

2 TRAIN STAGING WITH OPPOSITE DIRECTION RUNNING

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SIDING A IS WIRED FOR CLOCKWISE RUNNING

SIDING B IS WIRED FOR COUNTER-CLOCKWISE RUNNING

NOTE - BOTH RAILS GAPPED AT FROG END OF TRACK

SWITCHES. GAPS FOR TRIP-RUN-STOP

SECTIONS ARE IN RIGHT RAIL FOR FORWARD
MOVEMENT

BALANCE OF THE LOOP TRACK, INCLUDING THE SWITCHES
IS WIRED THRU THE RELAY CONTACTS ON DTRL#1
TO PROVIDE CLOCKWISE RUNNING IN "RESET" AND
COUNTER-CLOCKWISE RUNNING IN "SET". TRIP PREVENT
SECTIONS ARE GAPPED ON INSIDE RAIL OF LOOP.
SWITCH MACHINES ARE OPERATED BY MOMENTARY AC
VIA TRAK-DTT-SM AND DIODES TO PROVIDE
CORRECT POLARITY DC SO THAT DTT-A ALIGNS
TRACK TO SIDING B AND DTT-B ALIGNS TRACK
TO SIDING A.

WITH A TRAIN AT REST IN SIDING B AND TRACK
ALIGNED TO SIDING A A CLOCKWISE MOVING
TRAIN WILL PROCEED AROUND THE LOOP AND
ENTER SIDING A. LOCO PASSES TRIP A, ACTIVATING
DTT-A, AND COMES TO REST ON STOP A. WHEN
DTT-A ACTIVATES ITS RELAY:

1. DTT-SM PULSES SWITCHES TO ALIGN TO
SIDING B.
2. "SETS" DTRL#1 SO TRACK POLARITY IN LOOP
IS FOR COUNTER-CLOCKWISE RUNNING,

3. ACTIVATES STOP B SO TRAIN B CAN DEPART.

AS TRAIN STARTS TRAK DT ACTIVATES TO CONVERT TRIP B TO A RUN SECTION SO THAT LIGHTED CARS CAN NOT ACCESS TRIP B.

4. "SETS" DTRL #2 WHICH CONNECTS B TRIP PROTECTION TO CONTINUE TRAK-DT ACTIVATION BY-PASSING TRIP B SO THAT LIGHTED CARS WILL NOT TRIGGER TRIP B.

WHEN TRAIN B CLEARS B TRIP PROTECTION SECTION TRAK-DT WILL RELAX ALLOWING TRIP B TO BE ABLE TO REACTIVATE.

COUNTER-CLOCKWISE MOVING TRAIN WILL PROCEED AROUND THE LOOP AND ENTER SIDING B. LOCO PASSES TRIP B, ACTIVATING DTT-B, AND COMES TO REST ON STOP B. WHEN DTT-B ACTIVATES:

1. DTT-SM PULSES SWITCHES TO ALIGN TO SIDING A

2. "RESETS" DTRL #1 SO TRACK POLARITY IN LOOP IS FOR CLOCKWISE RUNNING

3. ACTIVATES STOP A SO TRAIN A CAN DEPART.

AS TRAIN STARTS ~~TRAK~~ DT ACTIVATES TO CONVERT TRIP A TO A RUN SECTION SO THAT LIGHTED CARS CAN NOT ACCESS TRIP A.

