Stacker will not Start

PROBLEM: On attempting to start, error on screen "No Air or E-Stop Button Locked?".

This error occurs when the start circuit cannot be completed. There are several contacts that the start circuit must complete in order for the stacker to start. The 35X and 40X stacker are very similar. The 50X is a bit different.

The most common thing to check is the e-stop buttons and the air pressure switch. If the e-stop buttons are depressed or the air is not on the stacker will not start. However, if this is not the case and e-stops are not engaged and there is air then some electrical troubleshooting is needed.

Figure 1 shows the start Circuit for the 50X stackers, figure 2 show the circuit for 35X and 40X stackers.

Make the following check to diagnose the problem.

1. Is the 24V fuse good on the TB1 board.
2. Make sure that ribbon cable from the operator control stations on the TB1 board is connected securely.
3. Is there 24 volts on both sides of the fuse.
    a. Neither side – there is a problem with the 24 volt power supply
    b. One side – Check the fuse again.
    c. Both sides. This is good, no problem here.
4. Make sure that both e-stop buttons are retracted.
5. Press a start button and hold (you may need help for this). Measure the voltage on TB1-Latch. You should see 24 volts here. Go to step 6 if you do. Follow the following steps if not.
    a. Unscrew the operator control panels from the side of the stacker, make sure that exposed wires are terminals do not touch the stacker surface.
    b. Check to make sure that SW7 is in opposite positions on the two sides of the stacker, slide switches to make sure there is good contact. For reference Left is the left side as you face the infeed of the stacker. Test voltage again with start button pressed. Try both start buttons.
    c. If voltage is found on the latch proceed to step 6. Otherwise you have identified a problem with one of the operator control stations.
6. You have voltage on the TB1 button when the start button is pressed and stacker still does not start. Check to make sure that both E-Stop buttons are released. Press the start button and measure the voltage on TB1-43. If you see 24 volts then the E-Stop buttons are good, if you do not see 24 volts then there is a problem with one of the contacts on the E-Stop button.
7. There may be a problem with the air switch. Check continuity to see that the contact is closed when the air is on and open when the air is off. If contact does not close then replace the switch or place a jumper on the terminals across the contact.
8. The CE option provides door switches for additional safety. If the stacker was purchased with the CE option (Canada or Europe), make sure that all of the doors or panels are closed. Try starting the stacker after checking the panels.
9. Check the LED on TB-31, this is set on by the program when the stacker is ready to start. If the TB1-31 LED is not on then check the I/O page on the screen to make sure that "Stkr Rdy" is on. If this is on then there is either a cabling issue or the 100930 IO card is faulty.

