

UNION PACIFIC RAILROAD COMPANY
Eastern District

Kansas Division

Special Rules
No. 12

Effective Saturday,
AUGUST 1, 1953

Superseding Special Rules No. 11.

**Employees whose duties are in any way affected
thereby, must have a copy of these rules with
them while on duty.**

E. HICKS,
General Manager

G. A. CUNNINGHAM,
General Superintendent

W. O. HORNE,
Superintendent

NOTE:—Changes in this issue are printed in type same as this.

Railroad Watches

2 (R). Operating Rules 2, 2 (A) and 2 (B) are cancelled.

Employees listed below must, while on duty, have a reliable railroad grade watch* which must not vary more than 30 seconds from correct time.

(*A railroad grade watch is one equipped with a lever set.)

Safety Representatives	Flagmen
Trainmasters	Firemen
Assistant Trainmasters	Hostlers
Traveling Conductors	Outside Hostler Helpers
Road Foremen of Engines	Yardmasters
Traveling Firemen	Assistant Yardmasters
†Station Agents	Engine Foremen
†Operators	Switchtenders
Conductors	Engine Herders
Engineers	Such other employes as
Brakemen	may be designated

(†Except when assigned in offices where standard clock is located.)

2 (S). Officers and employes must not make solicitation in connection with the sale of watches.

2 (T). Employes must present their watches to officers and supervisors upon request.

Watch Comparison

3 (R). Conductors and engineers of westward C. R. I. & P. trains who have made and registered watch comparison at Phillipsburg or Goodland will not be required to make or register watch comparison at Limon.

3 (S). At Junction City, Sharon Springs and Hugo, conductor on Train 9 or 10 need not compare time with engineer as required by Operating Rule 3 (C).

Signals

7 (R). Conductors and engineers of trains or engines which operate in territory where they are governed by the rules of another railroad must know that they have equipment necessary to enable them to fully comply with such rules.

8 (R). Yellow flags by day and yellow lights by night will be used by switchtenders.

Proceed signals as well as stop signals given by switchtenders must be answered.

8 (S). Electric lanterns may be used by switchtenders and interlocking signalmen for displaying yellow lights.

Reduce and Resume Speed Signs

10 (R). Operating Rule 10 (H) is changed to read:

"Reduce Speed sign showing by figures the maximum speed permitted, placed on engineer's side of track, indicates that the track 2500 feet distant is in condition for a speed of not more than indicated by the sign. Example: 60-40-25 will indicate maximum speed of 60 MPH for streamline trains, 40 MPH for DE-Psgr. and Psgr. trains, 25 MPH for freight trains.

Resume Speed sign placed on engineer's side of track, indicates that the Reduce Speed location has been passed.

The entire train must pass over the designated location at the specified speed.

Such speed restrictions will also be shown in time-table or superintendent's bulletin."

10 (S). Operating Rule 10 (G) is changed as follows:

Yellow signals will be placed one and one-fourth miles instead of one mile from the beginning of the slow track.

10 (T). Referring to Special Rule 10 (R), signs are located on engineer's side of track, except as follows:

Location	Direction	Sign	Located
MP 39.5 to 39.9	Westward	Reduce Speed	North of Leavenworth Branch track, Lawrence.
MP 104.6 to 105.0	Eastward	Resume Speed	South of siding, Wamego.
MP 132.5 to 132.7	Westward	Reduce Speed	On fireman's side.
MP 132.5 to 132.7	Westward	Resume Speed	North of running track, Funston.
MP 133.7 to 137.1	Westward	Reduce Speed	North of running track, Funston.
MP 173.3 to 173.5	Westward	Reduce Speed	North of siding, Solomon.
MP 238.4 to 239.5	Eastward	Reduce Speed	On fireman's side.
MP 323.3 to 324.0	Westward	Reduce Speed	North of siding, Wakeeney.
MP 424.9 to 425.0	Eastward	Reduce Speed	South of siding, Somena.

Engine Whistle Signals

14 (u). Operating Rule 14 (a) and Air Brake Rule 1044 are changed as follows: When an emergency exists and it is necessary to use engine whistle to call for brakes to be applied on moving train or cars or when necessary to use engine whistle to signal some other movement to stop, a succession of short sounds must be used.

Operating Rule 14 (p) is changed as follows: When necessary to use engine whistle as an alarm for persons or livestock on track, Whistle Signal 14 (l), two long, one short, and one long sounds, must be used.

Radio

16 (R). Any interruptions or failures of radio equipment used in yard operation must be reported by engine foremen to yardmasters, who will promptly furnish manager of telegraph office complete information concerning such interruptions or failures.

Any interruptions or failures of radio equipment used in train operation must be reported by conductor to chief dispatcher and manager of telegraph office at point where chief dispatcher is located, from first open telegraph office, such report to contain complete information concerning such interruptions or failures.

Headlights

17 (R). The following will govern use of oscillating red headlight:

When train becomes disabled or makes sudden stop due to unusual occurrence, or when an adjacent track is obstructed or there is possibility of it being obstructed, if red headlight is not set in motion automatically, engineer must immediately set it in motion by manual operation.

A train on adjacent track must stop before passing headlight and be governed by Operating Rule-102.

When head end protection is required, engineer will immediately display red headlight. When occupying main track in meeting an opposing train, except in C.T.C. territory, red headlight will be displayed until opposing train dims its headlight in accordance with Operating Rule 17 (B), after which, if switch is lined to permit opposing train to enter siding, red headlight will be extinguished.

