Ag-Nav GUIA Platinum Setup for SwathPRO

Wiring

Parts Needed (Not Supplied)

- **Relays:** Four SPST 20A 24V relays
- **Terminals:**
    - 16 spade terminals
    - Ring terminals for ground wires (1–4, depending on configuration)
- **Wires:**
    - 12–18 feet of 18 AWG mil-spec black wire (length varies with configuration)
    - 6 feet of 18 AWG mil-spec white, violet, and blue wire

Capstan SwathPRO Wiring

1. **Mount Relays**:

    Mount all four SPST 20A 24V relays near the Capstan boom shutoff kit relay.

2. **Splice Black Wire**:
    - Cut a 6-foot length of black wire.
    - Splice it into the Gateway Shut-off Harness (P/N 320124-008-3), parallel to one existing black wire.

3. **Splice Colored Wires**:
    - Repeat Step 2 for one wire of each color (white, violet, and blue) from the Gateway Shut-off Harness.
    - **Note**: The harness has multiple wires of these colors. Only one of each needs an additional matching-color wire spliced in parallel.

4. **Connect Existing Wires**:

    Link the existing wires from the Gateway Shut-off Harness to the shut-off switches and Capstan boom shutoff kit relay as described in the SwathPRO Installation Manual (See Boom Shutoff Kit Schematic).

    Systems Without Fan Brake: Additional Steps

    a. Connect a +24V wire to **terminal 85** on the Capstan Boom shutoff kit relay (jump from **terminal 30**, if needed).

    b. Connect the **Ag-Nav Autoboom signal wire** to **terminal 86** on the Capstan boom shutoff kit relay.

Ag-Nav Wiring

5. **Identify Boom Wires:**

    Locate Ag-Nav Boom wires (labeled Booms 1, 2, 3, and 4).
    - Boom 1: Single wire.
    - Booms 2, 3, and 4: Bundled in one harness.

6. **Splice Ground Wires:**

Cut three 2-foot lengths of black wire and splice them into the Ag-Nav harness, parallel to the existing ground (black) wire.

Right Boom Operation

- **Parts Required**: Two SPST 20A 24V relays (first and second relay), eight spade terminals.

7. **Relay 1 Connections**:

  a. Ag-Nav Boom 2 (white) wire → Terminal 30

  b. Spliced Ag-Nav ground (black) wire → Terminal 87

  c. Ground wire from airframe ground lug → Terminal 85

  d. Blue wire from SwathPRO harness (Step 3) → Terminal 86

8. **Relay 2 Connections**:

  a. Ag-Nav Boom 3 (red) wire → Terminal 30

  b. Spliced Ag-Nav ground (black) wire → Terminal 87

  c. Ground wire from airframe ground lug → Terminal 85

  Note: cut suitable length from supplied mil-spec black wire, route appropriately, and secure with ring terminal at installer's discretion.

