

AT220 Manual

NZ AutoTraps



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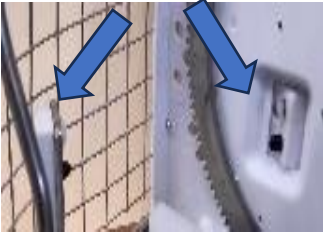
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2 AT220 COMPONENTS

Bait Bottle (Older Model)
Or Pouch (under lid).



Trigger Eyes



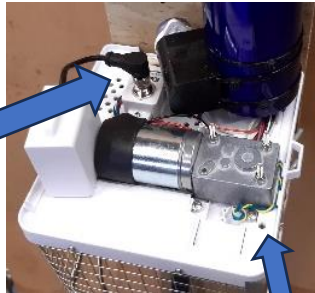
Possum keyhole



Kill Bar



Trap PCB controller



Rechargeable
Battery.



Trap Reset Motor
Drive Assembly



Spring kill
power

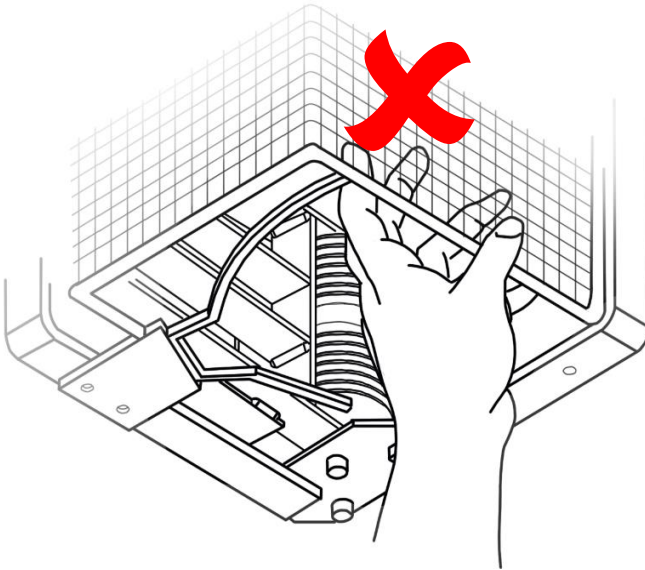


3 HEALTH & SAFETY:

The AT220 is designed to kill Possums and can cause serious harm to the user if not treated with care and caution.

The trap trigger is sensitive and can be activated by a bump or knock.

Before handling the trap, the kill bar should be down, and the battery unplugged. See Making the trap safe page 23.



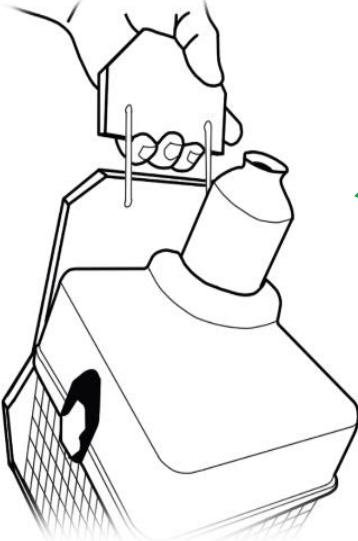
Even if not set, the mechanism should be treated with an adequate level of vigilance

WARNING: NEVER PLACE A HAND OR FINGER INTO THE INSIDE OF THE TRAP UNDER ANY CIRCUMSTANCE

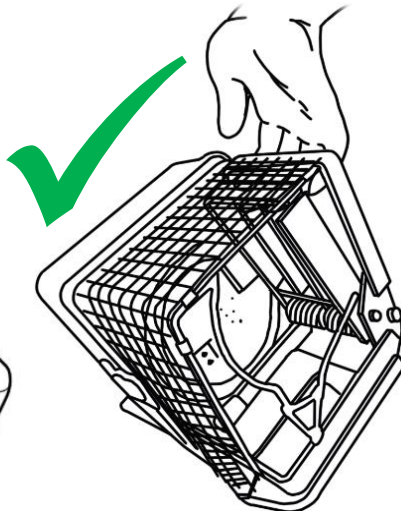
Kill-Bar Direction



Carry or handle the trap from the hanger



You can also carry from the back bar which is never in the path of the kill bar and sits behind the set position.