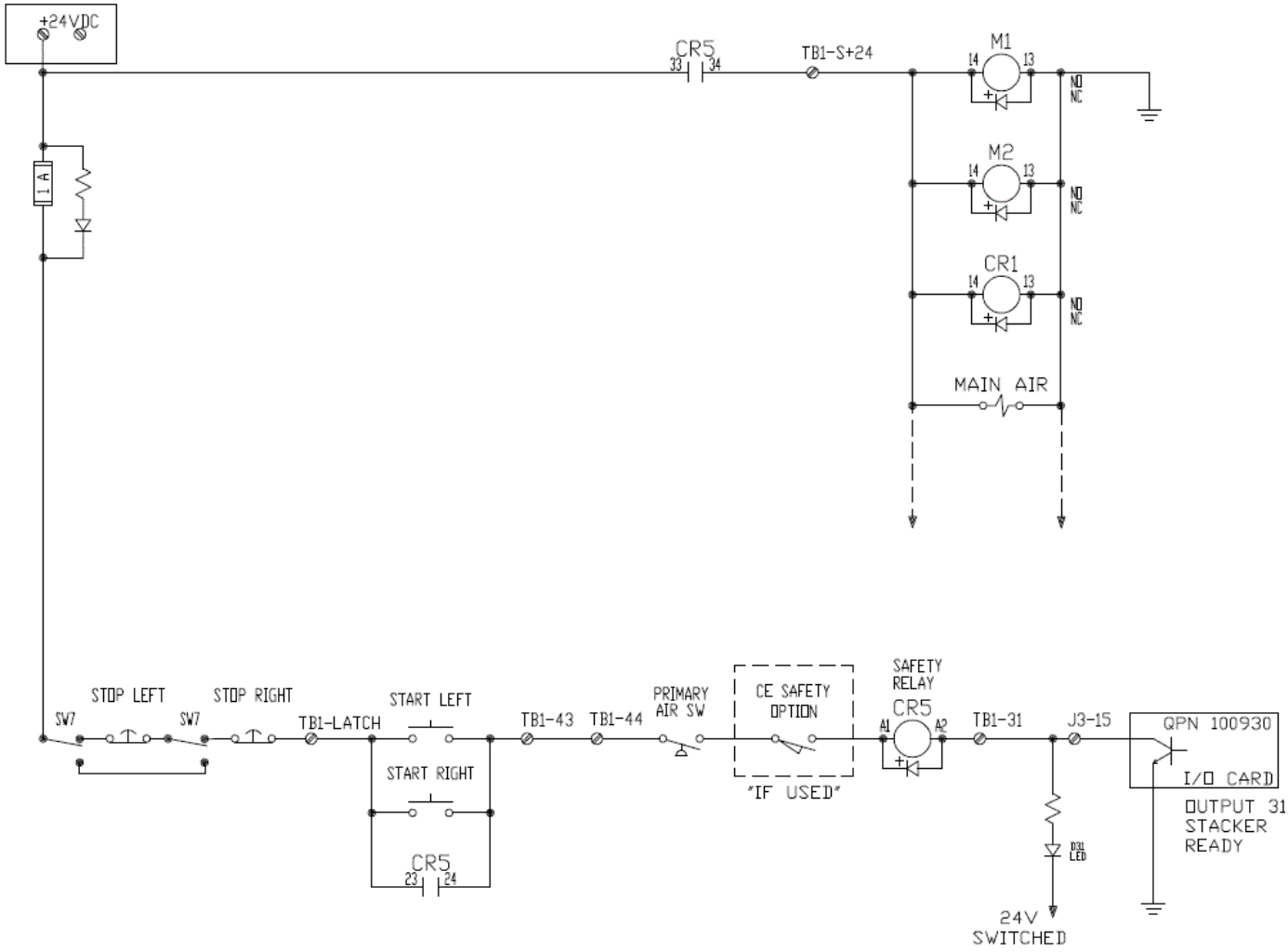

Figure 1 50X Stacker Start Circuit

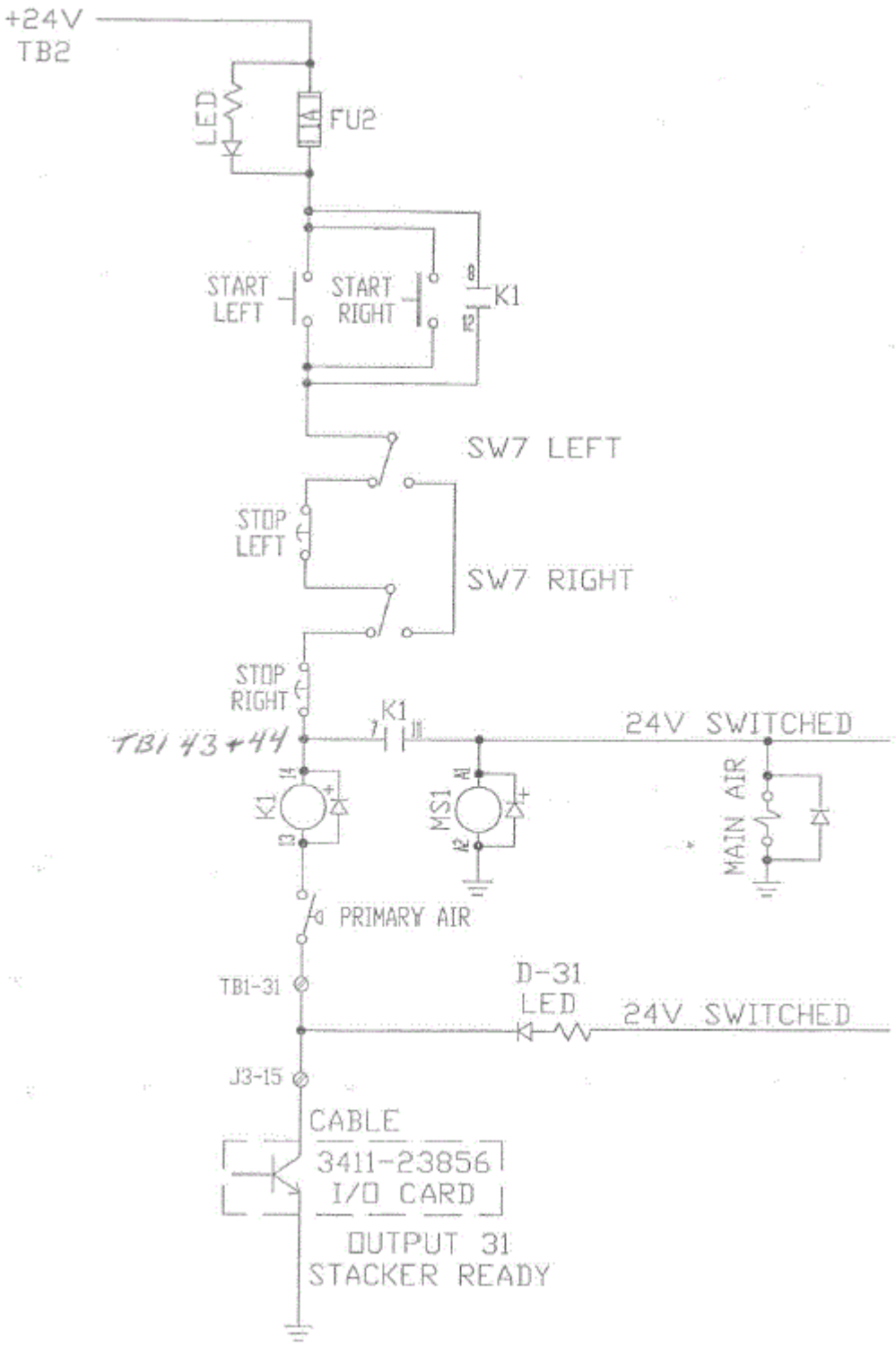

Figure 2 -35X and 40X Start Circuit