Engineer finding red headlight displayed by opposing train, must stop before passing headlight, ascertain the cause and be governed by conditions.

Display of red headlight does not relieve enginemen nor trainmen from protecting front of train in accordance with Operating Rule 99, when required.

If red headlight has been set in motion automatically and necessity no longer exists, engineer must extinguish it.

When standing at terminals and red headlight is not required, it must be extinguished.

17 (S). Operating Rule 17 (C) is cancelled.

First sentence of Operating Rule 17 is changed to read: "Headlight must be displayed, burning bright, to the front of every train by day and night."

17 (T). Operating Rule 17 (D) is changed to read:

"At night, when an engine is backing up without cars or backing up pulling cars, a white light must be displayed on rear of engine.

When a road engine without cars is standing or moving about yards at night under conditions not requiring the display of markers, a light must be displayed on rear of engine. A red light must be used when engine is so equipped."

17 (U). At night, oscillating white headlight must be set in motion passing through cities and towns and approaching and passing over public crossings at grade.

Markers and Rear End Lights

19 (R). Oscillating red rear end light on passenger trains will be used as a night signal in accordance with Operating Rule 9 and must be displayed from sunset to sunrise and when day signals cannot be seen due to weather or other conditions. Also at any time train is moving under circumstances in which it may be overtaken by another train.

Red rear end light must be extinguished when train is clear of main track and rear end protection is not required.

The displaying and extinguishing of red rear end light must be done by trainman.

Display of red rear end light does not relieve trainmen nor enginemen from complying with Operating Rule 99 nor any other rule.

18 (S). Operating Rule 19 (C) is cancelled.

When the rear car in a train is not equipped to display prescribed markers, a red flag by day and a red light by night must be displayed on rear end of rear car, except that when a red light is not available, a marker lamp displaying red light to rear must be wired or otherwise securely fastened to rear end of rear car.

19 (T). Between West Abilene and East Salina, A. T. & S. F. trains will display yellow instead of green lights in markers.

19 (U). That part of Operating Rule 19 requiring marker lamps to display green to rear at night when train is clear of main track does not apply in CTC territory.

In CTC territory, a train or engine need not stop for red markers or red light displayed on rear of a train on an adjacent track when the track to be used is seen or known to be clear.

Classification Signals

21 (R). When a train is equipped with indicators, white flags will not be displayed by extra trains.

Indicators

24 (R). Referring to Operating Rule 24: On subdivisions where Centralized Traffic Control operation is in effect, helper engines added to or cut off trains between terminals will display engine number instead of train number in indicators.

Switch Lights

27 (R). At stations where reflectorized type switch lamps are in use, in case of headlight failure, or engine backing up, trains and engines must approach facing point switches at restricted speed.

27 (S). Switch lights will not be used on:

Leavenworth Branch;
Manhattan Branch, between Marysville and Manhattan;
Solomon Branch;
McPherson Branch;
U. S. Hospital Branch.

Trains and engines must approach facing point switches on these branches prepared to stop if switch is not in normal position.

Stopping Trains at Stations

28 (R). A green and white signal will be used to stop designated trains at conditional stops shown in time-table.

28 (S). When necessary to stop a train at a station for any cause other than for flag or conditional stop, a lighted red fusee must be used.

Stopping Trains 300 Feet from Fouling Point

81 (R). When a train, either on main track or on siding, is to be stopped to be met or passed by another train, or is stopped by a CTC signal at leaving end of a station, stop should be made not less than 300 feet from fouling point or signal, when length of train will permit.

Train Register

83 (R). C. R. I. & P. trains entering or leaving C. R. I. & P. yard at Kaw Jct. will register by registering ticket.

83 (S). All trains may register by registering ticket at Topeka passenger depot.

Information required by Operating Rule S-83 at Topeka will be given to U. P. westward freight trains by train order at West Topeka.

83 (T). Solomon is registering station for Nos. 165 and 166 only. East Salina is registering station for Nos. 79, 159, 165 and 565 only. Hastings passenger depot is registering station for Nos. 543 and 544 only.

83 (U). Sandown Jct. is registering station only for C. R. I. & P. trains operating between Sandown Junction and D. & R. G. W. north-west yard. Conductors of such trains may register by registering ticket.

83 (V). Information contained in train register at 36th Street may be accepted as applying at Pullman.

83 (W). Trains which do not originate at 36th Street need not receive information required by Operating Rules S-83 or D-83 at that station and conductors of such trains may register by registering ticket.

83 (X). At Hiawatha, before fouling Missouri Pacific tracks by movement through a cross-over, flag protection as required by Operating Rule 99 must be provided. In addition, information required by Operating Rule S-83 and written line-up must be obtained from Missouri Pacific train dispatcher.

Departing Kansas City Union Station

84 (R). At Kansas City Union Station, conductors must comply with K. C. T. time-table Rule 6 before departing, unless release is received from U. P. passenger agent when he is on platform.

Clearing Trains—Rule 251 Operation

86 (R). Where Operating Rule 251 is in effect, Operating Rule 86 is modified as follows:

When instructed by train dispatcher to clear a train, the time of such train must be cleared not less than ten minutes.

Movements in Yards

93 (R). When making movement between Sable and Bunell, engines must move expecting to find track occupied by U. S. Government engines.