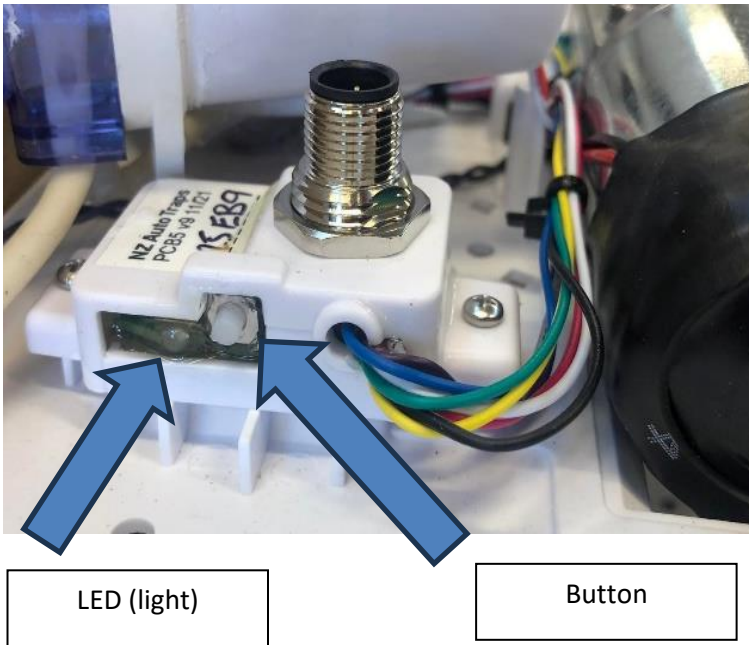
If any necessary intervention is in the path of the kill bar, then we recommend to use the NZAT Long Gripper, see page 17

4 TRAP BUTTON AND LED

On the control box there is an LED (small light) and small button. These are used for manual control of the trap and diagnostics.

It is important to identify these before continuing as they are required in a substantial portion of the tasks.

Please find them now



5 SETTING UP THE AT220

PACKAGE CONTENTS:

AT220 automatic resetting and rebaiting trap

- 1x battery pack
- 1x complementary battery charger
(Single purchases only) *
- 500ml bait bottle or 350ml bait pouch
- 2x mounting screws

*Bulk and repeat purchases may not include a charger

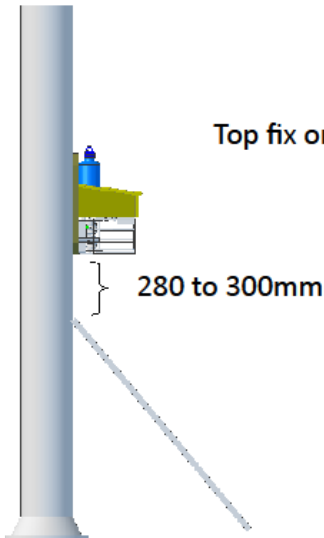
MOUNTING THE AT220:

Follow carefully to maximise the capabilities of the AT220

WARNING: BEFORE MOUNTING OR HANDLING THE AT220 BE SURE THE KILL BAR IS DOWN AND THE BATTERY IS DISCONNECTED

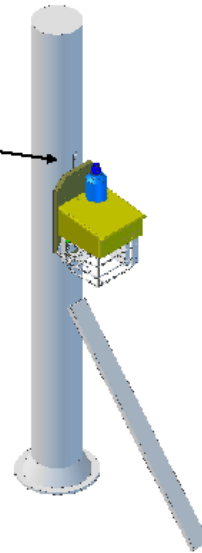
For Possums, rats, and mice: The trap is best mounted 300mm (bottom of rat ladder!) - above a ramp or small platform.

For Feral



Cats:

Top fix only



Mounting the trap lower to the ground and a ramp less steep should improve feral cat kills but a potential by-kill increase will have to be considered. Please treat alternative mountings with care.

If Within a Kiwi Zone or Around Domestic Pets: mount the trap at least 750mm high and use a ramp. A rough sawn fence pale or batten at 45° for the ramp works well.

Mounting: Fix the trap to a clean tree using two screws through the top mounting tag only. The rest of the trap must be able to swing out from mounting object, to ensure efficient possum execution.

The ramp or platform should be positioned so that the excess bait from the traps auto rebaiting drips onto the ramp or platform below. This excess acts as a pre-feed, encouraging a reluctant pest to return.

If the mounting location is on a steep slope, mount the trap on the high side of the tree with the ramp back into the slope. Due to possums normally approaching the trap from the high side.

Check bait block overflow: The best trap and ramp position is when bait block overflow runs on to the keyhole and then on to the ramp. Reposition the trap or ramp as required to let the bait overflow fall on to the ramp.

FILLING THE BAIT:

If using a bait bottle only refill to $\frac{3}{4}$ full. We recommend that the bottle is not overfilled.