  d. White wire from SwathPRO harness (Step 3) → Terminal 86

Narrow Swath Switch

- **Parts Required**: Two SPST 20A 24V relays (third and fourth relay), eight spade terminals.
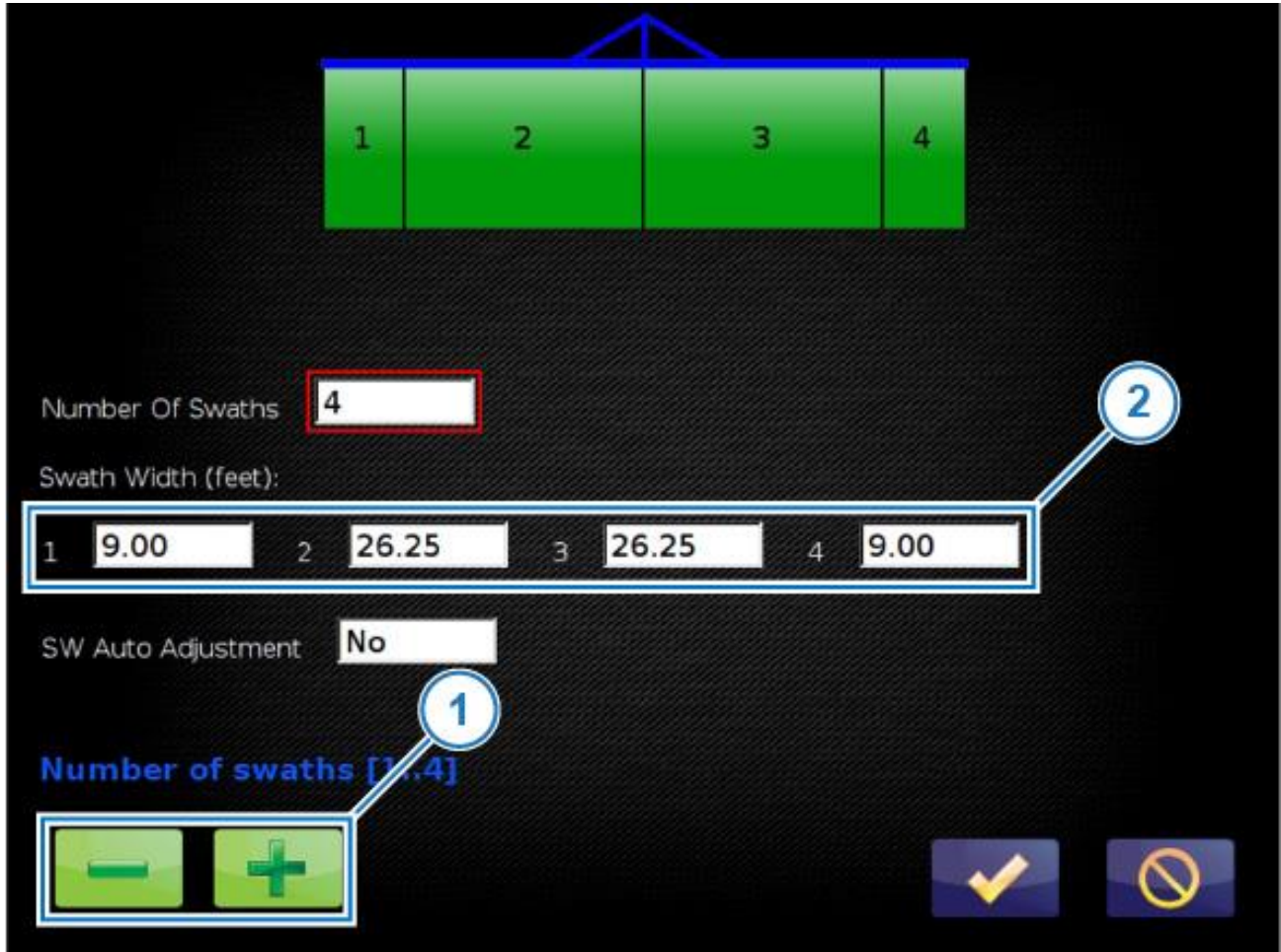
9. **Relay 3 Connections**:

  a. Ag-Nav Boom 1 (white) wire → Terminal 87

  b. Ag-Nav ground (black) wire → Terminal 30

  c. Ground wire from airframe ground lug → Terminal 85

  d. Black wire from SwathPRO harness (Step 2) → Terminal 86

10. **Relay 4 Connections**:

