

## 12) Using the AXE122 Bumper Switch Kit

The optional bumper switch kit (part AXE111) provides two long arm 'bumper' switches that can be connected to any of the inputs (0,1,2,6,7) marked on the PCB.

However make sure these inputs are not already in use by another module before soldering. The module input/output usage is as follows:

Module	Out3	In0	In1	In2	In6	In7
line follower			X	X	X	
infrared		X				
ultrasonic	X					X



### Kit Contents/Assembly:

- 2 microswitch
- 2 plastic spacer
- 2 M3 20mm bolts
- 2 double wire connectors (may be supplied as triple wire connectors)

- 1) If the double wire connectors are supplied with three wires, use a pair of scissors to cut off the spare wire, as only two wires are required.
- 2) Solder one wire of each pair to the 'C' terminal on the switch, and the other wire to the 'NO' connector on the switch.
- 3) Solder the other end of the wire pair to the selected input holes on the micro-robot. The wires can be soldered either way around.
- 4) Carefully bend the last 10mm of the switch as shown in the photograph. This helps stop the switch 'jamming' on obstacles.
- 5) Use the plastic spacers and M3 screws to mount the switches in position. Note that the screw is tightened directly into the plastic hole on the switch body.

### Sample program:

This sample program stops the micro-robot if input2 or input 6 is activated.

```

main:
    pause 100                \ motor controller start-up pause
    let pins = %10100000    \ buggy forward
loop:
    if input6 is on or input2 is on then stop
    goto loop                \ loop around

stop:
    let pins = %00000000    \ stop
    goto stop

```