After refilling a bottle stir the old and new baits together. Use a clean tool to stir- dirty sticks may cause blockage in pump and tube due to foreign material added to bait.

If refilling a pouch massage the pouch to stir the old and new baits together. Note: a pouch can be refilled or replace with new pouch- and refill at base.

Three Button clicks sets the bait to manual pump (LED amber/orange).

Press and holding the Button now runs the bait pump. This will time out after 30 minutes.

Excess bait should drip onto the keyhole then onto the ramp. Reposition the trap or ramp if the excess bait misses the ramp.

Select trap Auto. Press the Button 4 times, LED changes to green and the trap reset will restart.

Extra Bait can be Purchased from our Website:

NZAutoTraps.com

BAIT POUCH HINTS:

When removing a used pouch from the trap pull the pipe from the pouch cap first. This leaves the pipe clean and makes less mess. Don't remove the cap.

When replacing a pouch place the pouch on the tray then push the pipe through the cap. Don't remove the cap.

To carry a used pouch (with a punctured cap) you might want to swap the pouch caps before fitting the new pouch to the trap. Swap the caps with both pouches standing and outside of the trap.

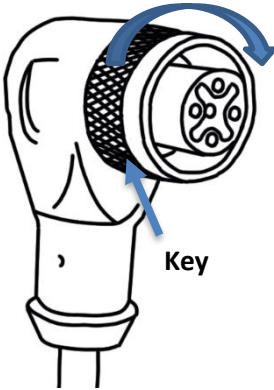
The pouch lies on its side. The bottom fits under the loop-Black cable tie used for photo.



The clear pipe is pushed through the cap after the pouch is in place.

CONNECTING/REPLACING THE BATTERY:

The battery can be changed with the trap in the set position however be careful not to put your fingers inside the grill while working the plug.



The plug has a locating key and will not need to be forced. When the key is located push the plug, turn the knurled nut, repeating until both feel firm.

If you cannot get the plug started remove the plug and battery and start again. It should locate in approx. position shown below.



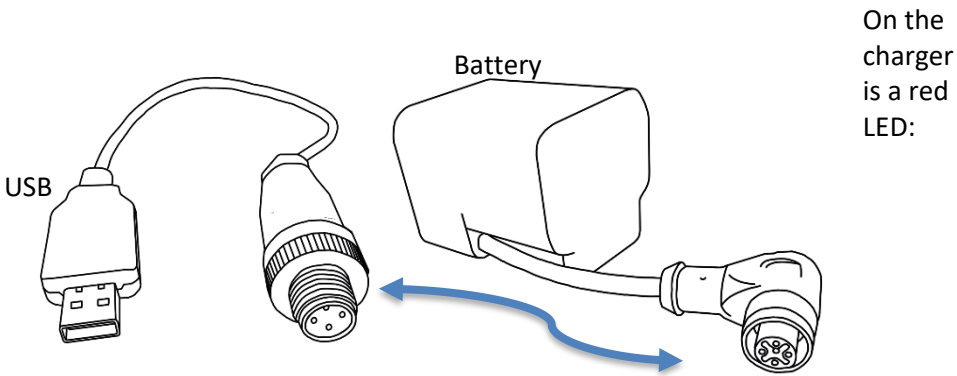
Once connected wait 10 seconds and press the Button.

If the trap is in the set: position the LED should be blinking green. Blinking green means the trap is set and ready.

If the trap is not set: the LED will be constant green and begin resetting OR the LED will blink a red fault code.

Refer to LED functions page 19 for all the LED functions.

CHARGING THE BATTERY



On the
charger
is a red
LED:

Note: A flat battery can take overnight to fully recharge.

WARNING: IF THE CHARGED BATTERY IS UNPLUGGED AND RECONNECTED TO THE CHARGER IT WILL TAKE APPROXIMATELY AN HOUR FOR THE RED LED TO INDICATE IT IS CHARGED

WARNING: WHEN YOU UNPLUG THE USB END ALSO UNPLUG THE BATTERY. DO NOT LEAVE THE BATTERY CONNECTED TO THE USB FOR EXTENDED PERIODS

Setting the Trap to Auto: After the battery has been connected for approx. 10 seconds the illuminated LED, will turn off (Asleep). Press the Button (one click), the LED will go green and the trap is now in Auto. If the trap is not set, the trap will start the reset cycle. If the trap fails to reset refer to LED functions page 19-20. Be warned the trap may trigger as it recalibrates its trigger (waiting) position, this can take three reset cycles.

