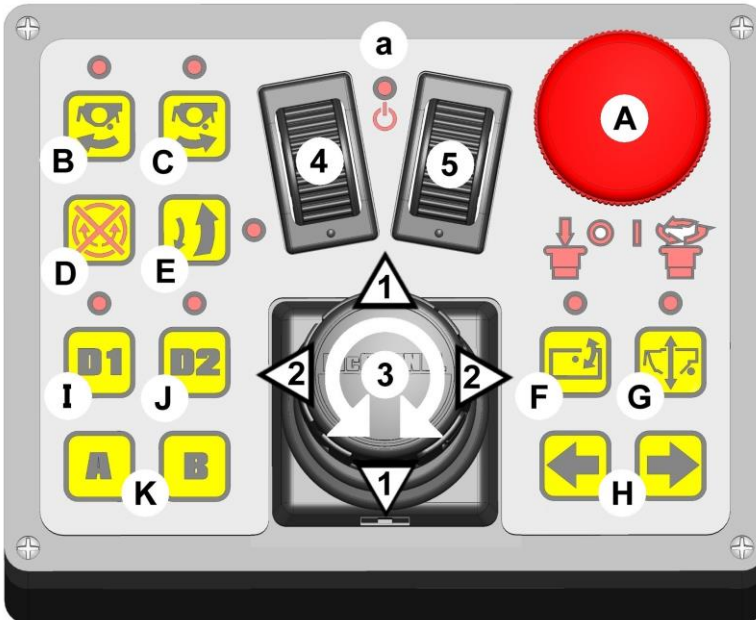


XTC (Mk3) PROPORTIONAL SWITCHBOX CONTROLS (7 Service)

Machines with XTC Mk3 Proportional Controls (7 service) will be supplied with the control unit shown below. The units for both electric and cable controlled rotor machines are identical except that for cable versions the rotor control switches B, C & D (*shown below*) will not provide a function as rotor operation will be controlled by a separate cable lever unit (*refer to specific cable rotor control page for operation details of that unit*).

Identification & Function of Controls



1. Arm Lift Control.
 2. Arm Reach Control.
 3. Head Angle Control.
 4. Slew Control (Default) / 6th Service*
 5. Tele/Midcut/VFR Control.
- A. Power On/Off (LED 'a' indicates status).
B. Rotor Start (Uphill Cutting Direction).
C. Rotor Start (Downhill Cutting Direction).
D. Rotor Stop.
E. Auto Reset.
F. Head Angle Float On/Off.
G. Lift Float On/Off (Option).
H. 6th Service* / Slew (Swapped Mode).
I. 6th Service Activation Switch
J. 7th Service On/Off (if applicable)
K. N/A
- * If applicable

*NOTE: On machines that feature a controllable 6th service the functions are operated by default using the ◀ ▶ buttons (H), this control can be swapped to operation by the LH Thumbwheel (4) by activation of the D1 control panel button; in this case Slew is then operated by use of the ◀ ▶ buttons (H). Control panel button D2 is used for any other additional services that require on/off control only i.e. Debris Blower / Diverter Valve.

NOTE: By default the VFR function on Tele/VFR machines is controlled by use of the RH Thumbwheel (5); the Tele function is configured to the D1 diverter control.

LED Lights

LED lights adjacent to control button reports the status of that particular function; when the function is selected the LED light will illuminate to confirm that the function is active; the light will switch off on de-selection of the function.