Clearances

96 (R). Clearance must be received as follows:

Union Station	—all westward trains;
Terminal Jct.	—all westward trains;
Topeka passenger depot	—all westward U. P. passenger trains and all eastward C. R. I. & P. passenger trains;
Topeka C. R. I. & P. tower	—all eastward C. R. I. & P. freight trains;
West Topeka	—all trains except westward passenger trains;
Junction City	—all trains;
Abilene C. R. I. & P. depot	—all westward C. R. I. & P. trains;
Abilene A. T. & S. F. depot	—all westward A. T. & S. F. trains;
Salina passenger depot	—all trains;
Ellis	—all trains;
Hugo	—all trains;
36th Street	—all second-class and extra trains going to Kansas Division;
Concordia	—all eastward trains;
Plainville	—all trains;
Colby	—all trains between 7 A. M. and 5 P. M. Monday through Friday, incl., and between 7 A. M. and 3 P. M. Saturdays and holidays.
Hastings passenger depot	—all first-class trains;
Hastings yard office	—all trains except first-class trains;
Marysville	—all trains;
Troy	—all westward trains;
Leavenworth	—all westward trains.

96 (S). At Pullman, trains are not required to receive clearance as per Operating Rule 96.

96 (T).

A Clearance Received At	By	Will Confer the Same Authority On	As When Received At
Junction City.	Westward trains.	First Subdivision.	Terminal Jct.
Junction City.	Eastward trains.	First Subdivision.	Salina.
Abilene C.R.I. & P. depot.	Westward C.R.I. & P. trains.	First Subdivision.	West Abilene.
Abilene A.T. & S.F. depot.	Westward A.T. & S.F. trains.	First Subdivision.	West Abilene.
Salina passenger depot.	Eastward C.R.I. & P. and A.T. & S.F. trains.	First Subdivision.	East Salina.
Ellis.	Westward trains.	Second Subdivision.	Salina.
Ellis.	Eastward trains.	Second Subdivision.	Sharon Springs.
Hugo.	Westward trains.	Wyoming Division.	Pullman.
Hugo.	Westward trains.	Third Subdivision.	Sharon Springs.

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A Clearance Received At	By	Will Confer the Same Authority On	As When Received At
Hugo.	Eastward trains.	Third Subdivision.	Pullman.
Limon.	Westward C.R.I. & P. trains.	Wyoming Division.	Pullman.
36th Street.	Trains going to Kansas Division.	Kansas Division.	Pullman.
Denver.	Trains going to Kansas Division.	Kansas Division.	Pullman.
Marysville.	Westward trains.	Fourth Subdivision.	Menoken or Upland.
Marysville.	Eastward St. Joseph Branch trains.	St. Joseph Branch.	Upland.
Leavenworth.	Westward trains.	Leavenworth Branch.	Cochrane.
Concordia.	Eastward trains.	Junction City Branch.	Miltonvale.

Railroad Crossings and Junctions

98 (R). Trains and engines must be governed by the following at the railroad crossings and junctions indicated:

Location	Railroad Crossed, or Junction With	Trains Which Have Precedence	How Governed
11th & Santa Fe Sts., Kansas City, Mo.	St.L.& S.F.		Stop. Operating Rules 98 and 98 (A).
Santa Fe St., Block 29, Kansas City, Mo.	M.P.		Stop. Operating Rules 98 and 98 (A).
Between Eighth & Ninth Sts., Kansas City, Mo.	St.L.& S.F.		Stop. Operating Rules 98 and 98 (A).
11th & Mulberry Sts., Kansas City, Mo.	C.B.& Q.		Stop. Operating Rules 98 and 98 (A).
State Line Yard, Kansas City, Mo.	Yard track crosses yard tracks and M.P.		All movements stop clear of crossing unless proceed signal is received from switch-tender and it is known that the crossing is clear.
Berger Ave. & Railroad St., Kansas City, Kans.	C.R.I.& P.		Stop. Operating Rules 98 and 98 (A).
Minnesota Ave. & M.P. Bridge, Kansas City, Kans.	M.P.		Interlocking.
Minnesota Ave. & Second St., Kansas City, Kans.	M.P.		Stop. Operating Rules 98 and 98 (A).
State Ave., East Block 16, Kansas City, Kans.	M.P.		Gates normally set against U.P.
State Ave. South, Opposite Block 16, Kansas City, Kans.	M.P.		Stop. Operating Rules 98 and 98 (A).
North City Limits, Kansas City, Kans.	M.P.		Stop. Operating Rules 98 and 98 (A).

Continued on Opposite Side.