Pump Additional Bait: After the trap resets, bait is automatically added by the pump to the bait block/tray. You can add bait manually if required using the Pump manual mode. If the trap is asleep (LED is not illuminated), wake with one press of button, after the LED shows green, pressing the button three times (Clicks) selects the manual pump mode, and the LED turns amber, you can now operate the pump manually. Pressing the button will activate the pump adding more bait to the block/tray. When finished adding bait, use the button to place the trap back into Auto mode, you can do this by pressing the button four times (4 clicks). Because the pump is still in manual mode the pump will operate each time you press the button 4x. The LED will turn green after 4 presses, which highlights that the trap is now back in Auto mode. See Button and LED Functions page 19-20 for manual operations.

Last Check: After the trap has run through its reset cycle, the trap kill bar should be in the set position. Be warned the trap may trigger as it recalibrates its trigger (waiting) position, this can take three reset cycles. Once it is set the LED will go out, if you now Press the Button once, the LED blinks green, highlighting that your trap is set and working. If not blinking green see Button and LED page 19-20

6 QUICK VISIT CHECKS

Your trap should be checked within the two weeks when the trap has first been installed or relocated. Since the catch rate will be higher when first installed or relocated.

We recommend 3 monthly checks and a battery change every 6 months.

Hint: Record in your diary when a battery is changed and when next 6 month change is due. Include the trap number and battery number.

1. **Check the trap is set:** The kill bar should be in the set position. The LED will be off, and the trap will be “sleeping.”
2. **Check the LED:** Press the button once if the LED blinks green the trap is set and working. The bait will do one pump cycle if the LED was off. (+V33.3)
3. **Bait check:** See page 9.
4. **Clear any debris:** See page 18 for more detail. Set trap to Manual. Then remove any debris from inside the trap. **DO NOT put your hand in the trap**, use NZAT Long Gripper.
5. **Check the trap mounting and ramp condition:** Repair as required.

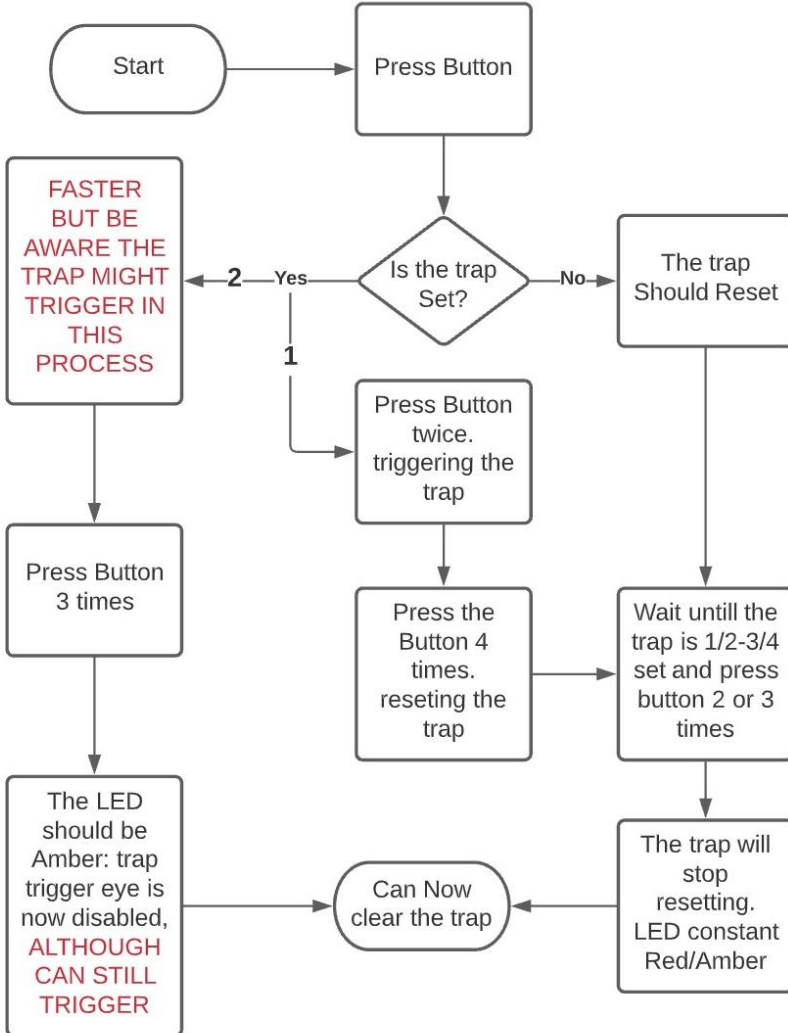
DAYLIGHT DEACTIVATION FEATURE: The trap has a daytime deactivation feature to reduce the chance of catching birds. The trap will remain in its set position, but the trap trigger mechanism shuts off and the trap will not fire.