  a. Ag-Nav Boom 4 (green) wire → Terminal 30

  b. Spliced Ag-Nav ground (black) wire → Terminal 87

  c. Ground wire from airframe ground lug → Terminal 85

  d. Violet wire from SwathPRO harness (Step 3) → Terminal 86

Setup

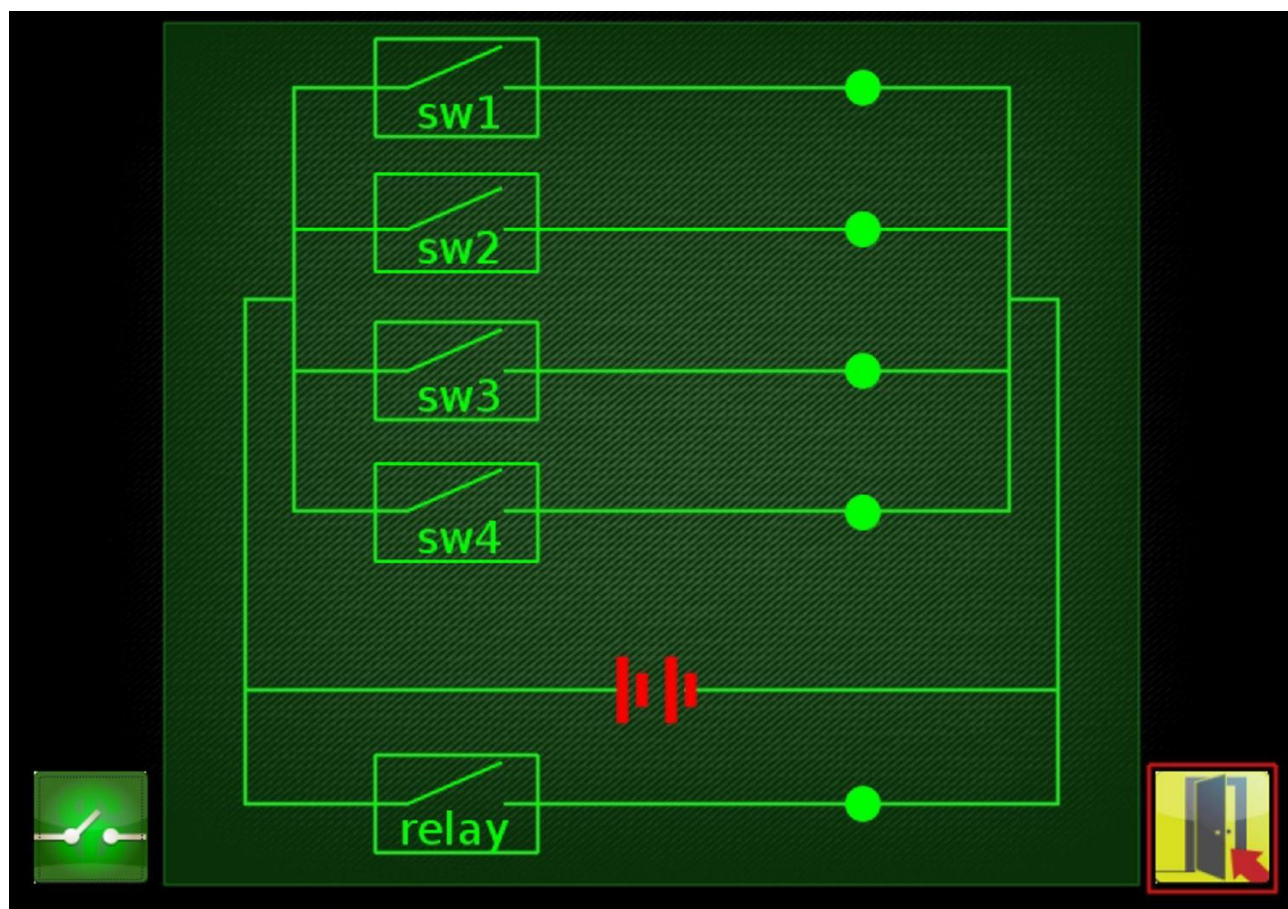Set up the number of swaths on the system.