Location	Railroad Crossed, or Junction With	Trains Which Have Precedence	How Governed
Terminal Jct. (M. P. 3.3)	W. Pgr. Line Crosses E. Frt. Line		Block signals, instructions and signal from telegrapher-switchtender. Special Rule 98 (S).
Kaw Jct.	C.R.I.& P.		Special Rule 98 (T).
Sunflower. (Cement Plant Lead)	K.C.K.V. & W.		Stop. Operating Rules 98 and 98 (A).
Topeka. (M. P. 68.2)	C.R.I.& P.	U.P.	Manually controlled signals. Special Rule 98 (U).
Manhattan. (M. P. 119.4)	C.R.I.& P.	U.P.	Stop, send member of crew to crossing to give proceed signal when safe to proceed.
Salina. (M. P. 187.2)	A.T.& S.F.	U.P.	Block signals and gate.
Limon. (M. P. 550.5)	C.R.I.& P.	U.P.	Non-operative block signal displaying Stop indication.
Limon Jct. (M. P. 550.6)	C.R.I.& P.	U.P.	Dwarf signal.
Sandown Jct. (M. P. 634.0)	C.R.I.& P.		Automatic block signals. Special Rule 98 (V).
Pullman. (M. P. 2.2)	Outbound main track.	Wyoming Division.	Block Signals. Special Rule 98 (Y).
36th Street. (M. P. 1.8)	Outbound main track.	Westward.	Block Signals. Special Rule 98 (Y).
Choctaw & Main Sts., Leavenworth.	L.T.& B. Co.		Interlocking.
Choctaw St. & Mo. River Bridge, Leavenworth.	L.T.& B. Co. C.G.W.		Interlocking.
Frankfort. (M. P. 58.3)	M.P.		Automatic Interlocking and CTC. Special Rule 98 (X).
Hanover. (M. P. 128.1)	C.B.& Q.		Automatic Interlocking and CTC. Special Rule 98 (X).
Endicott. (M. P. 147.1)	C.B.& Q.		Interlocking and CTC. Special Rule 98 (W).
Fairbury. (M. P. 152.7)	C.R.I.& P.		Automatic Interlocking and CTC. Special Rule 98 (X).
Fairbury. (M. P. 154.4)	C.R.I.& P.		Automatic Interlocking and CTC. Special Rule 98 (X).
Belvidere. (M. P. 177.0)	C.B.& Q.		Automatic Interlocking and CTC. Special Rule 98 (X).
Davenport. (M. P. 191.2)	C.& N.W.		Automatic Interlocking and CTC. Special Rule 98 (X).
Edgar. (M. P. 200.5)	C.B.& Q.		Automatic Interlocking and CTC. Special Rule 98 (X).

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Location	Railroad Crossed, or Junction With	Trains Which Have Precedence	How Governed
Iring. (M. P. 152.7)	M.P.	M.P.	Stop, send member of crew to crossing to give proceed signal when safe to proceed.
Beatrice. (M. P. 97.2)	C.R.I.&P.	U.P.	Stop. Operating Rules 98 and 98 (A).
Concordia.	A.T.&S.F.	A.T.&S.F.	Gate.
Minneapolis. (M. P. 23.7)	A.T.&S.F.	U.P.	Stop. Operating Rules 98 and 98 (A).
Beloit. (M. P. 57.2)	M.P.	M.P.	Stop. Operating Rules 98 and 98 (A).
Salina (M. P. 0.5), McPherson Branch.	A.T.&S.F.	U.P.	Stop. Operating Rules 98 and 98 (A).
Salina (M. P. 0.6), McPherson Branch.	C.R.I.&P.	U.P.	Stop. Operating Rules 98 and 98 (A).
Salina (M. P. 0.6), McPherson Branch.	M.P.	U.P.	Stop. Operating Rules 98 and 98 (A).
Lindsborg. (M. P. 20.7)	M.P.	M.P.	Stop at switch target until gate has been set up against M.P. When entire train has passed the target on opposite side of crossing, the gate must be set against U.P.
McPherson. (M. P. 35.1)	A.T.&S.F.	A.T.&S.F.	Stop. Operating Rules 98 and 98 (A).
Lincoln Center. (M. P. 33.8)	A.T.&S.F.	U.P.	Gate.
St. Joseph, Mo.	U.T.R.R.		Stop. Operating Rules 98 and 98 (A).
Belt Line Crossing. (M. P. 249.6)	Belt Line.	U.P.	Semaphore and gate.

98 (S). At Terminal Jct., for movement to or from C. R. I. & P. yard, permission must first be obtained from telegrapher-switchtender and after switches are properly lined, trains must be governed by indication of signals.

Eastward trains and engines on old ice dock track must not pass Stop sign near east end of that track without permission from telegrapher-switchtender.

A westward train stopped by a dwarf signal, or an eastward train stopped by Signal 34, must not proceed until signal changes to Proceed indication or a proceed signal is received from telegrapher-switchtender.

98 (T). At Kaw Jct., when dwarf signal governing westward movement from C. R. I. & P. yard, or lower unit of Signal 52, displays Stop indication, train or engine may proceed only on hand signal received from telegrapher-switchtender and after verbal explanation has been given by telegrapher-switchtender to trainman or engineer. This movement must be made at restricted speed.

98 (U). At C. R. I. & P. Crossing, M. P. 68.2, Topeka, manually controlled signals are under control of C. T. C. operator at West Topeka.

When signal governing route to be used displays Stop indication, member of crew must communicate with C.T.C. operator for instructions. If movement is verbally authorized by operator, member of crew must proceed to the crossing, and if conditions permit and no conflicting movement is evident, he will signal his engineer to proceed.

Eastward high signal west of crossing governs movement over C. R. I. & P. crossing and main track movement. Dwarf signal at base of this high signal governs movement over C. R. I. & P. crossing and through cross-over to south running track.

98 (V). When an automatic block signal governing movement at Sandown Jct. displays Stop indication, train or engine must not proceed until proceed signal given with yellow flag or yellow light is received from telegrapher-switchtender, and in proceeding train or engine must be governed by Operating Rule 509.

98 (W). At C. B. & Q. Crossing Endicott, when a train or engine has been stopped by interlocking signal and no conflicting train movement is evident, member of crew must communicate with dispatcher.

If informed that interlocking is in automatic operation, time release must be operated and if signal does not change its indication at expiration of time release interval, movement may be made in compliance with Operating Rules 612 and 267, proceeding at restricted speed to next home signal.