Powering the Controls

Activation of power to the control unit is by operation of the red button switch as shown below:

Rotate clockwise for **Power ON**
(LED light on confirms power on)

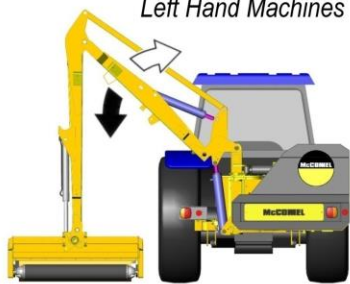


Press for **Power OFF / Emergency Stop**
(LED light off confirms power off)



ARMHEAD OPERATION

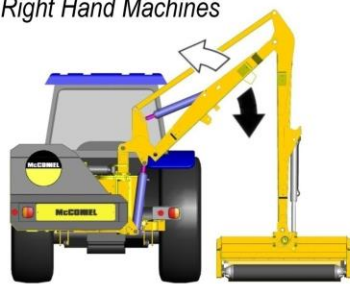
Left Hand Machines



LIFT



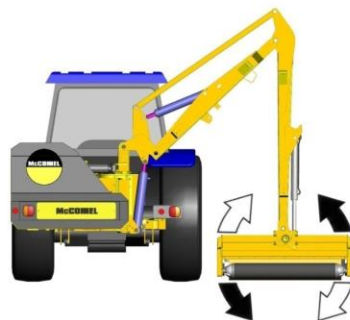
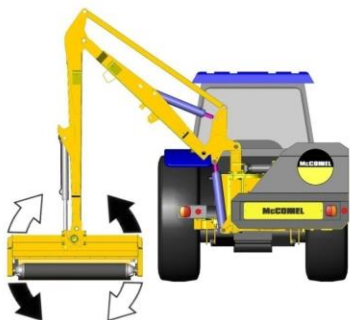
Right Hand Machines



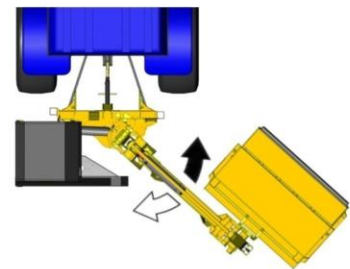
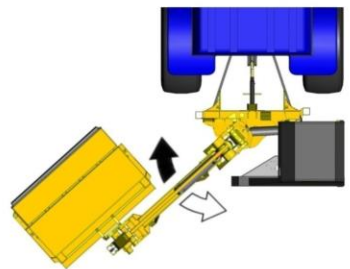
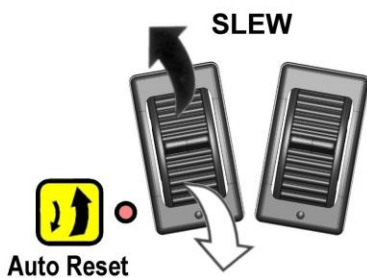
REACH



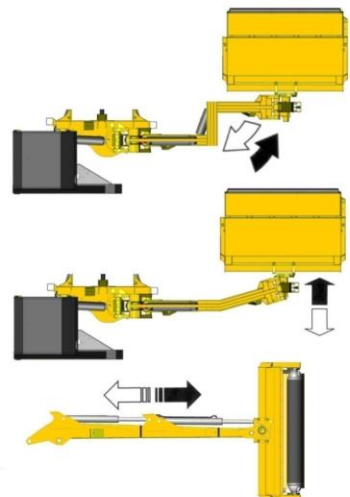
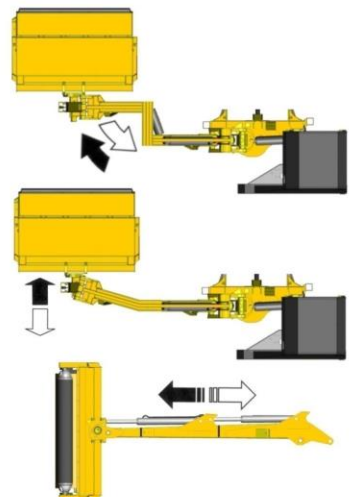
ANGLE



