

Fig 43a Initial Conditions - 1 Train—No Controls (Single train travels on thru Track 3—controls not operating)

1. Toggle switches K1 & K2—'DOWN' position (switching & blocking 'OFF').
3. Rheostat R1: Turn forward (CW) for no slowdown. Do out adjust.
4. Track switches: S5 & S1 straight.
6. Relay motor M3: Arm RIGHT (routes power to thru Track 3).
7. Motor M2: Arm 'FRONT' (block 'GREEN').
8. Position engine 5 as shown.

Note: This mode does not require either control unit, if appropriate jumpering is done at term blk TB8.

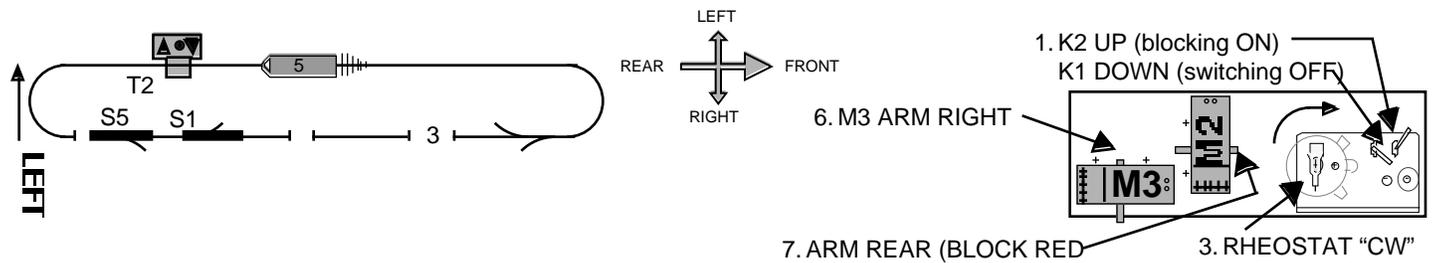


Fig 43b Initial Conditions - 1 Train—Blocking (Single train travels on thru Track 3—using Main Control for blocking)

1. Toggle switch K1 'DOWN' (switching OFF). K2 'UP' (blocking 'ON').
3. Rheostat R1: Turn forward (CW) for no slowdown. Do out adjust.
4. Track switches: S5 & S1 straight.
6. Relay motor M3: Arm RIGHT (routes power to thru Track 3).
7. Motor M2: Arm 'REAR' (block 'RED').
8. Position engine 5 as shown. Engine 5 must be UPSTREAM of T2..

Note: This mode allows you to verify proper operation of the blocking motor M2, plus the red/green part of the target signal light.

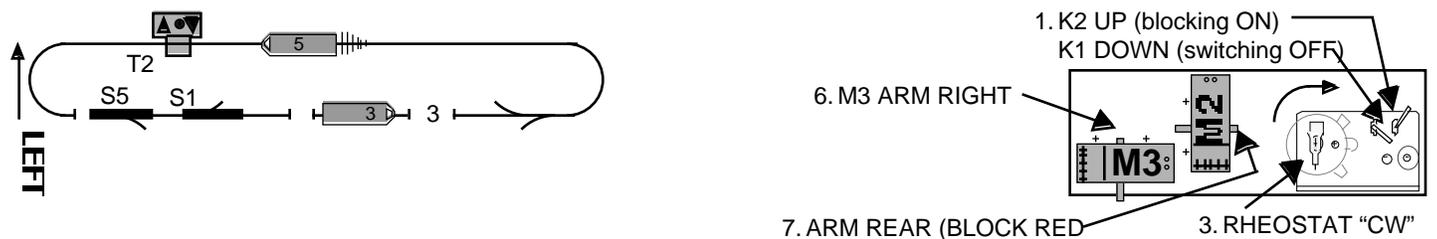
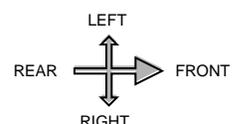


Fig 43c Initial Conditions - 2 Trains—Blocking (Trains run on Track 3, using Main Control for blocking)

1. Toggle switch K1 'DOWN' (switching OFF). K2 'UP' (blocking 'ON').
3. Rheostat R1: Turn forward (CW) for no slowdown. Adjust after trains are running.
4. Track switches: S5 & S1 straight.
6. Relay motor M3: Arm RIGHT (routes power to thru Track 3).
7. Motor M2: Arm 'REAR' (block 'RED').
8. Position engines 3 & 5 as shown. Engine 5 must be UPSTREAM of T2..



