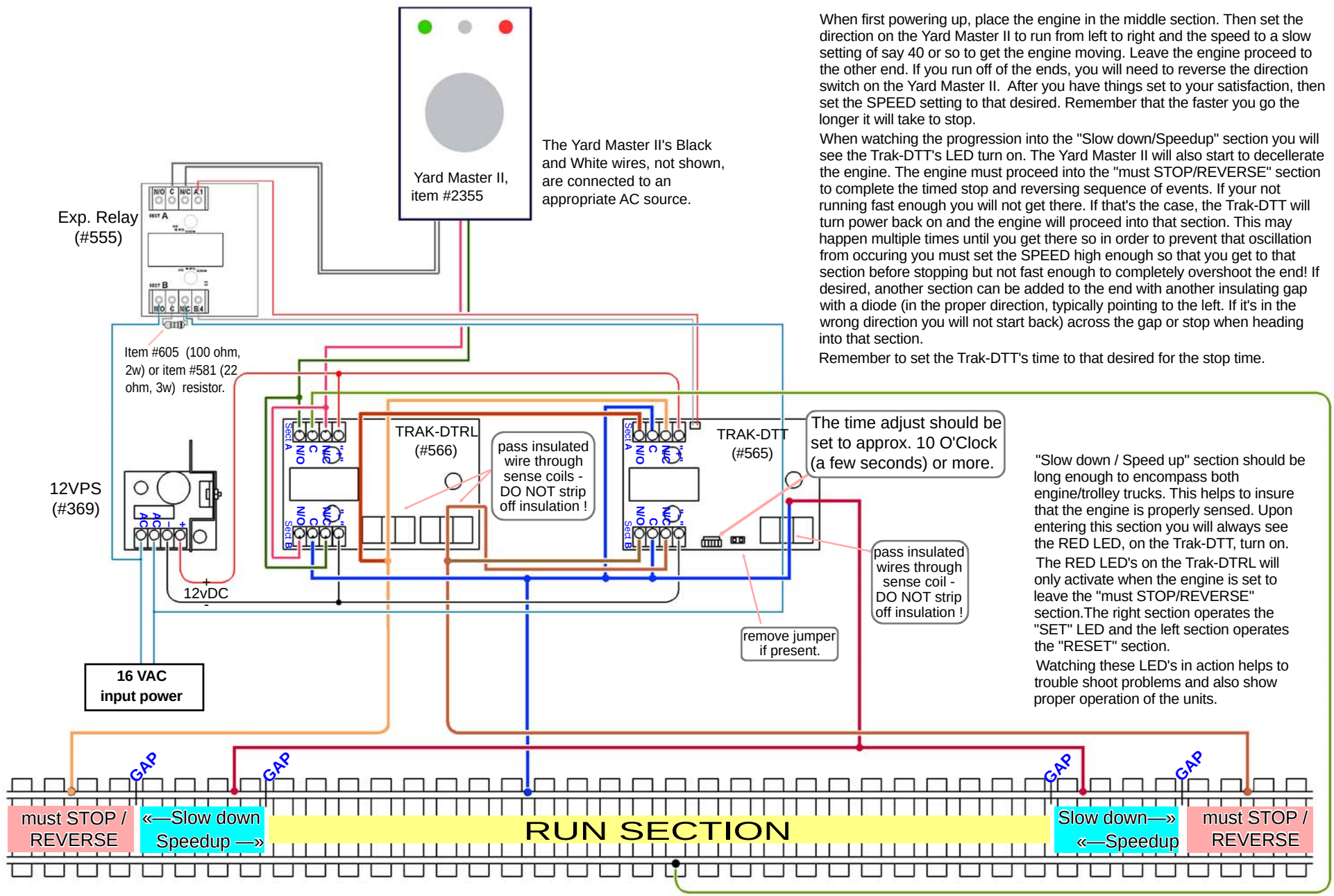
AUTOMATIC REVERSE with TIMED STOP AT ENDS utilizing the Yard Master II with remote momentum On/Off control.



When first powering up, place the engine in the middle section. Then set the direction on the Yard Master II to run from left to right and the speed to a slow setting of say 40 or so to get the engine moving. Leave the engine proceed to the other end. If you run off of the ends, you will need to reverse the direction switch on the Yard Master II. After you have things set to your satisfaction, then set the SPEED setting to that desired. Remember that the faster you go the longer it will take to stop.

When watching the progression into the "Slow down/Speedup" section you will see the Trak-DTT's LED turn on. The Yard Master II will also start to decellerate the engine. The engine must proceed into the "must STOP/REVERSE" section to complete the timed stop and reversing sequence of events. If your not running fast enough you will not get there. If that's the case, the Trak-DTT will turn power back on and the engine will proceed into that section. This may happen multiple times until you get there so in order to prevent that oscillation from occuring you must set the SPEED high enough so that you get to that section before stopping but not fast enough to completely overshoot the end! If desired, another section can be added to the end with another insulating gap with a diode (in the proper direction, typically pointing to the left. If it's in the wrong direction you will not start back) across the gap or stop when heading into that section.