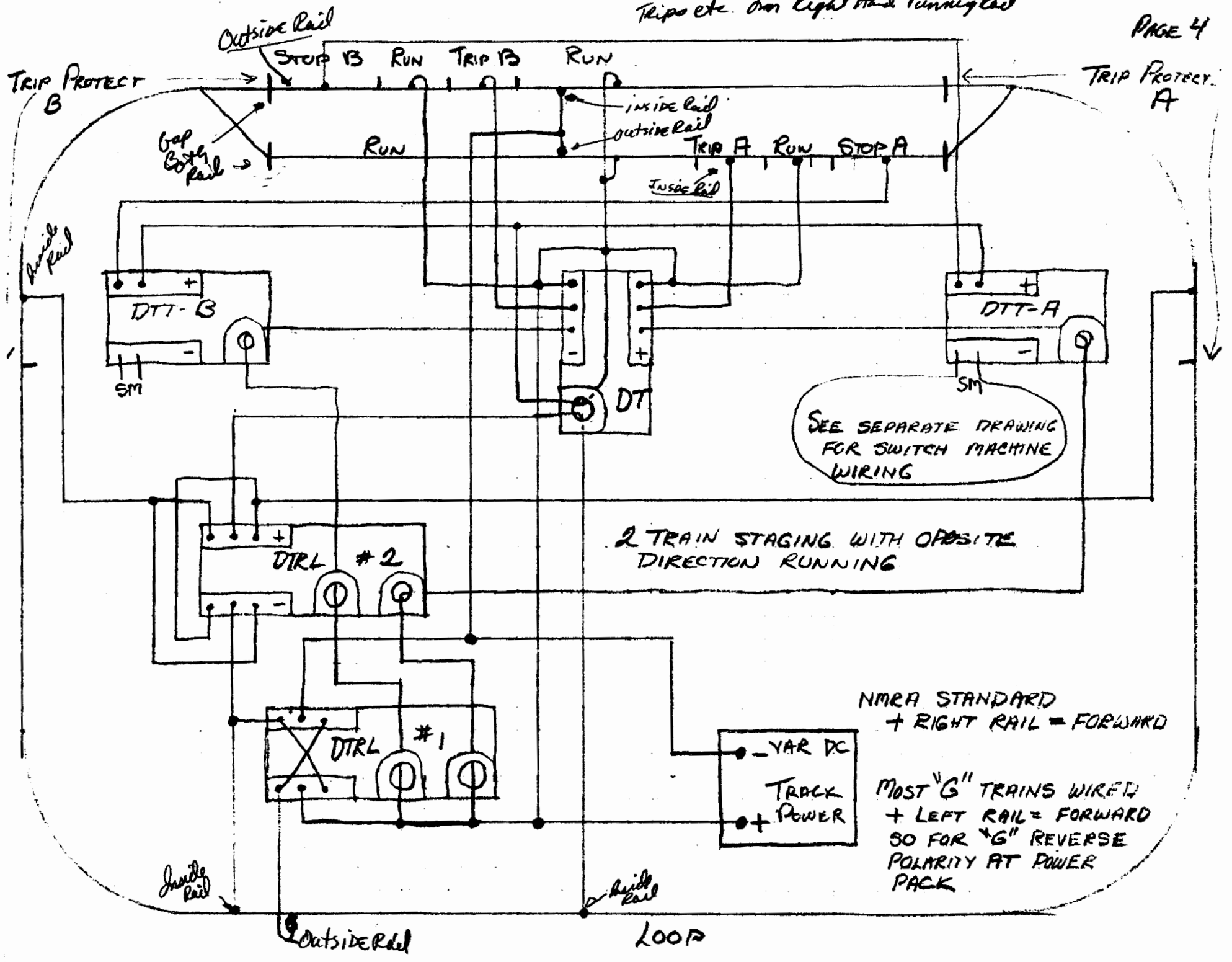
4. "RESETS" DTRL#2 WHICH CONNECTS A TRIP PROTECTION TO CONTINUE TRAK-DT ACTIVATION BY-PASSING TRIP A SO THAT LIGHTED CARS WILL NOT TRIGGER TRIP A.

WHEN TRAIN A CLEARS A TRIP PROTECTION SECTION TRAK-DT WILL RELAX ALLOWING TRIP A TO BE ABLE TO REACTIVATE.

DTT-A AND DTT-B ARE TO BE CONFIGURED AS ADJUSTABLE DETECTORS AND TIME FRAME MUST BE LONG ENOUGH FOR REAR OF MOVING TRAIN TO CLEAR ITS STOP SECTION SO THAT LIGHTS DO NOT BLINK OFF. TRIP PROTECT SECTIONS SHOULD BE AT LEAST A FULL TRAIN LENGTH LONG.

TRIP A AND TRIP B CAN BE VERY SHORT AS ONLY ONE WHEEL DRAWING CURRENT CAN ACTIVATE THE TRIP, THE LENGTH OF ONE CAR TRUCK (2 WHEEL SETS) IS HIGHLY RELIABLE. WHEN A TRAIN IS STOPPED IT IS REQUIRED THAT ("NO") WHEEL SETS ARE IN THE TRIP SECTION. WITH LIGHTED CARS IT IS SUGGESTED THAT AN UNLIT BAGGAGE CAR BE BETWEEN THE ENGINE AND THE LIGHTED CARS.