SLEW

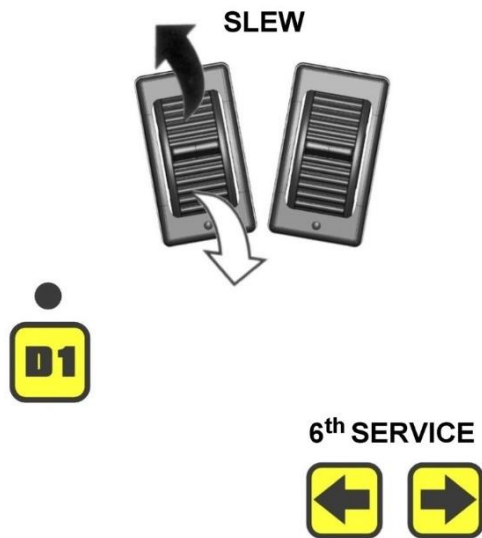


MIDCUT / VFR / TELE
(where applicable)

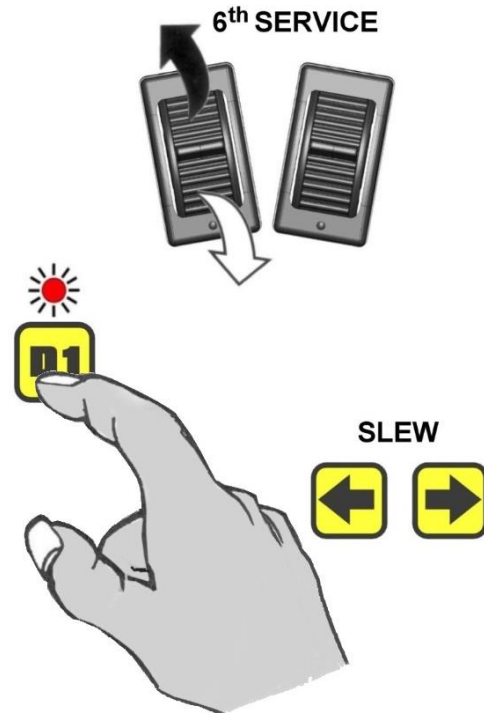


6th SERVICE (Where applicable)

Default Mode

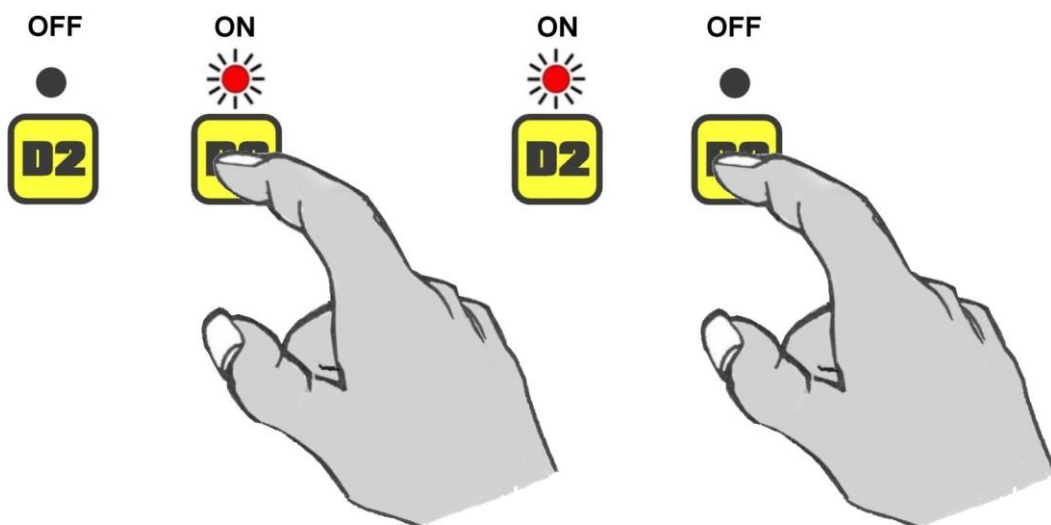


Swapped Mode (D1 Activated)



On machines fitted with a controllable 6th service default operation of that function will be via the ◀ ▶ buttons on the control unit. If required, control of the function can be swapped to the left hand toggle switch by activating the D1 button on the control panel; in this mode slew operation will then be transferred to the ◀ ▶ buttons. De-activating D1 will return the functions to their default controls. An LED light above the button confirms when the service is active.

