Point to Point Operation

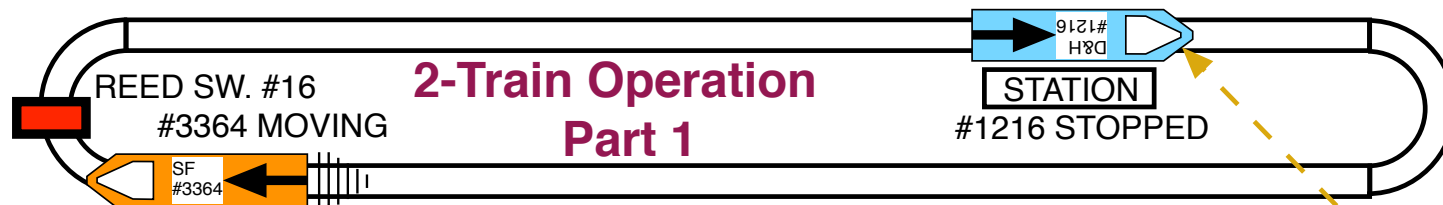B A

R REED SW. #16

SF #3364

WEST ⬅➡ EAST

- **Initial Conditions:** Start loco "East" of the Reed Switch (as shown).
- Adjust "Delay" length on each side of the Reed Switch, to get desired stopping points.
- Optimum position for the Reed Switch is midway between ends, but not necessary. (Less accumulated error.)
- If the Reed Switch is at one END, then set that "Delay" to 1/4 sec (essentially zero).
- NOTE: TWO reed switches {1 at EACH end} are <u>more dependable</u>, whenever it's possible to use two.
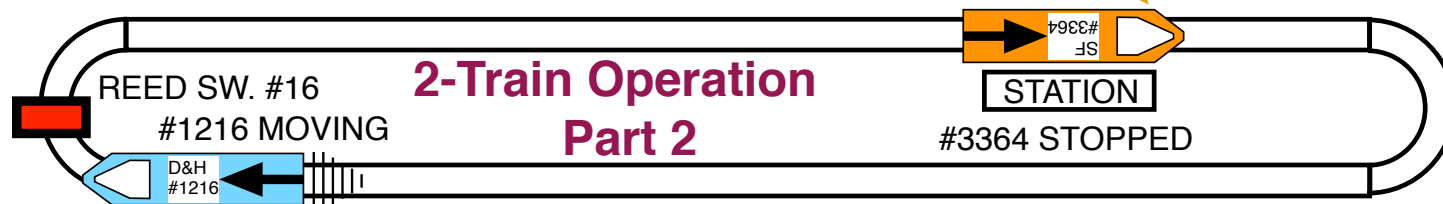
2-Train Operation Part 1

REED SW. #16
#3364 MOVING

D&H #1216

STATION
#1216 STOPPED

SF #3364

PART 1:
Initial Conditions: Blue loco stopped at Station, orange loco is traveling on mainline, upstream of the reed switch.
- The Blue loco is STOPPED, and WAITS until the Orange loco crosses the Reed Switch.
- Then, the Blue loco STARTS. The Orange loco travels on to the Station, and STOPS.
- The process REPEATS, when the Blue loco reaches the Reed Switch.
WARNING: The STOP command needs to be sent to the Orange loco when it reaches the Station, <u>BEFORE</u> the Blue loco travels around the loop and crosses the reed switch (or else Mini-Panel MISSES Blue loco crossing the reed switch, and have wreck).