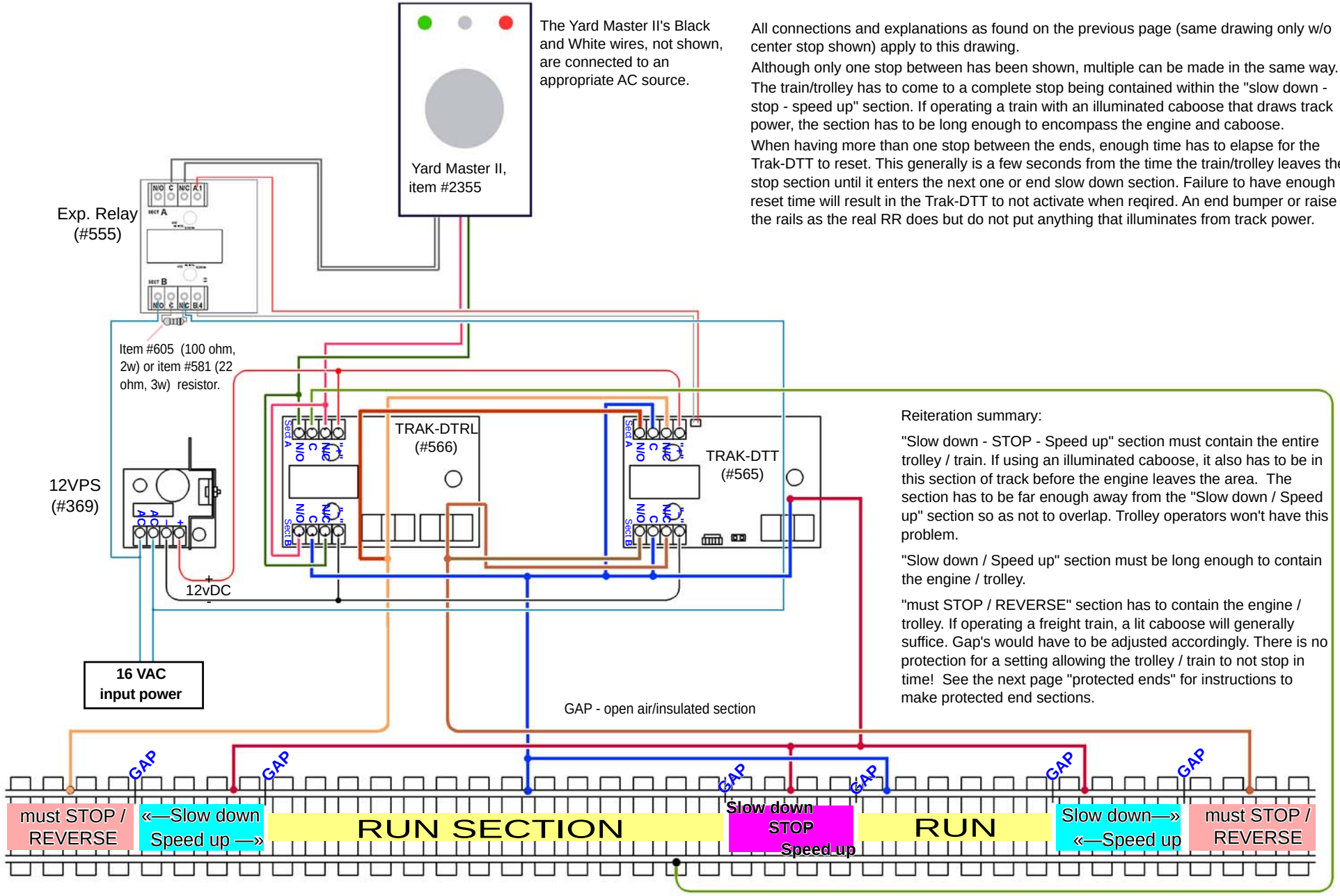
Remember to set the Trak-DTT's time to that desired for the stop time.

"Slow down / Speed up" section should be long enough to encompass both engine/trolley trucks. This helps to insure that the engine is properly sensed. Upon entering this section you will always see the RED LED, on the Trak-DTT, turn on.

The RED LED's on the Trak-DTRL will only activate when the engine is set to leave the "must STOP/REVERSE" section.The right section operates the "SET" LED and the left section operates the "RESET" section.

Watching these LED's in action helps to trouble shoot problems and also show proper operation of the units.

AUTOMATIC REVERSE with TIMED STOP AT ENDS & between utilizing the Yard Master II with remote momentum On/Off.



All connections and explanations as found on the previous page (same drawing only w/o center stop shown) apply to this drawing.

Although only one stop between has been shown, multiple can be made in the same way.

The train/trolley has to come to a complete stop being contained within the "slow down - stop - speed up" section. If operating a train with an illuminated caboose that draws track power, the section has to be long enough to encompass the engine and caboose.

When having more than one stop between the ends, enough time has to elapse for the Trak-DTT to reset. This generally is a few seconds from the time the train/trolley leaves the stop section until it enters the next one or end slow down section. Failure to have enough reset time will result in the Trak-DTT to not activate when reqired. An end bumper or raise the rails as the real RR does but do not put anything that illuminates from track power.

Reiteration summary:

"Slow down - STOP - Speed up" section must contain the entire trolley / train. If using an illuminated caboose, it also has to be in this section of track before the engine leaves the area. The section has to be far enough away from the "Slow down / Speed up" section so as not to overlap. Trolley operators won't have this problem.

"Slow down / Speed up" section must be long enough to contain the engine / trolley.

"must STOP / REVERSE" section has to contain the engine / trolley. If operating a freight train, a lit caboose will generally suffice. Gap's would have to be adjusted accordingly. There is no protection for a setting allowing the trolley / train to not stop in time! See the next page "protected ends" for instructions to make protected end sections.