To fire the trap during the day you can press the Button once to get the green light, the trap is now in manual mode and the trigger is active.

THE TRAP CAN STILL FIRE IF BUMPED.

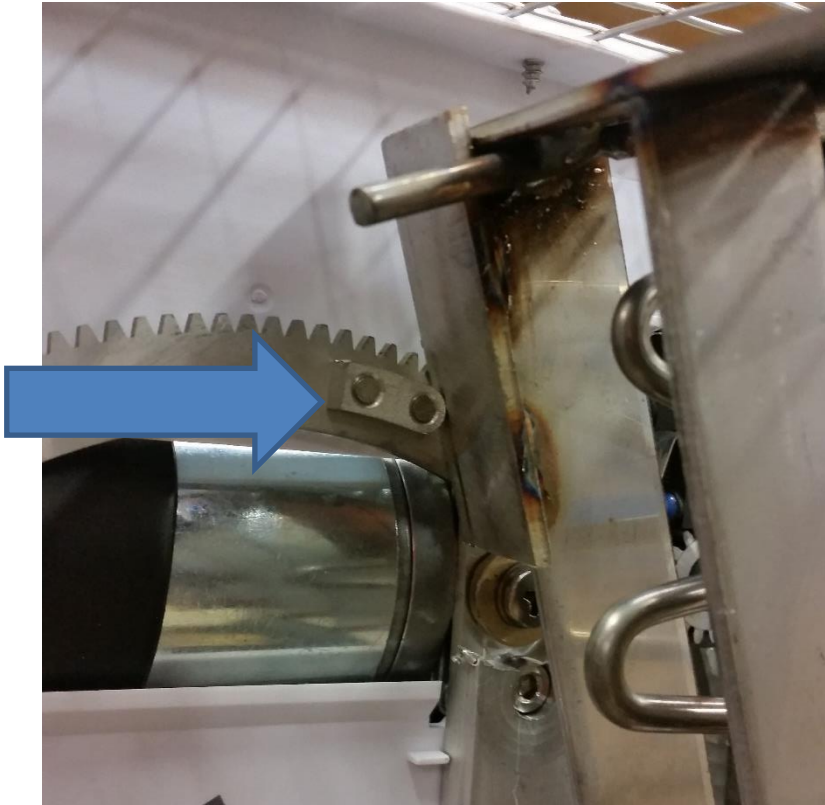
CLEARING SET UP

To make clearing easier we want the trap to be partially set. Follow the flow chart as below, with the following images showing what 1/2-3/4 set means when viewing the kill bar sprocket lifting lug.

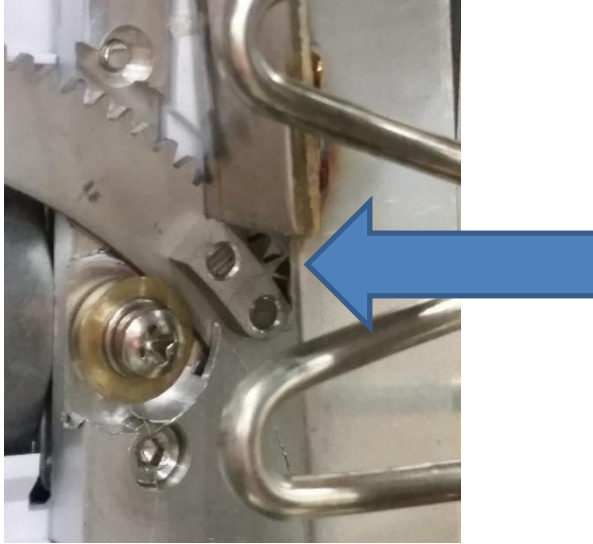


Reset Lug at 1/2-3/4 set position.

Trap showing 1/2 set position, note position of sprocket lifting lug at approx. 1/2 way along kill bar plate. (Half set)



Note: If the sprocket lifting lug has started to move under the Kill bar plate you have gone too far.

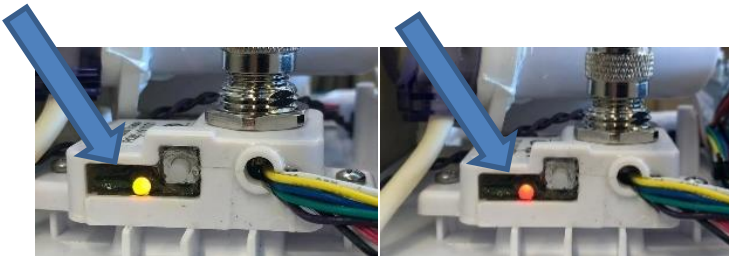


Trigger the trap and try again.