2-Train Operation Part 2

REED SW. #16
#1216 MOVING

SF #3364

STATION
#3364 STOPPED

D&H #1216

PART 2:
- The Orange loco is STOPPED, and WAITS until the Blue loco crosses the Reed Switch.
- Then, the Orange loco STARTS. The Blue loco travels on to the Station, and STOPS.
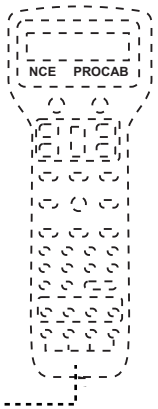- The process REPEATS, when the Orange loco reaches the Reed Switch.
WARNING: The STOP command needs to be sent to the Blue loco when it reaches the Station, <u>BEFORE</u> the Orange loco travels around the loop and crosses the Reed Switch (or else Mini-Panel MISSES Orange loco crossing the reed switch, and have wreck).
NOTE: See previous Video #815 for a more DETAILED logic diagram of 2 train operation with a single reed switch.
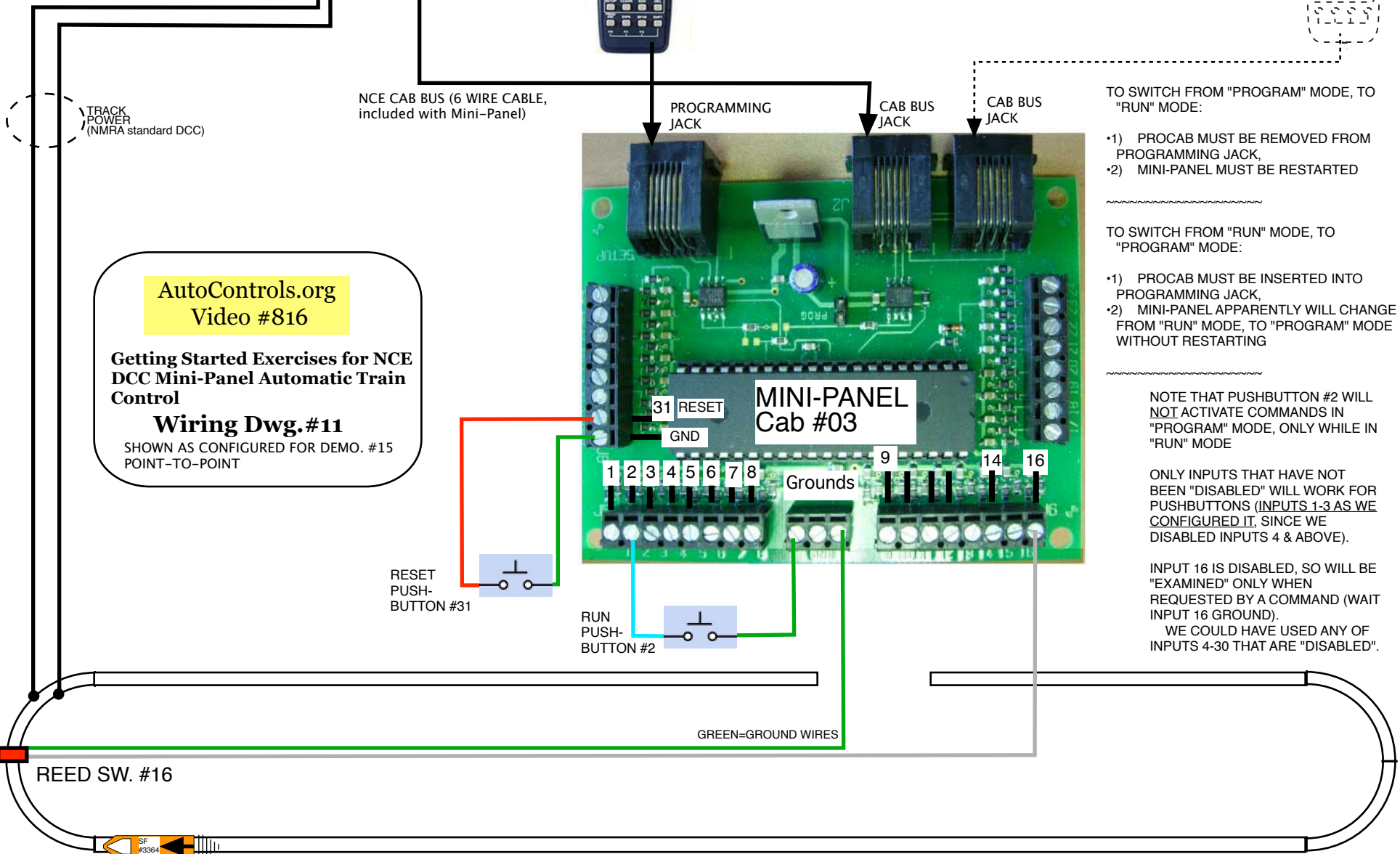
POWERHOUSE
FROM North Coast Engineering

PROCAB –
PLUGGED INTO
PROGRAMMING
JACK

OPTIONAL 2ND PROCAB –– CAN BE
USED TO MANUALLY CONTROL
TRAINS WHILE MP IS IN
PROGRAMMING MODE

NCE PROCAB

PROGRAM MODE

TRACK
POWER
(NMRA standard DCC)

