (This is ISO of 400 and helps greatly with our night pictures). Then use the return button to get it back in Picture mode. You will see a Runners icon in the bottom left hand corner of the screen. Now power the camera off and Plug in the servo connector. When the sensor turns the camera on, it will always come on in the Action mode/ISO 400. This setting will default back to normal shooting mode when powered on while disconnected from the servo connector, and needs to be reset each time you use it in the trail camera.