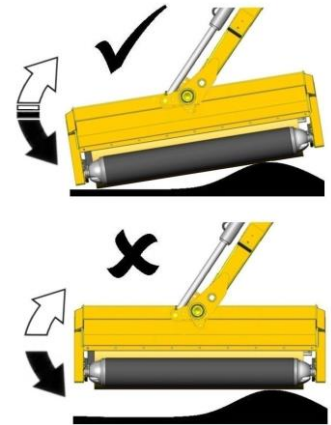
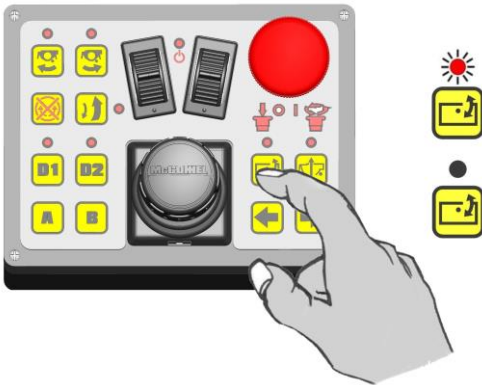
7th SERVICE (Where applicable)



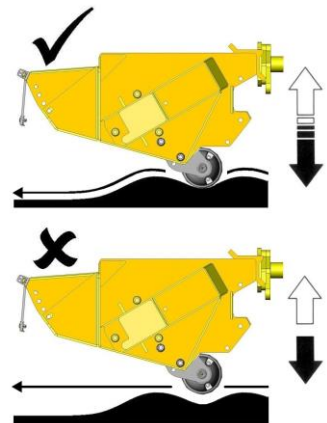
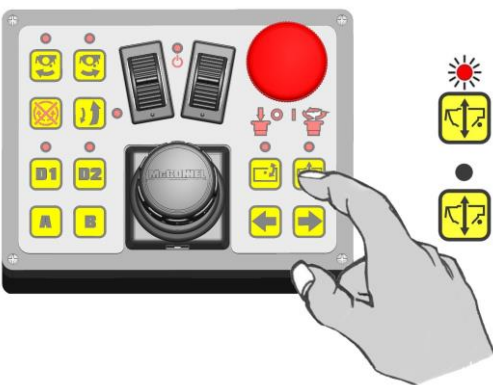
Additional services that require ON/OFF control only are operated by the D2 button on the control panel; pressing the button will switch the service on, pressing the button again will switch it off. An LED light above the button confirms when the service is active.

HEAD FLOAT OPERATION

Angle Float (Optional)



Lift Float (Optional)



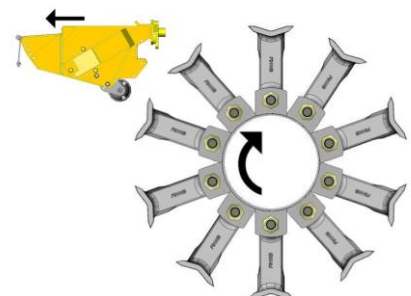
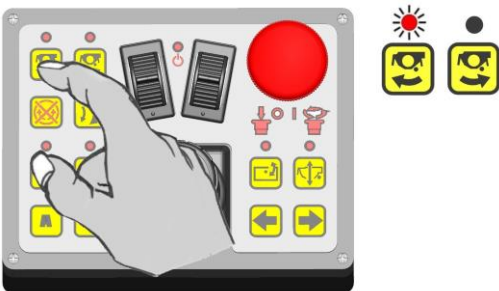
ROTOR OPERATION – Electric Rotor Control Models only

NOTE: The following section relates to machines with electric rotor control only – for cable rotor control models refer to the specific cable rotor control section in the manual.