NCE CAB BUS (6 WIRE CABLE,
included with Mini–Panel)

PROGRAMMING
JACK

CAB BUS
JACK

CAB BUS
JACK

TO SWITCH FROM "PROGRAM" MODE, TO
  "RUN" MODE:

•1)   PROCAB MUST BE REMOVED FROM
  PROGRAMMING JACK,
•2)   MINI-PANEL MUST BE RESTARTED

~~~~~~~~~~~~~~~~~

TO SWITCH FROM "RUN" MODE, TO
  "PROGRAM" MODE:

•1)   PROCAB MUST BE INSERTED INTO
  PROGRAMMING JACK,
•2)   MINI-PANEL APPARENTLY WILL CHANGE
  FROM "RUN" MODE, TO "PROGRAM" MODE
  WITHOUT RESTARTING

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NOTE THAT PUSHBUTTON #2 WILL
NOT ACTIVATE COMMANDS IN
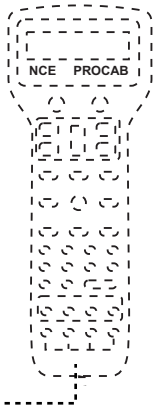"PROGRAM" MODE, ONLY WHILE IN
"RUN" MODE

ONLY INPUTS THAT HAVE NOT
BEEN "DISABLED" WILL WORK FOR
PUSHBUTTONS (INPUTS 1-3 AS WE
CONFIGURED IT, SINCE WE
DISABLED INPUTS 4 & ABOVE).

INPUT 16 IS DISABLED, SO WILL BE
"EXAMINED" ONLY WHEN
REQUESTED BY A COMMAND (WAIT
INPUT 16 GROUND).
  WE COULD HAVE USED ANY OF
INPUTS 4-30 THAT ARE "DISABLED".

AutoControls.org
Video #816

**Getting Started Exercises for NCE
DCC Mini-Panel Automatic Train
Control**
Wiring Dwg.#11
SHOWN AS CONFIGURED FOR DEMO. #15
POINT-TO-POINT

MINI-PANEL
Cab #03

31 RESET
GND

1 2 3 4 5 6 7 8   Grounds   9   14   16

RESET
PUSH-
BUTTON #31

RUN
PUSH-
BUTTON #2

GREEN=GROUND WIRES

REED SW. #16

SF
#3364

Dwg# mp11wire-getStrt1611.int   11/11/2016

POWERHOUSE
from North Coast Engineering

DCC COMMAND STATION
with FIVE AMP POWER BOOSTER

CONTROL BUS

POWER TRACK
18VAC / 28VDC MAX.

STATUS
LOOP
NORMAL

PROGRAM TRACK
POWER
18VAC / 28VDC MAX.

CONTROL BUS

CAB BUS

STATUS TRACK

PRI

NCE   PROCAB

RUN MODE

TRACK
POWER
(NMRA standard DCC)

NCE CAB BUS (6 WIRE CABLE,
included with Mini–Panel)

PROGRAMMING
JACK

CAB BUS
JACK

CAB BUS
JACK

TO SWITCH FROM "PROGRAM" MODE, TO
"RUN" MODE:

•1)   PROCAB MUST BE REMOVED FROM
PROGRAMMING JACK,
•2)   MINI-PANEL MUST BE RESTARTED

~~~~~~~~~~~~~~~~~~~~

TO SWITCH FROM "RUN" MODE, TO
"PROGRAM" MODE:

