



---FIELD WORK:--
 1. A CIRCUIT CONTROLLER, PLAN S-221, SHALL BE CONNECTED TO AND OPERATED BY EACH DRAW WEDGE, DRAW LATCH, RAIL LIFT BEAM AND RAIL LOCK BAR. THE CIRCUIT CONTROLLER OPERATED BY RAIL LOCK BAR MUST BE CONNECTED AT FARTHEST POINT FROM OPERATING LEVEL.
 2. WHEN LOCKED, THE LOCKING BLOCK ON RAIL LOCK BAR, SHALL PASS 4" BEYOND FAR SIDE OF LOCKING TONGUE, WHEN UNLOCKED IT SHALL CLEAR LOCKING TONGUE "2".
 3. CIRCUIT CONTROLLERS OPERATED BY DRAW WEDGES, DRAW LATCHES AND RAIL LOCK BARS SHALL BE ADJUSTED TO MAKE CONTACTS IN BOTH LOCKED AND UNLOCKED POSITIONS. CONTROLLERS OPERATED BY RAIL LIFT BEAM SHALL MAKE CONTACTS IN COMPLETE RAISED POSITION ONLY.

4. INSULATION SHALL BE PLACED IN PIPE LINES AND CONNECTIONS, IF NECESSARY, TO PREVENT THE GROUNDING OR SHUNTING OF TRACK CIRCUITS.

---ENGINEERING REQUIREMENTS:--
 1. (a) FOR SINGLE TRACK DRAW, USE ONE LEVER FOR LOCKING RAILS BOTH ENDS OF DRAW AND OPERATING ELECTRIC BRIDGE COUPLERS.
 (b) FOR TWO TRACK DRAW, USE SEPARATE LEVER FOR LOCKING RAILS AND OPERATING ELECTRIC

BRIDGE COUPLERS FOR EACH END.
 2. (a) CIRCUITS THRU CIRCUIT CONTROLLERS SHALL BE SO ARRANGED THAT ALL RAILS MUST BE UNLOCKED (ELECTRIC BRIDGE COUPLERS BEING WITHDRAWN AT SAME TIME) BEFORE DRAW WEDGES AND DRAW LATCHES CAN BE WITHDRAWN AND RAIL LIFT BEAM CAN BE RAISED. DRAW WEDGES MUST BE ENTIRELY WITHDRAWN AND DRAW LATCHES AND RAIL LIFT BEAM RAISED PROPERLY BEFORE POWER CAN BE APPLIED TO SWING DRAW.
 (b) IN RETURNING DRAW TO NORMAL POSITION CIRCUITS SHALL BE SO ARRANGED THAT DRAW MUST BE CENTERED WITH DRAW LATCH ENTIRELY DOWN BEFORE DRAW WEDGES CAN BE DRIVEN; DRAW WEDGES MUST BE DRIVEN PROPERLY AND RAIL LIFT BEAM DROPPED IN PLACE BEFORE LEVER OPERATING RAIL LOCKS AND ELECTRIC BRIDGE

COUPLERS CAN BE OPERATED.
 (c) TO MAKE THIS PROCEDURE IMPERATIVE, THE LOCK AND INDICATION CIRCUITS SHALL BE SO INTERCONNECTED WITH THE DRAW WEDGE AND SWING CONTROLS THAT ALL OPERATIONS OF SIGNAL AND DRAW MACHINERY MUST SUCCEED EACH OTHER IN THE PROPER PREDETERMINED ORDER.
 3. THE CONTROLLING FUNCTIONS OF OTHER TYPES OF DRAWBRIDGES SHALL CONFORM TO THESE SAME GENERAL PRINCIPLES.

REVISIONS

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THE PENNSYLVANIA RAILROAD
 STANDARD

**DRAWBRIDGE LOCKING
 FOR CENTER PIVOT DRAW**

OFFICE OF CHIEF SIGNAL ENGINEER, PHILA., PA. MAY 28, 1928

Approved
[Signature]
 Chief Signal Engineer

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 Chief Engineer