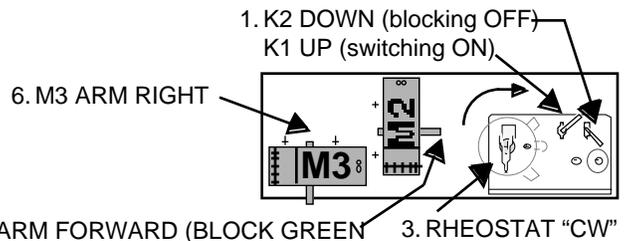
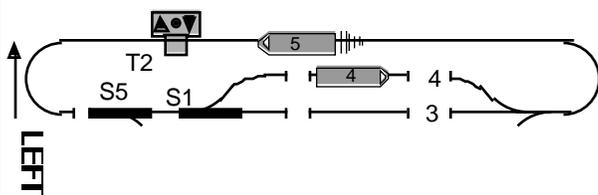


Fig 43d Initial Conditions - 2 Trains—Switching

(Trains run on Tracks 3 & 4—using Main Control for switching)

1. Toggle switch K1 'UP' (switching ON). K2 'DOWN' (blocking 'OFF').
3. Rheostat R1: Turn forward (CW) for no slowdown. Adjust after trains are running.
4. Track switches: S5 & S1 straight.
6. Relay motor M3: Arm RIGHT (routes power to thru Track 3).
7. Motor M2: Arm 'FRONT' (block 'GREEN').
8. Position engines 4 & 5 as shown.

Note: This mode does not require Helper Control Unit, if appropriate jumpering is done.

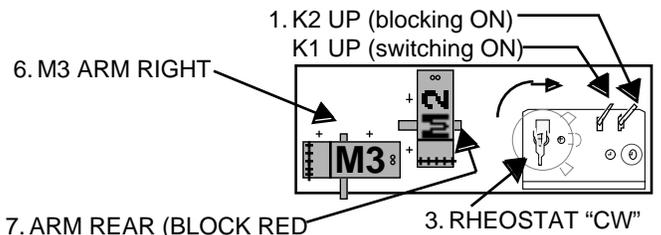
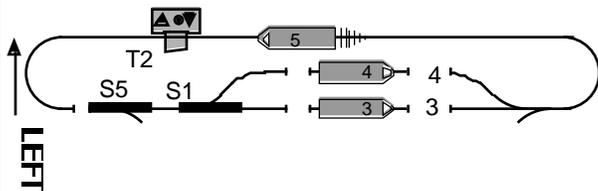


Fig 43e Initial Conditions - 3 Trains:

(Trains run on Tracks 3 & 4—using Main Control Unit for blocking & switching)

1. Toggle switch K1 'UP' (switching ON). K2 'UP' (blocking 'ON').
3. Rheostat R1: Turn forward (CW) for no slowdown. Adjust after trains are running.
4. Track switches: S5 & S1 straight.
6. Relay motor M3: Arm RIGHT (routes power to thru Track 3).
7. Motor M2: Arm 'REAR' (block 'RED').
8. Position engines 3, 4 & 5 as shown. Engine 5 must be UPSTREAM of T2..

Note: This mode is the normal "full capacity" mode of operation for the 2-track Model 165 Automatic Switching Block.

Summary: This sheet shows how to position the trains and relay switches to start the system, when you have the 1 and 2-track configurations.

Proceed later to Sheet 44 after you have built the 4-track configuration.