Figure 1: Swath Setup

1. Navigate: **Navigate** > **Application** > **Set Swath**
2. Set the number of swaths to **4** using the green **-/+ buttons** (Figure 1, Item 1).
3. Enter swath widths (in feet) in the **Swath Width** boxes (Figure 1, Item 2):
    - Swaths 1 and 4: **1/8** of total width of all four swaths.
    - Swaths 2 and 3: **3/8** of total width of all four swaths.
    - **Note:** Adjust these values whenever swath widths change.
4. Return to the main screen.
5. Navigate: **Tests** > **Boom Switches**.
6. Use the figures on the following pages to confirm that the booms are configured correctly. Each figure shows the correct Boom Switches display when the controls are in the indicated positions.
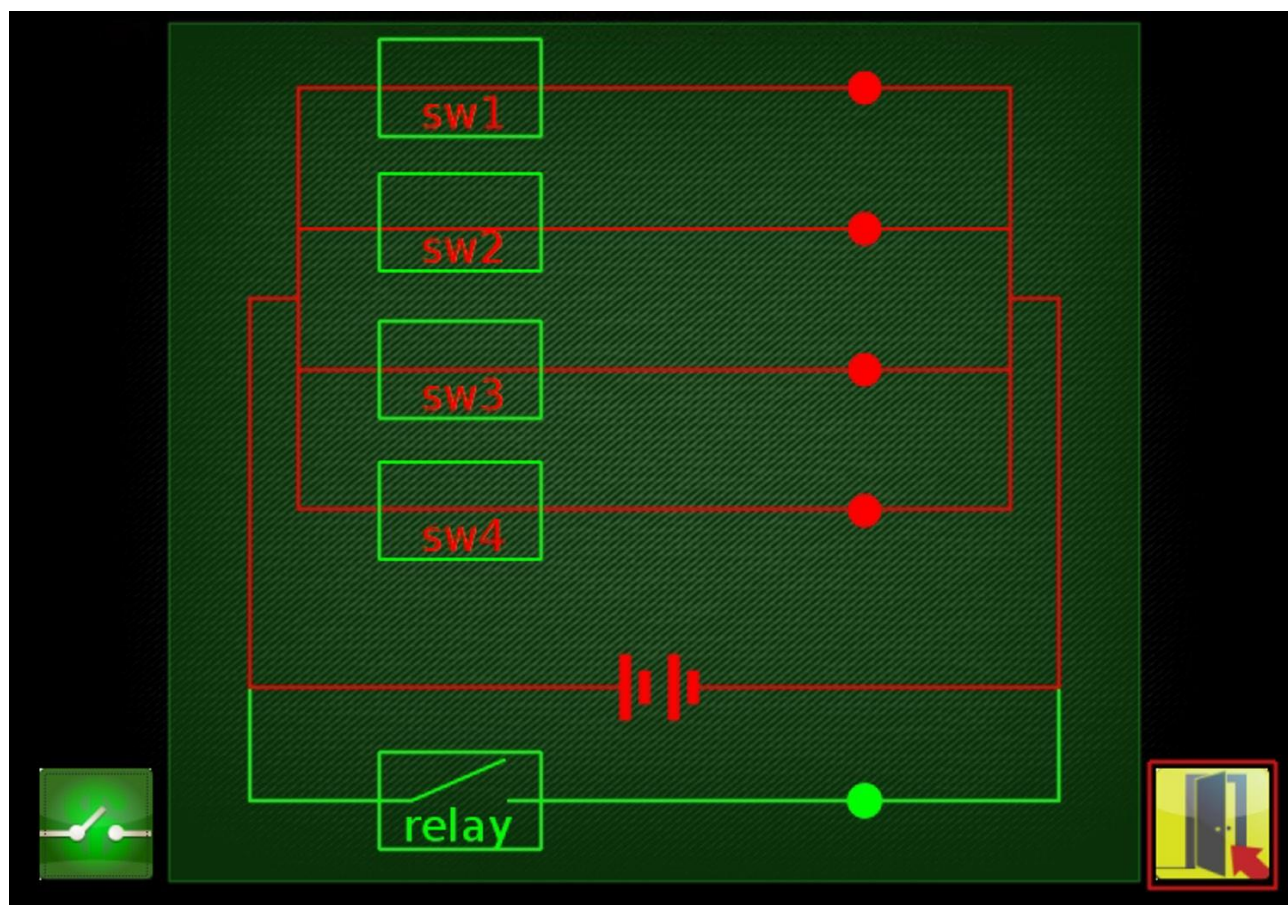
Figure 2: Boom Switches Screen