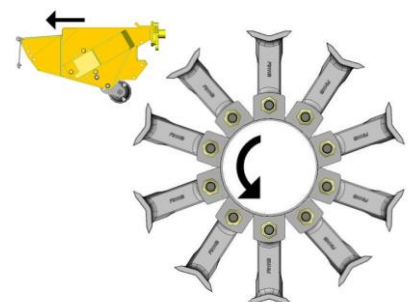
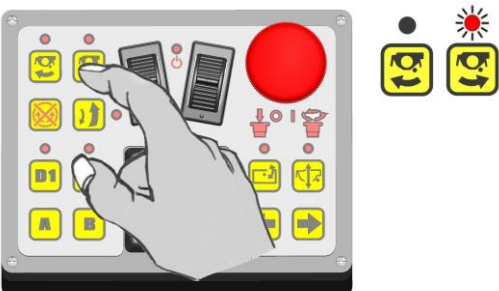
Rotor Start (Selection of Rotor Cutting Direction)

Select rotor start for required direction (LED will light to indicate the active direction).

Uphill Cutting

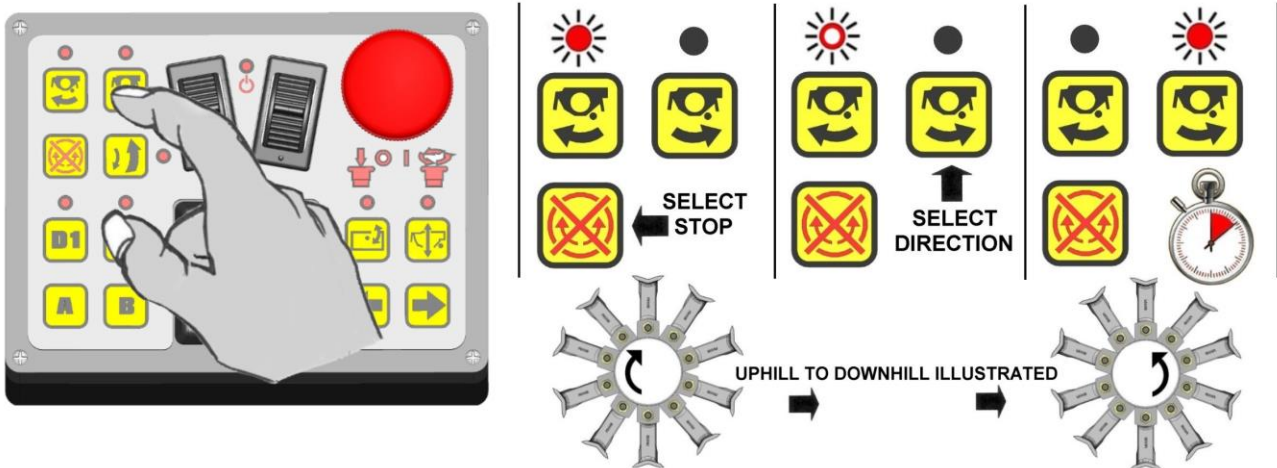


Downhill Cutting



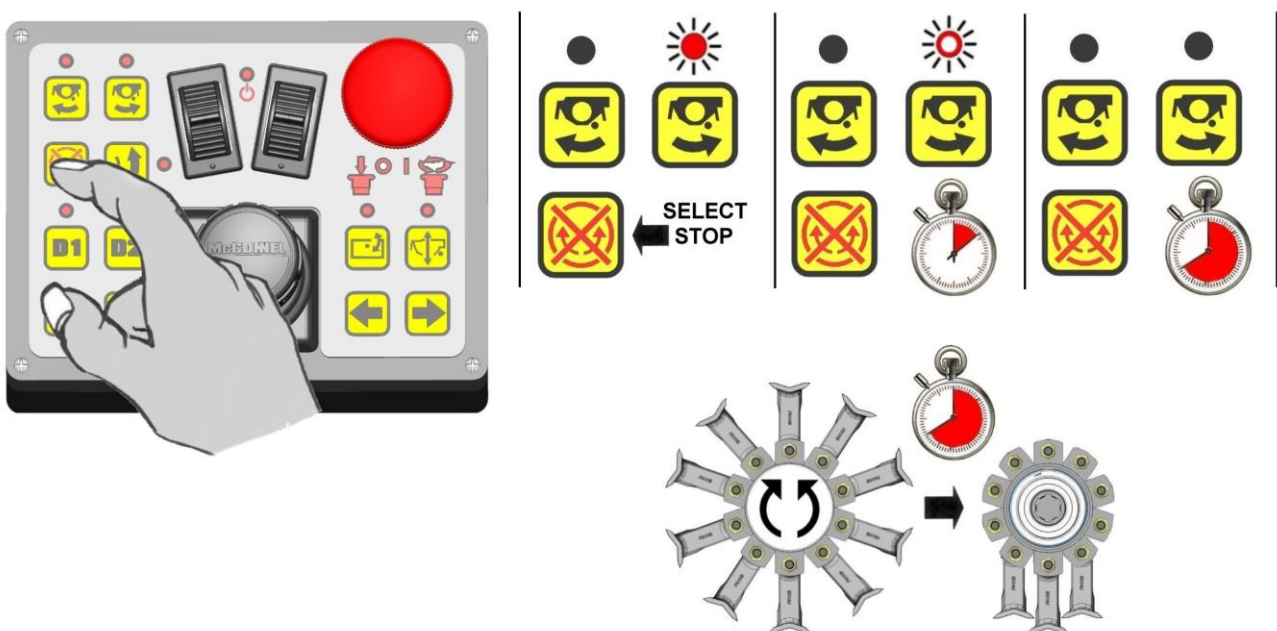
Switching Rotor Direction

With the rotor running, changing the rotor cutting direction can only be achieved after first operating 'rotor stop', when stop has been selected the specific direction button can then be operated to command the rotor to switch to the desired direction. NOTE: This function has a built in time delay of approximately 8 seconds - this is a machine protection feature that allows the rotor sufficient time to de-accelerate before restarting in the opposite direction. The LED light of the active cutting direction will flash on and off during the slowing down period, when the direction has changed the LED for the new direction will be illuminated.



Switching the Rotor Off