If informed that interlocking is in manual operation, signal must not be passed; except on permission of operator and movement made in compliance with Operating Rules 609 and 267, proceeding at restricted speed to next home signal.

98 (X). When a train or engine has been stopped by a Stop signal and no conflicting train movement is evident, member of crew must communicate with dispatcher. When instructed by dispatcher, time release must be operated and if indication of signal does not change at expiration of time release interval, movement may be made—

At railroad crossings, shown below, in compliance with Operating Rules 527, 612 and 267:

M. P. Crossing, Frankfort (M. P. 58.3);
C. B. & Q. Crossing, Hanover (M. P. 128.1);
C. R. I. & P. Crossing, Fairbury (M. P. 152.7);
C. & N. W. Crossing, Daenport (M. P. 191.2);
C. B. & Q. Crossing, Edgar (M. P. 200.5).

At railroad crossings, shown below, in compliance with Operating Rules 612 and 267:

C. R. I. & P. Crossing, Fairbury (M. P. 154.4);
C. B. & Q. Crossing, Belvidere (M. P. 177.0).

98 (Y). All first-class trains must stop clear of cross-over at 36th Street unless proceed signal is received from switchtender and it is known that the switches are properly lined.

All Wyoming Division first-class trains and trains moving to or from Kansas Division must stop clear of cross-over at Pullman, unless proceed signal is received from switchtender and it is known that the switches are properly lined.

Flag Protection

99 (R). Flagman, in placing torpedoes as required by Operating Rule 99, must place second set of torpedoes one and one-half miles instead of one and one-fourth miles from rear of train.

Last paragraph of Operating Rule 99 is changed to read:

"Night signals—A white light, not less than ten torpedoes and six red fuses."

At night and during foggy and stormy weather, a lighted red fusee will be used for hand signals required by Operating Rule 99.

99 (S). Operating, M. of W. and Signal Rule 99 (F) is changed as follows:

Employee alone, who finds track or bridge unsafe for trains at normal speed, in placing torpedoes as required by Rule 99 (F), must place second set of torpedoes one and one-half miles instead of one and one-fourth miles from red flag or red light.

99 (T). Trains may be relieved from protecting against following extra trains by the use of Example (7) of train order Form E, only as follows:

Second Subdivision, between Ellis and Sharon Springs;
Third Subdivision, between Sharon Springs and Hugo;
Fourth Subdivision, between Hastings and Grand Island;
St. Joseph Branch, Junction City Branch;
between Troy and Home; Solomon Branch;
Manhattan Branch; McPherson Branch;
Leavenworth Branch; Plainville Branch.

Dead Engines

101 (R). In handling dead steam engine, it must be placed 12 cars behind the road engine, and if a second dead steam engine is in the train, the second dead engine should be 25 cars behind the road engine. In handling three dead steam engines in train, 15 cars must be placed between each engine.

Cars or Train Left Behind

102 (R). In complying with Operating Rule 102 (B), if no light is available to be placed on front end of cars left behind, a trainman must remain at front end of such cars to signal engineer when returning.

Riding Ends of Engines

103 (R). When Diesel-electric locomotive is used, a yardman or trainman may ride on side steps or platform in direction locomotive is moving instead of on leading footboard.

103 (S). Where reference is made in rules to rear of tender of engines, this requirement will also apply to rear end of Diesel-electric locomotives.

103 (T). A yardman or trainman need not ride on leading footboard of engine as follows:

- At Kansas City, continuous movements between Fairfax District and main running track at Armstrong;
- At Junction City, main track movements;
- At Salina, movements in train yard between Santa Fe and Ohio Streets;
- At Ellis, main track movements;
- Between Denver and Pullman, continuous main track movements;
- At Marysville, between train yard and Elm Street;
- At Hastings, between train yard and freight house yard.

Public Crossings

103 (U). At public crossing protected by crossing watchman and crossing gates, yard crews must know gates are down and crossing protected before making movement over the crossing with engine or car; otherwise crossing must be protected by member of crew.

103 (V). At highway grade crossings protected by any automatic crossing protection, signals, bells or gates, every effort must be made to avoid unnecessarily occupying controlling circuits or leaving switches open within the controlling circuits. See Operating Rule 103 (A).

When a train, engine, or yard movement has been delayed or stopped within 1500 feet of such crossing, any further movement toward the crossing must be made at restricted speed until it is determined that the crossing signals are operating to stop highway traffic.

When a train, engine, or yard movement has passed over such crossing and a reverse movement onto or over the crossing is then to be made, or, when a switching, engine or train movement is to be made against the current of traffic over such crossing, the crossing must be protected by a member of the crew as provided in Operating Rule 103 (B) or 103 (C), except when a crossing watchman is on duty.

Switches

104 (R). No. 14 turnouts are installed at all power operated switches in C.T.C. territory except those at C. R. I. & P. Junction, Topeka, and at west cross-over switches at west end of Menoken.

Other switches equipped with No. 14 turnouts are indicated by a figure "14" on switch target.

104 (S). Switches will be set normally at:

- Manhattan, Manhattan Branch main track switch just north of Poyntz Ave.—for passenger station;
- Miltonvale, junction switch—for A. T. & S. F. main track;
- Concordia, junction switch—for A. T. & S. F. main track;
- Troy, junction switch—for C. R. I. & P. main track.