•1)   PROCAB MUST BE INSERTED INTO
PROGRAMMING JACK,
•2)   MINI-PANEL APPARENTLY WILL CHANGE
FROM "RUN" MODE, TO "PROGRAM" MODE
WITHOUT RESTARTING

~~~~~~~~~~~~~~~~~~~~

NOTE THAT PUSHBUTTON #2 WILL
NOT ACTIVATE COMMANDS IN
"PROGRAM" MODE, ONLY WHILE IN
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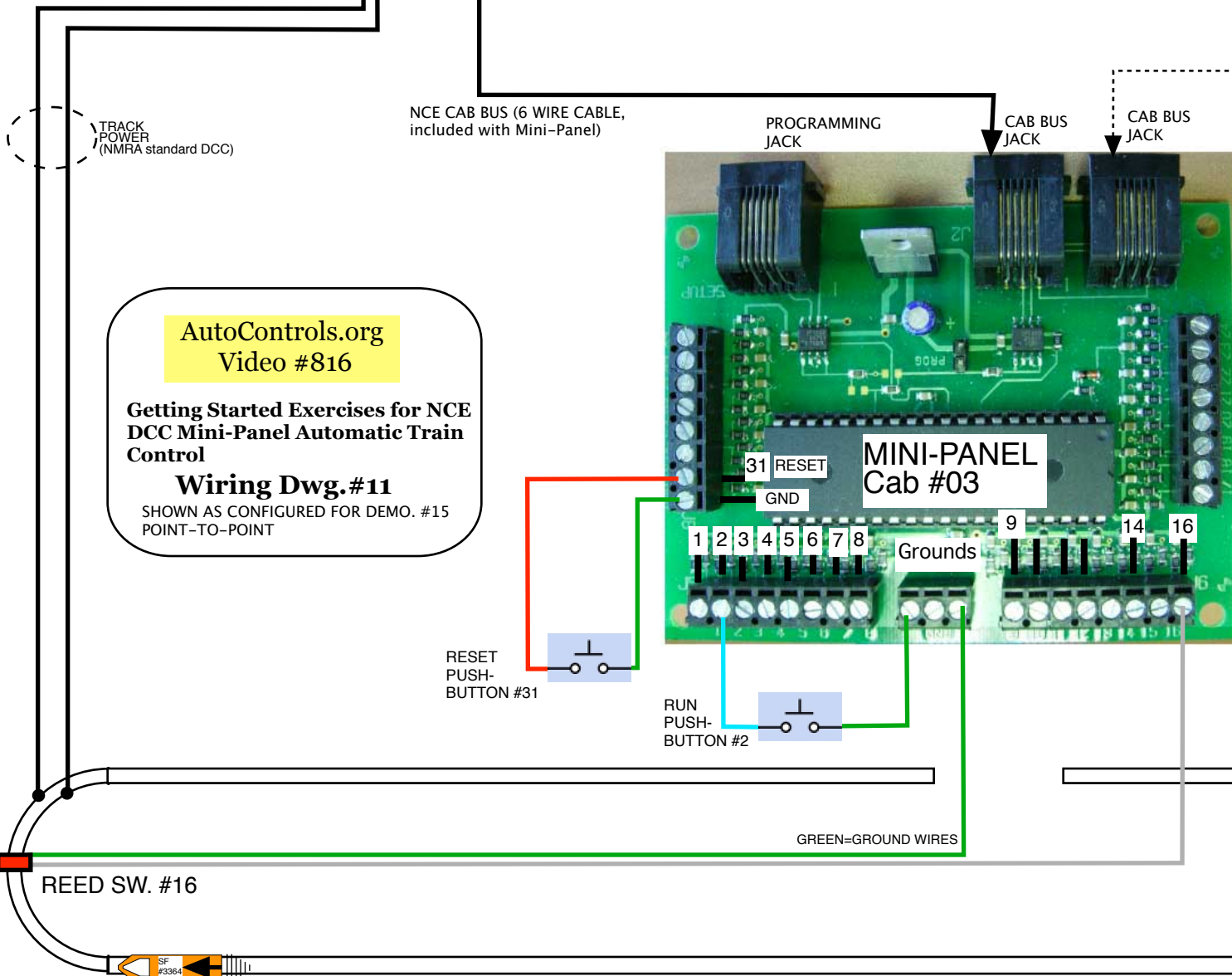REQUESTED BY A COMMAND (WAIT
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WE COULD HAVE USED ANY OF
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AutoControls.org
Video #816

**Getting Started Exercises for NCE
DCC Mini-Panel Automatic Train
Control**

Wiring Dwg.#11

SHOWN AS CONFIGURED FOR DEMO. #15
POINT–TO–POINT

31 RESET

GND

MINI-PANEL
Cab #03

1 2 3 4 5 6 7 8   Grounds   9   14   16

RESET
PUSH-
BUTTON #31

RUN
PUSH-
BUTTON #2

GREEN=GROUND WIRES

REED SW. #16

SF
#3364