Right Boom switch: **OFF**

Narrow Swath switch: **OFF**

Spray Handle/Spray Switch: **UP/OFF,** not spraying
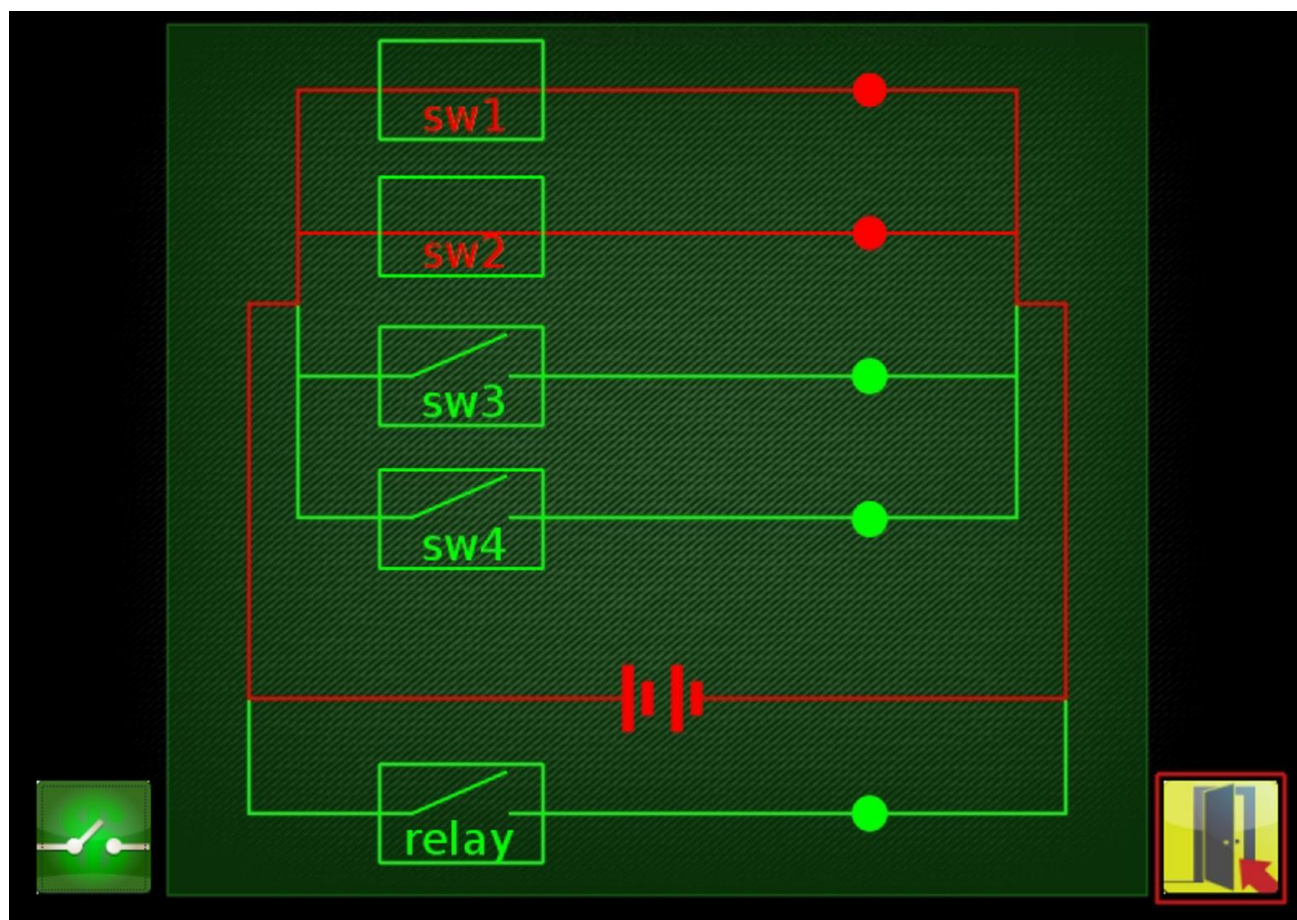
Valves: none pulsing

