2025 Part 12.5.15

Recommended Instructions for Facing Point Locks Applied to Spring Switches Revised 2025 (2 Pages)

A. Purpose

This Manual Part recommends instructions for the installation, maintenance and test of facing point locks applied to spring switches. They set forth general requirements representing recommended practice.

B. General

- Maintenance, tests and repair work which may interfere with safe operation of trains shall not be started until train movements have been fully protected. Temporary repairs or adjustments, when required, shall be made in such manner that safety of train operation shall not be impaired. When repair, adjustment, change or replacement is made, tests shall be made immediately to determine that the apparatus functions as intended. When making tests of apparatus, proper instruments shall be used and it shall be known that no unsafe conditions are created by the application of testing equipment.
- 2. Facing point lock mechanism, tie plates, gauge plates, and crank stand should be kept securely fastened to the ties.
- 3. Special rail stop should be securely fastened to the switch point and the switch should be free and in proper alignment so that the rail stop will bear positively against the stock rail when the switch is thrown slowly to the normal position by hand, and also return against the stock rail after the switch has been pried away by means of a bar inserted as near the stop as possible.
- 4. Connections operating the locking plunger should be kept tight and the end of plunger should have square edges.
- 5. Holes or notches in lock rods shall have square edges and shall not be more than 3/16 in (4.76 mm) larger than plunger.
- 6. Lock rods shall be so maintained that when switch is operated by hand toward its normal position, the plunger will not enter the lock rod if the switch point is prevented by an obstruction from closing to within ½ in (6.35 mm).
- 7. Point detector shall be so maintained that when switch points are locked contacts cannot be opened by manually applying force at the closed switch point. Point detector circuit controller shall be so maintained that the contacts will not assume the position corresponding to switch point closure if the switch point is prevented by an obstruction from closing to within ¼ in (6.35 mm) where latch-out device is not used and to within ¾ in (9.53 mm) where latch-out device is used.

AREMA® C&S Manual

Part 12.5.15 2025

8. Tests should be made, as instructed, to determine that end of locking plunger is withdrawn from the lock rod without binding.

- 9. Locking plunger contacts shall be so maintained that disconnection of the locking plunger connection at its point of attachment to the switch, when the switch and switch operating mechanism are in normal position, shall either:
 - a. Prevent contacts from assuming the position indicating point closure, or;
 - b. Operate other contacts to indicate separately that plunger has over-traveled.
- 10. Facing point mechanism should be so maintained and adjusted conforming to manufacturer's instructions unless they conflict with any individual railroad instructions, in which case proper authority should be consulted for the correct procedure.
- 11. Results of inspections and tests should be recorded as instructed.