Arduino LCD display: 4 lines, 20 characters per line

Line 1: Status: current\_state

Line 2: Safe indicator

Line 3: Arrow status

Line 4: Error message

(F\_OPTIC\_STATUS/R\_OPTIC\_STATUS; “?” indicates analog is neither HIGH nor LOW)

Line 2:

if (LOW/LOW) “SAFE”

else “LOADED”

Line 3:

if (HIGH/LOW) “ARROW FRONT”

else if (HIGH/HIGH) “ARROW DRAWN”

else if (LOW/LOW) “”

else “ERROR”

Line 4:

if (?/?) “CHECK SENSORS”

else if (rear=?) “CHECK REAR SENSOR”

else if (front=? OR LOW/HIGH) “CHECK FRONT SENSOR”

else “”;

E-stop activation

-------------------- <-- Line represents maximum width

---EMERGENCY HALT---

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RESET H/W TO PROCEED