Figure 3: Boom Switches Screen

Right Boom switch: **OFF**

Narrow Swath switch: **OFF**

Spray Handle/Spray Switch: **DOWN/ON,** spraying
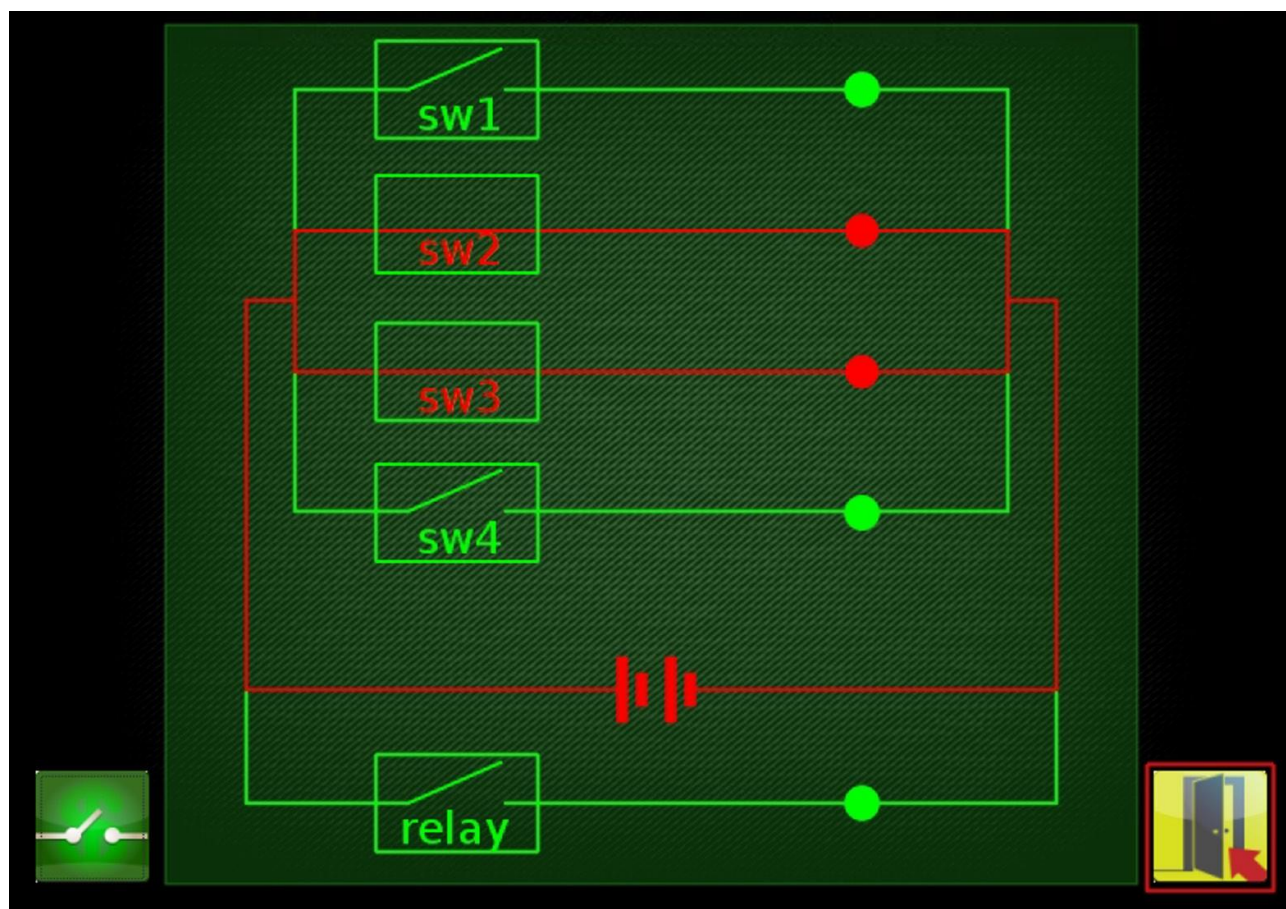
Valves: all pulsing

