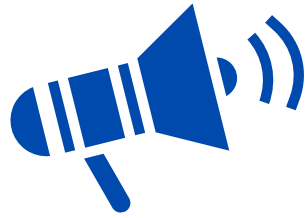


FENTON



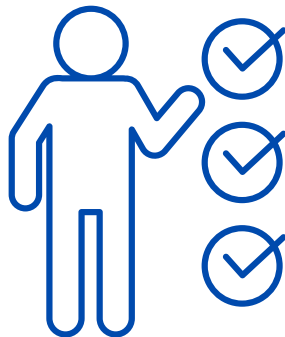
ANNOUNCING *SHIFT-N-STEP* 2.0

Now Equipped with Tech Friendly Time-Saving Diagnostic Features!



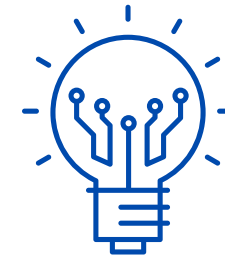
Introducing Troubleshooting Flash Codes!

Switch Left & Switch Right LED lights now flash time saving error codes to easily identify exactly what condition needs to be addressed such as:



- **Overcurrent Conditions**
- **Temperature Conditions**
- **Motion Block**
- **Unplugged Harness Wire**
- **Multiple Control Time-Out**

SNS v2.0 Diagnostic Reference Chart



During Normal Operation

Mode	LED	Meaning
All Modes	Switch Left LED	On solid to indicate movement to the left
All Modes	Switch Right LED	On solid to indicate movement to the right
Momentary	White Step Well Lights	Always Solid
Automatic	White Step Well Lights	SlowFlash during movement

During Fault Condition

Mode	LED	LED Activity	Fault	Priority
All Modes	White Step Well Lights	Fast Flash	Overcurrent*	1
All Modes	Switch Left & Right LEDs	FastAlternatingFlash	OverTemp	1
All Modes	Switch Left & Right LEDs	Flash 2x	MotionBlocked due to PE1 (Inboard Photo Eye)	2
All Modes	Switch Left & Right LEDs	Flash 3x	MotionBlocked due to PE2 (Outboard Photo Eye) or unplugged J7 Harness	3
All Modes	Switch Left & Right LEDs	Flash 4x	MotionBlocked due to PE3 (Optional Photo Eye)	4
All Modes	Switch Left & Right LEDs	Flash 5x	MotionBlocked due to LS1 (Full Shift Left Limit Switch)	7
All Modes	Switch Left & Right LEDs	Flash 6x	MotionBlocked due to LS2 (Full Shift Right Limit Switch)	8
All Modes	Switch Left & Right LEDs	Flash 7x	Multiple Controls Asserted (Buttons or Key Switch) [Planned Feature]	5
All Modes	Switch Left & Right LEDs	Flash 8x	Both Limit Switches Active or unplugged J8 Harness	6
All Modes	Switch Left & Right LEDs	Flash 9x	Unplugged J6 Harness or both Photo Eye 1 and Photo Eye 3 are unsafe	1

During Bootup (Immediately after cycling power on J1 harness)

Mode	LED	Meaning
All Modes	Switch Left LED	Flashes to show number of Firmware Major Revision
All Modes	Switch Right LED	Flashes to show number of Firmware Minor Revision
All Modes	White Step Well Lights	On solid immediately @ boot

***Overcurrent Note:** There are two different types of overcurrent:

OverCurrentHigh is always active and looks for >150A for more than 1500counts

OverCurrentHigh causes very fast blinking (200ms) with a 12sec motion lockout

OverCurrentLow activates immediately (or after 1sec if on limit switch) and dynamically reduces its threshold as shift time increases

OverCurrentLow causes fast blinking (400ms) with a 6sec motion lockout