Stopping the rotor is performed by operation of the rotor stop button as illustrated below. When 'rotor off' has been selected the LED light above the button of the active cutting direction will flash on and off at an increasing frequency for approximately 8 seconds to signify that the rotor has been switched off, after this 8 second period the light will go off completely. NOTE: The rotor will continue to rotate under its own power until it finally comes to a standstill.



CAUTION: When the rotor is switched off it will continue to 'freewheel' under its own momentum for up to 40 seconds before finally coming to a standstill – do not leave the tractor cab or attempt to approach the flailhead until the rotor has stopped turning completely.

TEMPERATURE COMPENSATION – SELECTION & CALIBRATION

The control unit features a built in temperature compensation system which automatically adjusts the performance of the system in response to increased solenoid temperatures ensuring maximum operating performance is retained in all work conditions.

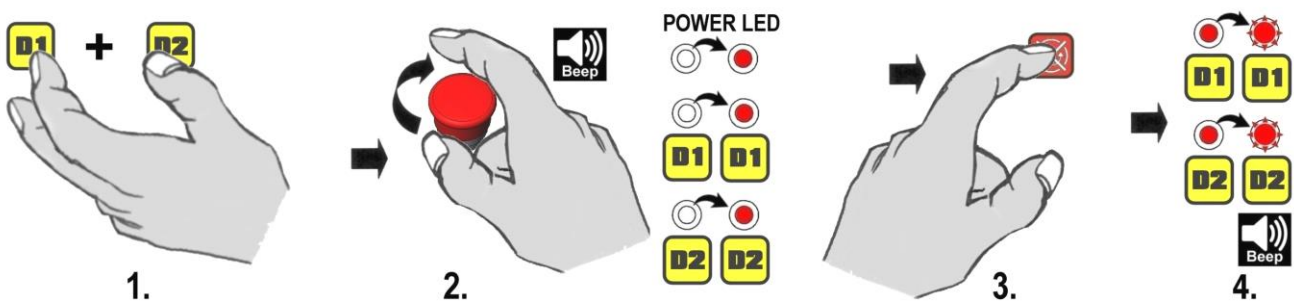
On initial machine setup the temperature compensation system must be calibrated and activated; when this has been performed the temperature compensation system will not require any further attention or adjustment and will operate automatically.