Use of Sidings and Running Tracks

105 (R). Movements on Fort Riley siding and on Funston running track between west switch at East Funston and east switch at Fort Riley are governed by dwarf signals. All movements on these tracks must be made at restricted speed.

When a lunar light is displayed on governing dwarf signal, train or engine may proceed.

When a red light is displayed on governing dwarf signal or when dwarf signal is not visible, trains or engines must not enter these tracks, or move on these tracks, unless preceded by flagman.

Trains must not use Funston running track unless authorized by train dispatcher.

Brakemen and Firemen Stopping Trains

106 (R). When conditions or signals require that the train be stopped or speed of train be reduced and the engineer or conductor fails to take proper action to do so, or should the engineer become incapacitated, brakemen and firemen must take immediate action to stop train.

Speed Restrictions

152 (R). That part of last paragraph of Operating Rule 93 reading, "(See Special Rule 152-R)" is changed to read, "See speed restrictions in time-table."

Hold Indicators

240 (R). At Topeka, when "H" indication is displayed on eastward approach signal for A. T. & S. F. interlocking, eastward trains must remain west of Kansas Avenue until signal displays proceed indication or interlocking operator authorizes further movement by telephone.

Centralized Traffic Control System

266 (R). In C.T.C. territory, at points where hand operated switches not equipped with electric lock are installed, a train or engine must not move to nor foul main track or controlled siding until authority to occupy such track has been obtained from dispatcher or operator.

266 (S). Clearance Form B need not be received by trains or engines entering C.T.C. territory between Topeka and Menoken, nor by St. Joseph Branch trains entering C.T.C. territory at Marysville or Upland, but must be governed by signal indication and instructions from dispatcher or operator.

266 (T). Westward Fourth Subdivision trains must receive C.T.C. Clearance Form B at West Topeka, which will confer same authority on Fourth Subdivision as when received at Menoken.

Westward trains or engines stopped by Stop signal at east end of Marysville Yard, Fourth Subdivision and Manhattan Branch, need not receive Form C clearance, but will be governed by verbal instructions from dispatcher.

Eastward trains or engines stopped by Stop signal just west of wye switch west end of Marysville yard need not receive Form C clearance, but will be governed by verbal instructions from dispatcher.

Westward helper engines stopped by Stop signal at east end of Hanover need not receive Form C clearance but may proceed on main track as far as helper track switch when given verbal authority by dispatcher.

267 (R). At Topeka, when C.T.C. Signal 688 or 693 displays Stop indication, member of crew must communicate with C.T.C. operator for instructions. If movement is verbally authorized by operator, flagman must be sent ahead to next signal and movement made at restricted speed.

267 (S). Between C. R. I. & P. Junction, Topeka, and West Topeka, yard engines need not receive Clearance Form C as authority to proceed from a Stop indication as required by Operating Rule 267, but must be governed by verbal instructions from C.T.C. operator.

272 (R). Protection of rear of train as required by Operating Rule 99 is not required between C.T.C. Stop signals at West Topeka and C.T.C. Stop signals at C. R. I. & P. Junction, M. P. 68, when rear of train is standing between those signals.

Block Signals

509 (R). An eastward train leaving Pullman or a westward train leaving Roydale will cause block signals between Pullman and Roydale to display restrictive indication. Trains using siding at Sandown should clear main track in sufficient time to avoid holding Stop signal against other trains.

Spring Switches

517 (R). Spring switch at Hastings is equipped with facing point lock. See Operating Rule 517.

Interlocking

605 (R). To indicate the route to be used, the following whistle signals will be used:

At Kaw Jct.:

C. R. I. & P. eastward trains, for diverging track . . . — 0

At Bonner Springs, over A. T. & S. F. Crossing:

For switch for eastward trains to enter siding . . . — 0

At Topeka, over A. T. & S. F. Crossing:

For main track switch to east yard and rip track. . . — 0

For Rock Island—Curtis Street connection 0 0 — 0

For Golden Belt Elevator tracks — 0 0 — 0

For Santa Fe interchange tracks — 0 0 — 0

For cross-over, 700 feet east of crossing — 0 — 0

At Hastings (M. P. 227.2):

For main track — — —

For diverging track — — 0

Exchanging Signals and Inspection of Trains

713 (R). A trainman must be stationed on rear of train in position to give or receive signals, when passing depot at the following stations:

Terminal Junction	Monument
Kaw Junction	Page City
St. Joseph, Mo. River	
Drawbridge Control House	

713 (S). On Fourth Subdivision, in addition to complying with requirements of Operating Rule 713 (A), a trainman must be stationed on rear of train in position to give or receive signals and pick up messages at all stations where an agent or operator is on duty.

Between Menoken and Hastings, a trainman must be stationed on rear of train in position to give or receive signals at all times when passing depot at Emmett, Onaga, Frankfort, Hanover, Fairbury, Carleton and Fairfield.

Due to excessive slack action on eastbound trains, a trainman need not be on rear platform when passing stations at Bremen and Herkimer if it can be seen that there are no messages or orders to pick up.