Trips etc. on Light Hand running rail



SEE SEPARATE DRAWING FOR SWITCH MACHINE WIRING

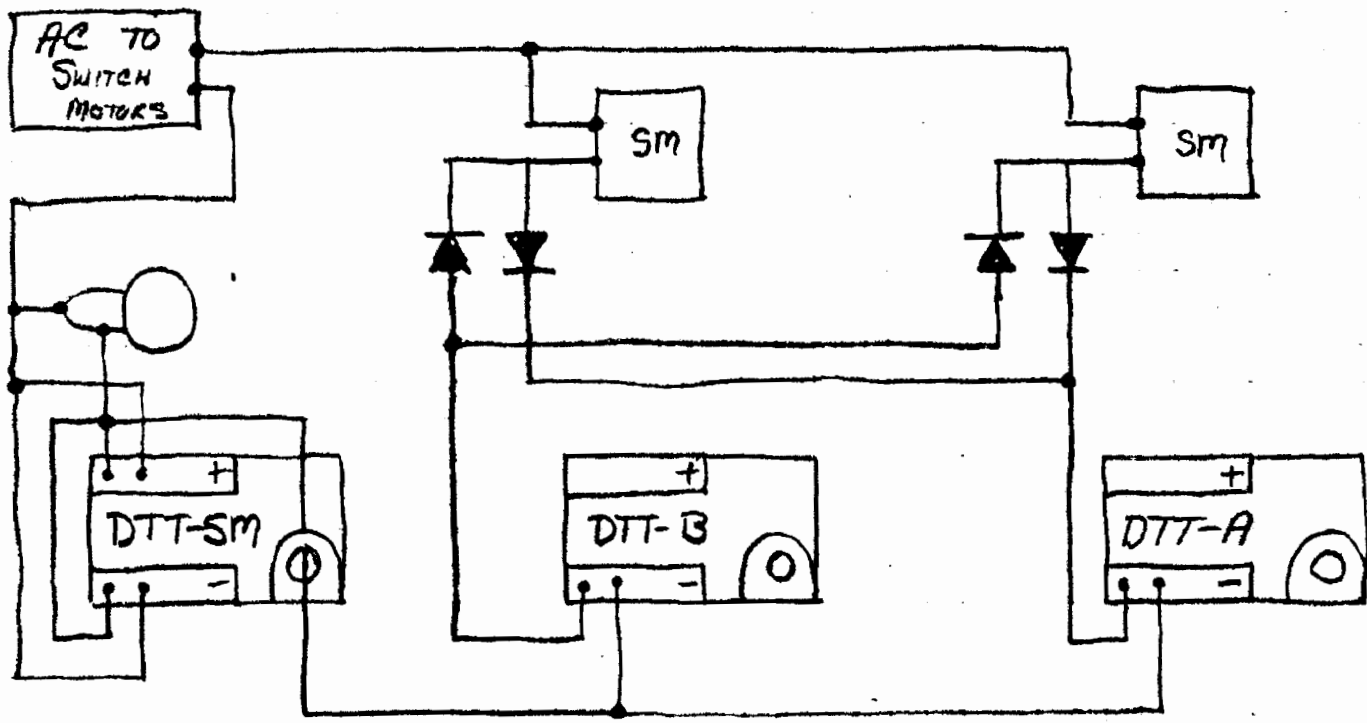
2 TRAIN STAGING WITH OPPOSITE DIRECTION RUNNING

NMRA STANDARD
+ RIGHT RAIL = FORWARD

MOST "G" TRAINS WIRED
+ LEFT RAIL = FORWARD
SO FOR "G" REVERSE
POLARITY AT POWER
PACK

-VAR DC
TRACK
+ POWER

LOOP



DC Switch Machine
or
Rotary coil

DTT-SM CONFIGURED AS
A TIMER (REMOVE JUMPER CONNECTOR)
SET TIME TO MINIMUM

MOMENTARY ACTIVATION OF
SWITCH MACHINES FOR
2 TRAIN STAGING