Amber / Red LED:

3 presses of button and LED changes to amber. (Pump manual mode)

2 presses of button LED changes to red. (Trap reset Drive manual mode)



Note: Manual Pump mode will time out after 20 minutes.
Use Option 1 if you are wanting to disable the trap for extended periods.

CLEARING DEBRIS

Once the kill bar is out of the way the trap can be cleaned easily

Tools Required:



NZAT Long Gripper

Cleaning:

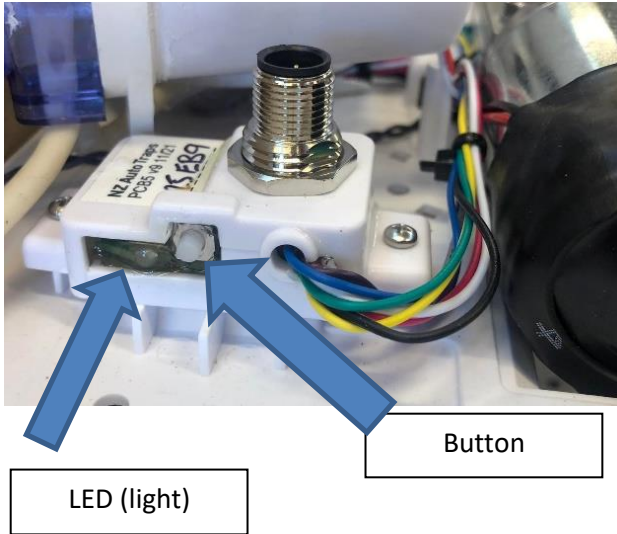


Note: Manual mode will time out after 30 minutes and the trap will begin to reset. Disconnect the battery if you are wanting this state for extended periods.

WARNING: DO NOT PUT HANDS OR FINGERS UNDER THE KILL BAR. MAINTAINANCE OF THE TRAP CAN BE PERFORMED SAFELY WITHOUT PLACING HANDS INSIDE OF THE TRAP

7 LED AND BUTTON FUNCTIONS

A summary of the trap mode and potential actions



The LED has 3 colours, green, red, and amber, and 3 states, off, on (constant) and blinking.

The Button has 4 different press combinations, 1 press, 2 presses, 3 presses and 4 presses. Remember to delay at least three seconds between combinations.

The trap has three different modes, automatic, Trap reset drive manual mode and pump drive manual mode.

LED FUNCTIONS-

The LED can be used to determine the traps state:

Indication:	Meaning:	Next Action:
<i>No LED ON</i>	Trap inactive/'sleeping' OR Trap battery is flat	Press the Button once to "wake up" Replace battery if no response from the Button
<i>LED blinking green</i>	Trap is set and OK	No action required
<i>LED blinking amber</i>	Trap is set and OK however the eye is not completely clear	Check the eye is not part covered and clean OR Amber blinking is OK, the trap will still trigger
<i>LED blinking red</i>	Indicates a fault... If trap is set: Constant On, Off blink OR If trap not set: 1 blink, 3 blinks:	Indicates an eye fault. Clear the eye. The LED colour should change. If not see Trap will not trigger Page 26. Battery fault. Replace the battery. Drive timeout. Check for a kill bar jam- WARNING: THE TRAP MAY STILL TRIGGER!!!
<i>LED constant green</i>	Trap is resetting or waiting to reset	No action required To press the Button will start the reset sequence
<i>LED constant red</i>	Trap is in Reset Drive Manual	The Button will drive reset drive when pressed OR 4 presses to end manual OR If left, manual will timeout and reset

*LED constant
amber*

Trap is in Bait Pump
Manual

The Button will run the bait pump
when pressed

OR

OR
4 presses to end manual.
If left, manual will timeout

Trap just triggered.
Possum detector is
working

No action required.
Bump trap, LED should flicker red

BUTTON FUNCTIONS

The Button has distinct functions depending on the state of the trap:

Action:	Result:	
<i>1x Press</i>	Wakes trap if sleeping	See LED functions
	Restarts reset if waiting or in fault	
	Restarts comms link (optional)	
<i>2x Presses</i>	Sets Reset Drive manual	LED will change to constant red WARNING: THE TRAP WILL TRIGGER WHEN THE MANUAL IS FIRST SELECTED IF THE TRAP IS IN A SET POSITION
<i>3x Presses</i>	Sets Bait Pump manual	LED will change to constant amber
<i>4x Presses</i>	Resets manual modes to automatic	LED will change to green. See LED functions If the trap is not set the trap will begin to reset
<i>Press and hold in automatic</i>	No function	
<i>Press and hold in manual</i>	Drives the reset drive or bait if trap is in manual	Four presses to exit manual

Note 1: Wait at least 3 seconds between press combinations.