713 (T). Referring to Operating Rules 713, 713 (A) and 713 (B). The following additional requirements must be observed in the operation of streamline trains:

Trainmen and enginemen, in addition to exchanging signals with operators or other employes at train order stations, must look their train over on curves, at stations where train order signals are located, when passing through yard limits and, in addition, they must inspect train on curves, as follows:

M. P. 23.6 and M. P. 23.9	M. P. 295.8 and M. P. 296.0
M. P. 39.5 and M. P. 39.9	M. P. 324.3 and M. P. 324.8
M. P. 42.4 and M. P. 43.0	M. P. 363.0 and M. P. 363.6
M. P. 58.5 and M. P. 59.1	M. P. 401.3 and M. P. 401.8
M. P. 82.1 and M. P. 82.5	M. P. 450.8 and M. P. 451.1
M. P. 99.6 and M. P. 99.9	M. P. 500.0 and M. P. 500.3
M. P. 123.1 and M. P. 123.5	M. P. 543.9 and M. P. 544.8
M. P. 167.9 and M. P. 168.3	M. P. 568.6 and M. P. 569.2
M. P. 221.9 and M. P. 222.4	M. P. 598.4 and M. P. 598.8
M. P. 256.4 and M. P. 256.9	

On curves indicated above, at train order stations, and after passing through yard limits, a trainman at rear of the train must exchange signals with a member of the engine crew in cab of locomotive, such signals to indicate whether or not train is running properly.

Any exceptions noted by either trainmen or enginemen must be promptly investigated and condition known to be safe before permitting train to proceed.

Passengers on Freight Trains

719 (R). Passengers with tickets may be carried on freight trains between stations at which the trains stop, except trains consisting mostly of stock.

Within the State of Kansas, on freight trains, passengers under 15 years of age must be accompanied by parent, guardian or other competent person.

Outfit Cars

720 (R). That part of Operating Rule 720 (C) and M. of W. and Signal Rule 1521 requiring authority from superintendent to permit women and children to remain in outfit cars during movement of such cars is cancelled.

Carbon Monoxide Fumes

733 (R). There is hazard of carbon monoxide fumes from exhaust of Diesel or gasoline engines and precautions must be taken to avoid possibility of accident therefrom.

Exhaust from such engines must not be located in close proximity of fresh air intake of passenger cars and care must be exercised at all times to see that there is sufficient ventilation where such engines are operated.

Trains Stopped in Tunnels

733 (S). Dangerous gases present in exhausts from various types of locomotives, steam generators, or engines of the Waukesha type, may cause incapacitation or fatalities if in sufficient concentration as might result when a train is stopped in a tunnel.

In the event a passenger train, regardless of the type of power being used, is stopped in a tunnel, cars within the tunnel must have air circulating systems, including air conditioning systems, ice machines and engine generators, shut off, fresh air intake shutters closed, and blower fans shut off.

Continued on Opposite Side.

733 (S). Continued.

Certain gases are not readily detected by odors and this action must be taken immediately and time not wasted in determining when train may be started. Take safe course and act at once.

When a Diesel-electric locomotive is stopped in a tunnel under conditions preventing prompt movement, Diesel engines must be promptly shut down.

Shutting Off Diesel Propulsion Engines

733 (T). When Diesel propulsion engines are shut off, air brakes must be fully applied and, in addition, front and rear of a traction wheel must be blocked and sufficient hand brakes must be applied throughout the train to prevent movement should air brakes leak off.

During freezing weather, when Diesel engines are shut down, cooling water must be drained to winter level and if necessary to prevent damage to engine must be drained completely.

Local conditions must be carefully considered, as there may be situations where the exhaust gases are being carried away from the train by air currents, or where proximity to tunnel opening would make it unnecessary to shut down these engines. Safety of passengers and members of the crew must be the first consideration.

Train dispatcher should be notified immediately so that proper arrangements can be made for protection of persons and equipment.

Power Transmission Wires

734 (R). Power transmission wires carrying 2300 volts are located on top cross-arm of signal pole line.

Diesel-Electric Locomotives

735 (R). Adjustments must not be attempted nor made in high voltage cabinets of Diesel-electric locomotives until engine has first been isolated and stopped and units have come to a stop.

736 (R). When Diesel-electric switch locomotive is to be idle in excess of 30 minutes, main engine must be stopped.

When Diesel-electric road locomotive is to be idle for one hour at initial or intermediate stations, main engines must be stopped.

Exception: In such cases, engines must not be stopped when outside temperature is below 35 degrees.

When Diesel engines are stopped at terminals when a heavy rain is falling, enginemen will call on mechanical forces for covers to be placed over exhaust stacks.

When Diesel engines are stopped, hand brakes must be applied.

Cars Partly Loaded or Unloaded

802 (R). All persons are prohibited from riding in cars while being switched, which are in the process of loading or unloading. Part loads will not be switched unless properly broken down or properly braced to prevent contents falling and being damaged. Before switching with or moving cars which are in the process of loading or unloading, persons working in the car must be notified and trainmen and yardmen should see that cars are not switched with until cars are vacated.

Handling of Explosives and Inflammables

802 (S). Trainmen, enginemen, yardmen, agents and other employes who in any way handle or care for explosives and other dangerous articles must familiarize themselves with the regulations and instructions governing the handling of them.

Placards on Cars

BE 589 (b). A car requiring car certificates and "Explosives," "Dangerous," "Dangerous—class D Poison," "Poison Gas," or "Caution—Residual Phosphorus" placards under the provisions of this part shall not be transported unless such freight car is at all times placarded and certificated as required by this part. Placards and car certificates lost in transit shall be replaced at next inspection point and those not required shall be removed.

BE 589 (b). (1) At points where trains are inspected, cars placarded "Explosives" and adjacent cars shall be inspected; such cars shall continue in movement only when inspection shows them to be in condition for safe transportation.

