route locking circuit of each power-operated switch hereafter installed.

[49 FR 3385, Jan. 26, 1984]

## § 236.310 Signal governing approach to home signal.

A signal shall be provided on main track to govern the approach with the current of traffic to any home signal except where the home signal is the first signal encountered when leaving yards or stations and authorized speed approaching such signal is not higher than slow speed. When authorized speed between home signals on route governed is 20 miles per hour or less, an inoperative signal displaying an aspect indicating "approach next signal prepared to stop" may be used to govern the approach to the home signal.

# §236.311 Signal control circuits, selection through track relays or devices functioning as track relays and through signal mechanism contacts and time releases at automatic interlocking.

(a) The control circuits for aspects with indications more favorable than "proceed at restricted speed" shall be selected through track relays, or through devices that function as track relays, for all track circuits in the route governed.

(b) At automatic interlocking, signal control circuits shall be selected (1) through track relays, or devices that function as track relays, for all track circuits in the route governed and in all conflicting routes within the interlocking; (2) through signal mechanism contacts or relay contacts closed when signals for such conflicting routes display "stop" aspects; and (3) through normal contacts of time releases, time element relays, or timing devices for such conflicting routes, or contacts of relays repeating the normal position or normal state of such time releases, time element relays, or timing devices.

## § 236.312 Movable bridge, interlocking of signal appliances with bridge devices.

[49 FR 3385, Jan. 26, 1984]

When movable bridge is protected by interlocking the signal appliances shall be so interlocked with bridge devices that before a signal governing movements over the bridge can display an aspect to proceed the bridge must be locked and the track alined, with the bridge locking members within one inch of their proper positions and with the track rail on the movable span within three-eighths inch of correct surface and alinement with rail seating device on bridge abutment or fixed span. Emergency bypass switches and devices shall be locked or sealed.

[33 FR 19684, Dec. 25, 1968, as amended at 49 FR 3385, Jan. 26, 1984]

#### § 236.313 [Reserved]

## § 236.314 Electric lock for hand-operated switch or derail.

Electric lock shall be provided for each hand-operated switch or derail within interlocking limits, except where train movements are made at not exceeding 20 miles per hour. At manually operated interlocking it shall be controlled by operator of the machine and shall be unlocked only after signals governing movements over such switch or derail display aspects indicating stop. Approach or time locking shall be provided.

#### RULES AND INSTRUCTIONS

#### § 236.326 Mechanical locking removed or disarranged; requirement for permitting train movements through interlocking.

When mechanical locking of interlocking machine is being changed or is removed from the machine, or locking becomes disarranged or broken, unless protection equivalent to mechanical locking is provided by electric locking or electric circuits, train movements through the interlocking shall not be permitted until each switch, movablepoint frog or derail in the route is spiked, clamped or blocked in proper position so that it cannot be moved by its controlling lever, and then train movements shall not exceed restricted speed until the interlocking is restored to normal operation. It will not be necessary to comply with this requirement at interlockings where protection is in service in accordance with section 303, provided that the signal controls are arranged so that the signals cannot display an aspect the indication of

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which is less restrictive than "proceed at restricted speed."

## § 236.327 Switch, movable-point frog or split-point derail.

Switch, movable-point frog, or splitpoint derail equipped with lock rod shall be maintained so that it can not be locked when the point is open threeeighths inch or more.

[49 FR 3385, Jan. 26, 1984]

#### §236.328 Plunger of facing-point lock.

Plunger of lever operated facingpoint lock shall have at least 8-inch stroke. When lock lever is in unlocked position the end of the plunger shall clear the lock rod not more than one inch.

#### § 236.329 Bolt lock.

Bolt lock shall be so maintained that signal governing movements over switch or derail and displaying an aspect indicating stop cannot be operated to display a less restrictive aspect while derail is in derailing position, or when switch point is open one-half inch or more.

#### § 236.330 Locking dog of switch-andlock movement.

Locking dog of switch-and-lock movement shall extend through lock rod one-half inch or more in either normal or reverse position.

#### §§ 236.331-236.333 [Reserved]

#### § 236.334 Point detector.

Point detector shall be maintained so that when switch mechanism is locked in normal or reverse position, contacts cannot be opened by manually applying force at the closed switch point. Point detector circuit controller shall be maintained so 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 one-fourth inch where latch-out device is not used, and to within three-eighths inch where latch-out device is used.

### § 236.335 Dogs, stops and trunnions of mechanical locking.

Driving pieces, dogs, stops and trunnions shall be rigidly secured to locking bars. Swing dogs shall have full and free movement. Top plates shall be maintained securely in place.

#### §236.336 Locking bed.

The various parts of the locking bed, locking bed supports, and tappet stop rail shall be rigidly secured in place and alined to permit free operation of locking.

## §236.337 Locking faces of mechanical locking; fit.

Locking faces shall fit squarely against each other with a minimum engagement when locked of at least one-half the designed locking face.

# § 236.338 Mechanical locking required in accordance with locking sheet and dog chart.

Mechanical locking shall be in accordance with locking sheet and dog chart currently in effect.

#### § 236.339 Mechanical locking, maintenance requirements.

Locking and connections shall be maintained so that, when a lever or latch is mechanically locked the following will be prevented:

- (a) Mechanical machine. (1) Latch-operated locking. Raising lever latch block so that bottom thereof is within three-eighths inch of top of quadrant.
- (2) Lever-operated locking. Moving lever latch block more than three-eighths inch on top of quadrant.
- (b) Electromechanical machine. (1) Lever moving in horizontal plant. Moving lever more than five-sixteenths inch when in normal position or more than nine-sixteenths inch when in reverse position.
- (2) Lever moving in arc. Moving lever more than 5 degrees.
- (c) Power machine. (1) Latch-operated locking. Raising lever latch block to that bottom thereof is within seven thirty-seconds inch of top of quadrant.
- (2) Lever moving in horizontal plane. Moving lever more than five-sixteenths inch when in normal position or more than nine-sixteenths inch when in reverse position.
- (3) Lever moving in arc. Moving lever more than 5 degrees.