But when completing a combination, you will want to click the button quickly

8 MAKING THE TRAP SAFE.

WARNING: THE TRAP IS AUTOMATIC AND CAN BE TRIGGERED WITHOUT WARNING!!!

NEVER PUT YOUR HANDS OR FINGERS BELOW THE KILL BAR EVEN WHEN THE BATTERY IS DISCONNECTED!!! THE TRIGGER IS VERY LIGHT AND MAY RELEASE WITHOUT WARNING

NEVER TRANSPORT OR CARRY THE TRAP WITH THE KILL BAR IN THE SET POSITION OR WITH THE BATTERY CONNECTED

SHORT TERM SAFE.

If the battery is good

1.. Trigger the trap by pressing the Button twice. Two presses set the reset drive to manual; this will trigger the trap if set.

2.. The LED will change to constant red

WARNING: IF THE LED IS NOT CONSTANT RED, IT IS NOT IN MANUAL. RETRY TWO PRESSES!!

3.. The Button will now manually drive the reset stopping and starting as the Button is pressed and held

4.. You can use the manual control to lift the kill bar to remove debris from under the kill bar

WARNING: DO NOT USE YOUR HANDS OR FINGERS TO REMOVE DEBRIS FROM UNDER THE KILL BAR

WARNING: MANUAL MODE TIMES OUT AFTER 30 MINUTES, THE TRAP WILL THEN CHANGE TO AUTOMATIC AND RESET

If the battery is flat

Press the Button once if there is no LED the battery may be flat. It is necessary to replace the battery to trigger the trap

WARNING: NEVER ENTER THE TRAP ASSUMING UNPLUGGED IS SAFE

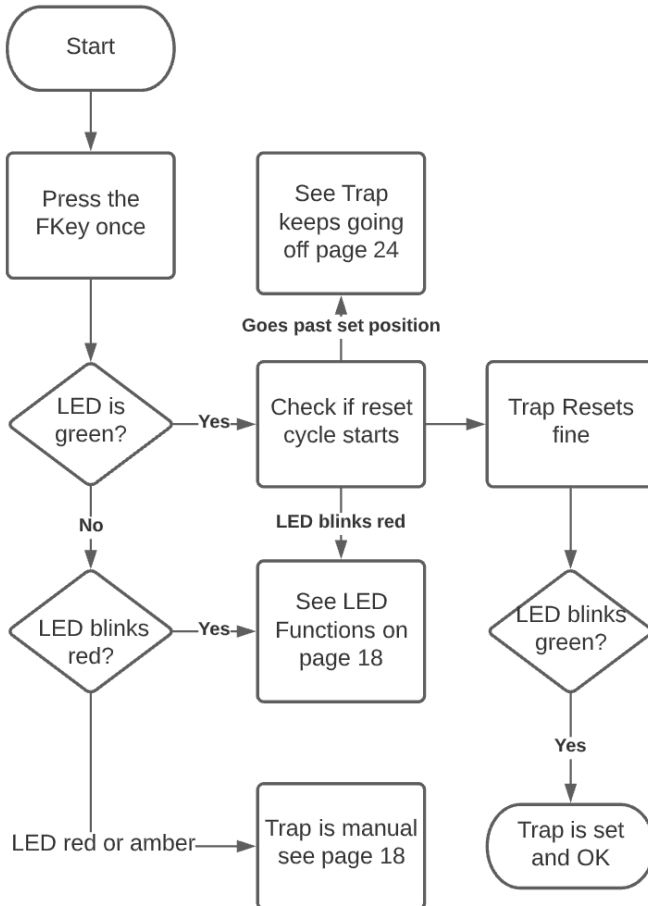
LONG TERM SAFE

Long term safe is where the kill bar is down resting against bottom plate, and the battery is disconnected.