*The procedures for calibration and activation of the temperature compensation system are as stated below. **Ensure PTO is OFF for the calibration procedure.***

Temperature Compensation - Calibration

With the control unit powered OFF;

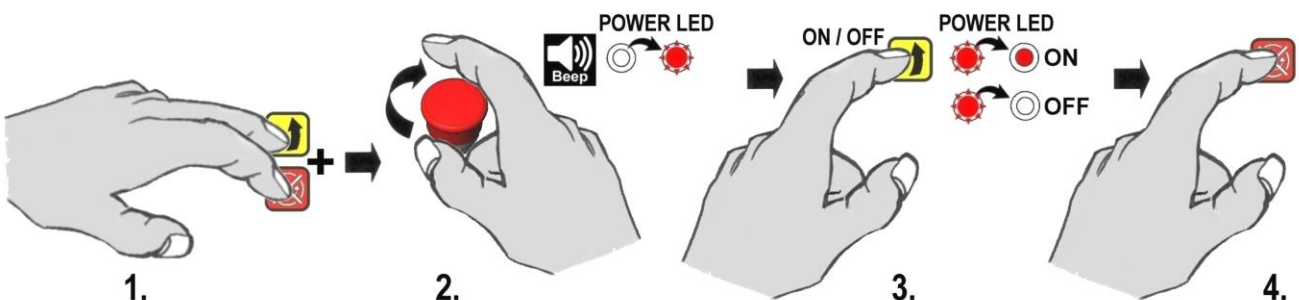
1. Press and hold 'D1' & 'D2' keys.
2. Turn 'Power ON'; unit will emit a 'beep', **Power, D1 & D2 LED's will illuminate.**
3. Press 'Rotor Stop' key.
4. **D1 & D2 LED's will flash** (cutoff outputs will turn on for approx 2 seconds).
Unit will emit a 'beep' to confirm calibration and the unit will be restarted.



Temperature Compensation - Enable / Disable

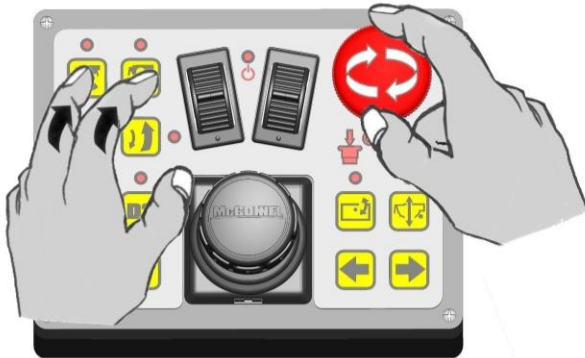
With the control unit powered OFF;

1. Press and hold 'Auto-Reset' & 'Rotor Stop' keys.
2. Turn 'Power ON'; unit will emit a 'beep' and **Power LED will flash.**
3. Press 'Auto-Reset' key to enable (or disable) temperature compensation.
Power LED ON = Temperature Compensation ON (Enabled)
Power LED OFF = Temperature Compensation OFF (Disabled)
4. Press 'Rotor Stop' key to complete selection.
All LED's will flash and the unit will be restarted.

