
Recommended Instructions for Spring Switches

Revised 2025 (2 Pages)

A. Purpose

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

B. General

1. 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, correct instruments shall be used and it shall be known that no unsafe conditions are created by the application of testing equipment.
2. Checks should be made to determine that:
 - a. Spring switch is in good condition.
 - b. Parts of switch and supports are properly secured.
 - c. Track is securely anchored and kept in proper gauge, surface and alignment.
 - d. Adequate drainage is provided.
3. The type and quality of buffing agent used in the buffer should be as recommended by the manufacturer. The frequency with which the buffing agent should be changed, and the cleaning of the buffer and strainer should be as recommended by the manufacturer.
4. Buffing agent should be kept at proper level in the buffer. Where low temperatures are encountered and oil is used as a buffing agent, antifreeze treatment, if required, should be used as recommended by the manufacturer.
5. Packing around piston rod should be kept tight to prevent leakage of buffing agent, care being exercised to see that the tightening does not interfere with free action of the switch. The exposed portion of the piston rod should be kept coated with grease.

6. Buffer and switch operating spring shall be so adjusted and tests made as instructed, to determine that proper spring compression is developed and maintained so that switch points return to their proper position within the specified time limits and that the closed point is held against the rail with adequate force.
7. During snow and sleet storms switches should be kept clear of snow and ice. Where open flame snow-melting devices are used, care should be exercised to prevent damage to apparatus and devices kept clear of all moving parts.
8. Paint should be applied as often as required. Rusty surfaces should be cleaned before painting. Paint should not be applied to piston rods, threads of adjusting screws, padlocks or gaskets.
9. Threads of rods, jaws, bolts, and bearings of all movable parts should be kept clean and lubricated.
10. Bolts, nuts, pins, and cotters of proper size and type should be kept in place, nuts kept tight and cotters properly spread.
11. Parts that fail to perform their intended functions should be adjusted, repaired, or replaced.
12. When making repairs or adjustments of spring switches and before removing rails, switch points or frogs, protecting signals shall be secured to display their most restrictive aspects. Signals shall not be restored to normal operation until tests have been made and it is known that they function as intended and that the track is safe for train operation.
13. Spring switches should be spiked and clamped only as instructed. Measures shall be taken to protect train movements as instructed and proper authority notified when spring switch is spiked and clamped.
14. When spring switch is equipped with facing point lock, it shall be maintained and tested conforming to Manual Part 12.5.15 Recommended Instructions for Facing Point Locks Applied to Spring Switches.
15. When spring switch is equipped with circuit controller, it shall be maintained and tested conforming to Manual Part 12.5.1 Recommended Instructions for Switch Circuit Controllers.
16. Spring switch buffers and any other parts removed from service for repairs should be returned with full information as required by the railroad.
17. Results of inspections and tests herein required and all other inspections and tests that may be required should be recorded as instructed.