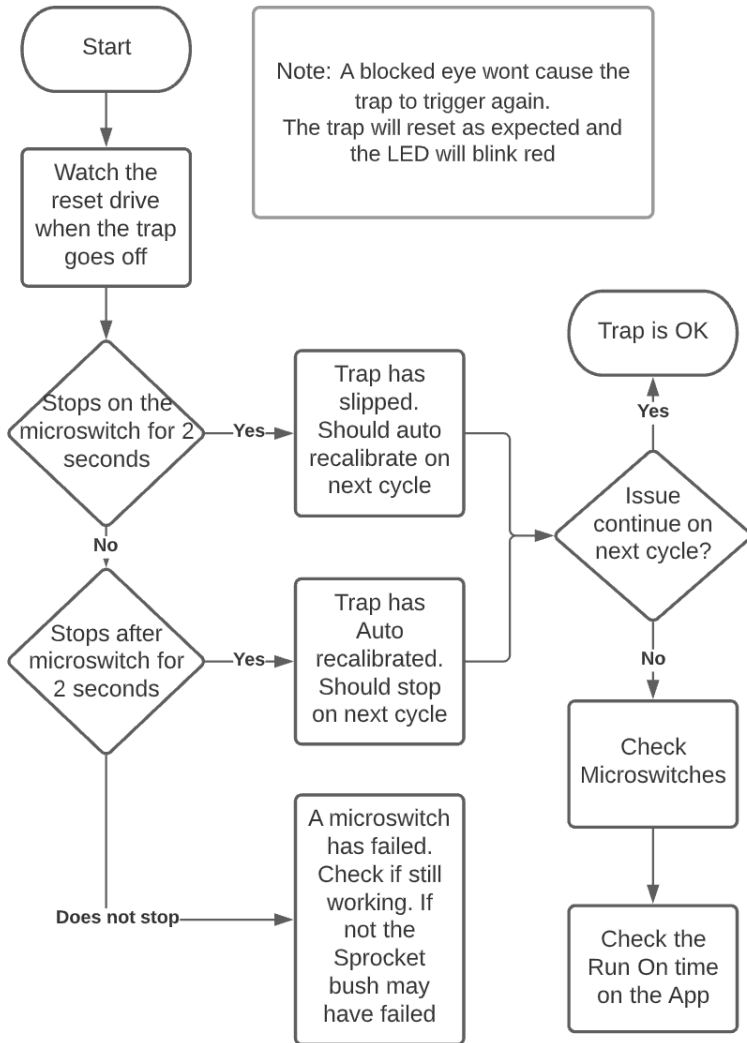
To make the trap “Long Term Safe” first make the trap short term safe as described above then disconnect the battery.

Trouble Shooting-Use this guide to step through a trap problem.

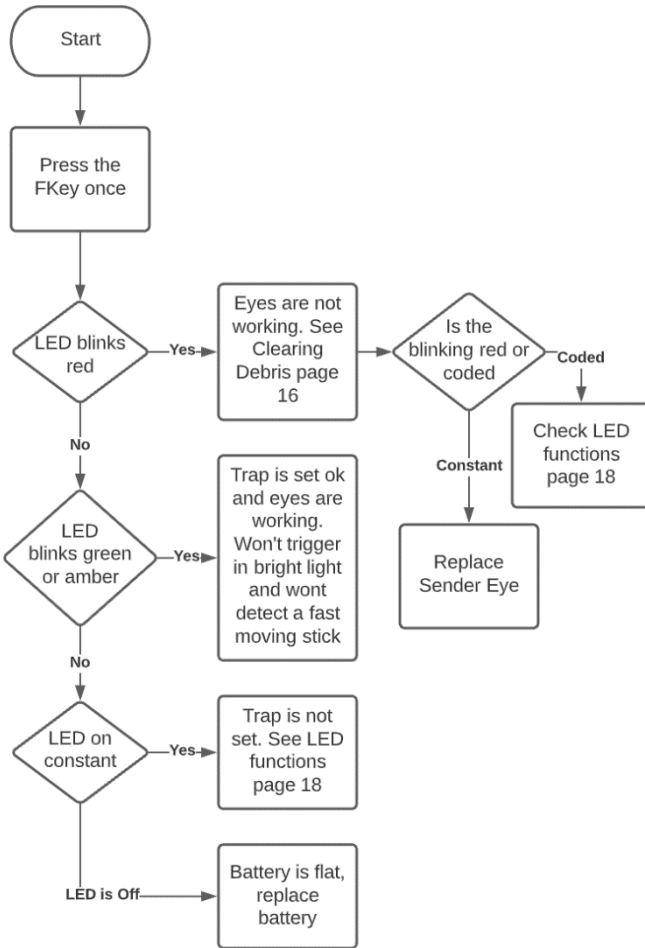
TRAP WON'T RESET OR IS ONLY 1/2 SET:



TRAP KEEPS GOING OFF:



TRAP WONT TRIGGER:



9 CONTACT DETAILS

Website: www.NZAutoTraps.com

Further Resources : <https://nzautotraps.com/pages/how-to-use-the-at220>

Email: info@nzautotraps.com