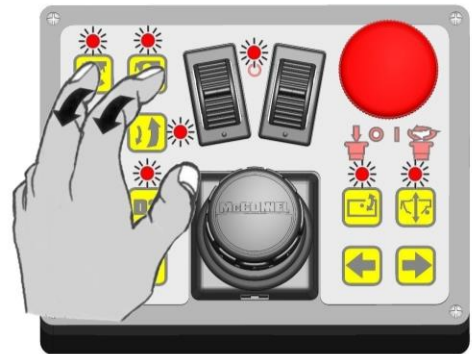


CONTROL UNIT CALIBRATION

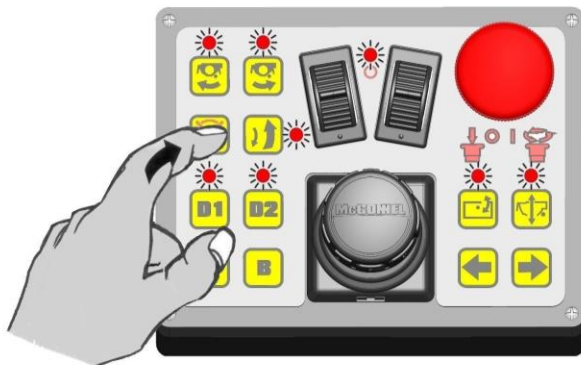
If for any reason the controls should stop responding the unit will need to be calibrated; the procedure for this is shown below.



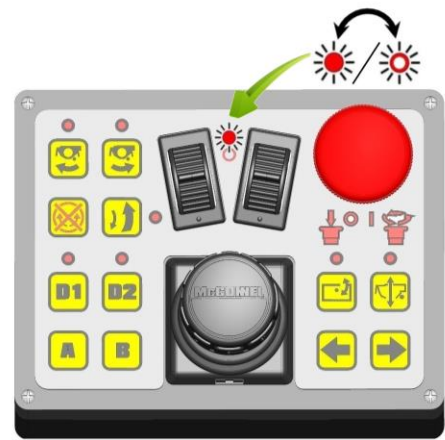
With the unit powered off; simultaneously press and hold both rotor direction buttons before then powering on the unit.



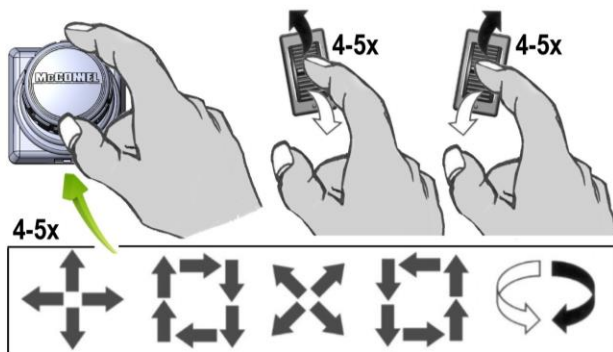
When all the led's light up; release both buttons.



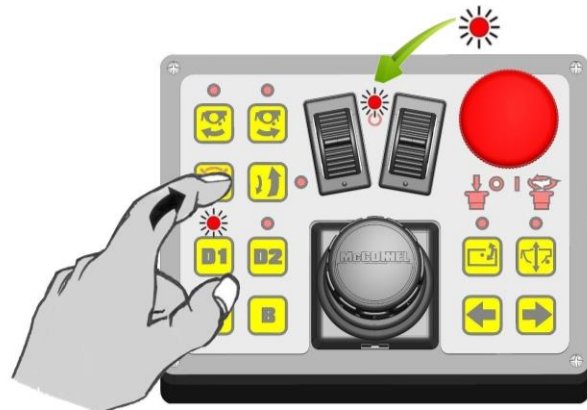
Press and release the rotor stop button to enter calibration mode; all led's will simultaneously flash once to confirm.



Power led will flash on and off continuously whilst the unit is in calibration mode.



Operate the joystick through its complete range of movements 4 to 5 times then operate each toggle switch fully forwards and fully backwards 4 to 5 times.



Press the rotor stop button once to exit calibration mode; the rotor stop led will flash rapidly to confirm and the power led will stop flashing and remain lit.