Figure 4: Boom Switches Screen

Right Boom switch: **ON**

Narrow Swath switch: **OFF**

Spray Handle/Spray Switch: **DOWN/ON,** spraying

Valves: pulsing, left side only

Figure 5: Boom Switches Screen

Right Boom switch: **OFF**

Narrow Swath switch: **ON**

Spray Handle/Spray Switch: **DOWN/ON,** spraying
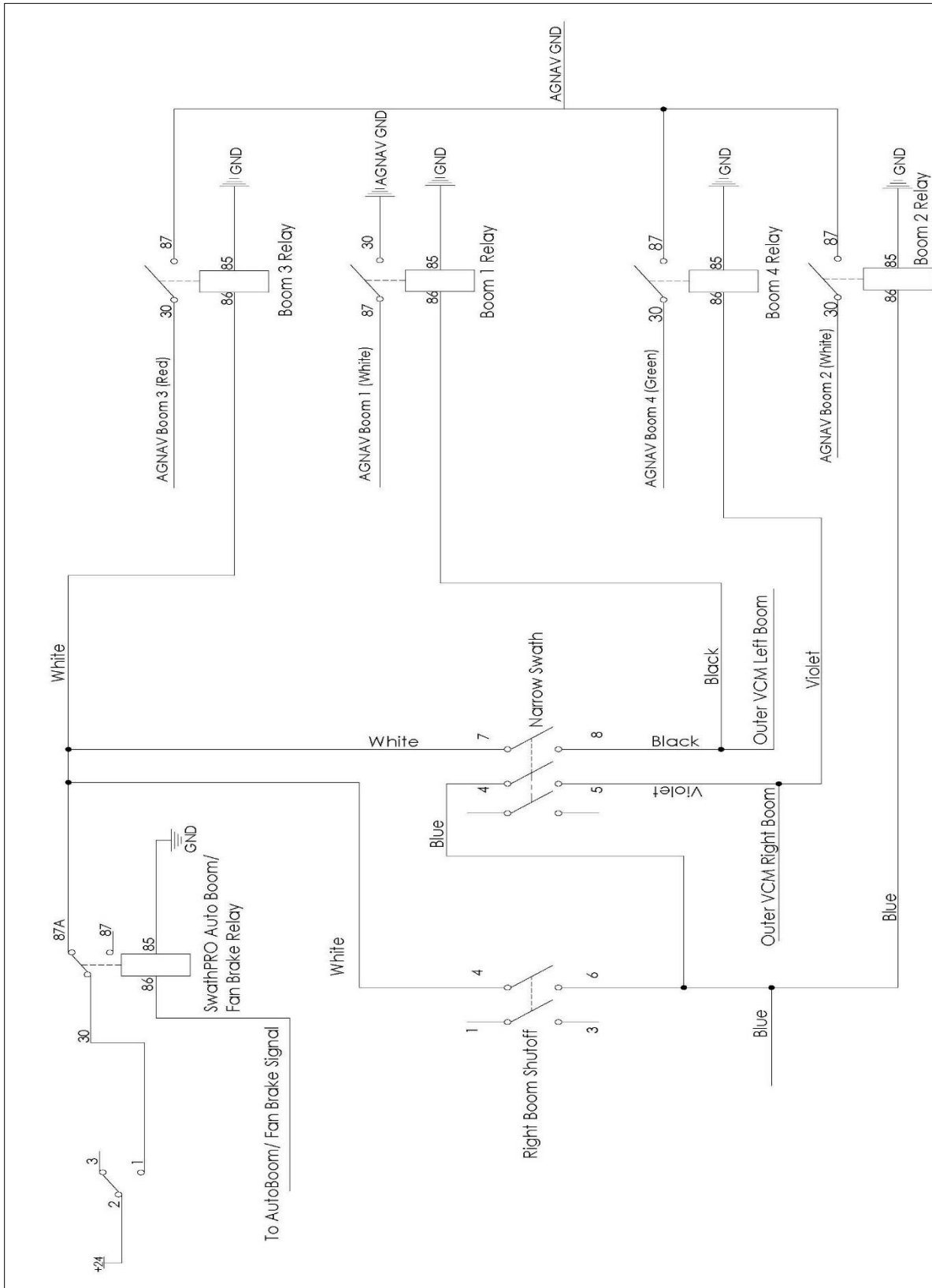
Valves: pulsing, middle swaths only

Figure 6: Schematic