Continued on Page 8.

Switching Cars Containing Explosives or Poison Gas

BE 589 (c). A car placarded "Explosives" or placarded "Poison Gas" shall not be cut off while in motion. No car moving under its own momentum shall be allowed to strike any car placarded "Explosives," or placarded "Poison Gas." No freight car placarded "Explosives" or placarded "Poison Gas" shall be coupled into with more force than is necessary to complete the coupling.

BE 589 (c). (1) When transporting a car placarded "Explosives" in terminals, yards, side tracks, or sidings, such cars shall be separated from the engine by at least one non-placarded car.

BE 589 (c). (2) Closed cars placarded "Explosives" shall have doors closed before they are moved.

Switching of Cars Containing Dangerous Articles

BE 589 (d). In switching operations where use of hand brakes is necessary, a placarded loaded tank car, or a draft which includes a placarded loaded tank car shall not be cut off until the preceding car or cars clear the ladder track and the draft containing the placarded loaded tank car, or a placarded loaded tank car shall in turn clear the ladder before another car is allowed to follow.

BE 589 (d). (1) In switching operations where hand brakes are used, it shall be determined by trial that a car placarded "Dangerous" or that a car occupied by a rider in a draft containing a car placarded "Dangerous" has its hand brakes in proper working condition before it is cut off.

Placement of Freight Cars Containing Explosives, in Yards, on Sidings, or Sidetracks

BE 589 (e). Cars placarded "Explosives" shall be so placed that they will be safe from all probable danger of fire. Freight cars placarded "Explosives" shall not be placed under bridges or overhead highway crossings, nor in or alongside of passenger sheds or stations except for loading or unloading purposes.

Notice to Crews of Cars Containing Explosives in Freight Trains or Mixed Trains

BE 589 (f). At all terminals or other places where trains are made up by crews other than road crew accompanying the outbound movement of cars, the railroad shall execute a consecutively numbered notice showing the location in the freight train or mixed train of every car placarded "Explosives." A copy of such notice shall be delivered to the train and engine crew and a copy thereof showing delivery to the train and engine crew shall be kept on file by the railroad at each point where such notice is given. At points other than terminals where train or engine crews are changed, the notice shall be transferred from crew to crew.

Position in Freight Train or Mixed Train of Cars Containing Explosives

BE 589 (g). In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" shall, when length of train permits, be placed not nearer than the sixteenth car from both the engine or occupied caboose, except:

- (1) When the length of freight train or mixed train will not permit it to be so placed, it shall be placed near the middle of the train.
- (2) When transported in a freight train made up in "blocks" or classifications, a car placarded "Explosives" shall be placed near the middle of the "block" or classification in which moving, but not nearer than the sixth car from both the engine or occupied caboose.
- (3) When transported in a freight train or a mixed train performing pickup and/or setoff service, it shall be placed not nearer than the second car from both the engine or occupied caboose, except as provided in paragraph (1) of this section.

Separating Cars Placarded "Explosives" From Other Cars in Train

BE 589 (h). In a freight train or a mixed train either standing or during transportation thereof, a car placarded "Explosives" must not be handled next to:

1. Occupied passenger car, other than car occupied by gas handlers or military personnel accompanying shipments.
2. Occupied combination car, other than car occupied by gas handlers or military personnel accompanying shipments.
3. Any car placarded "Dangerous" or "Dangerous—Class D Poison."
4. Engine.
5. Any car placarded "Poison Gas."

Continued on Opposite Side.

6. Wooden underframe car (except on narrow gauge railroads).
7. Loaded flat car. (Note: Flat cars equipped with permanently attached ends or rigid construction shall be considered as open-top cars. See subparagraph (8) of this paragraph.)
8. Open-top car when any of the lading extends or protrudes above or beyond the ends or sides thereof.
9. Car equipped with automatic refrigeration or any other apparatus utilizing an open-flame light or an internal combustion engine in its operation.
10. Car containing lighted heaters, stoves or lanterns.
11. Car loaded with live animals or fowl, occupied by an attendant.
12. Occupied caboose except as provided in paragraph (1) of this section.

Position in Train of Loaded Placarded Tank Car

BE 589 (i). In a freight train or a mixed train, except a train consisting entirely of placarded loaded tank cars and as provided in paragraph (j) of this section, a placarded loaded tank car shall when the length of the train permits, be not nearer than the sixth car from the engine, occupied caboose or passenger car.

BE 589 (i). (1) When the length of the freight train or mixed train will not permit it to be so placed, it shall be not nearer than the second car from the engine, occupied caboose or passenger car.

BE 589 (i). (2) When transported in a freight train engaged in "pickup" or "setoff" service, a placarded loaded tank car shall be not nearer than the second car from both engine or occupied caboose.

Separating Loaded Tank Cars Placarded "Dangerous" from Other Cars in Train

BE 589 (j). In a freight train or mixed train either standing or during transportation thereof, a placarded loaded tank car must not be handled next to:

1. Occupied passenger car, other than gas handlers accompanying shipment.
2. Occupied combination car, other than gas handlers accompanying shipment.
3. Any car placarded "Explosives."
4. Engine (except when train consists only of placarded loaded tank cars).
5. Any car placarded "Poison Gas."
6. Wooden under-frame car (except on narrow gauge railroads).
7. Loaded flat cars. (Note: Flat cars equipped with permanently attached ends of rigid construction shall be considered as open-top cars. See subparagraph (8) of this paragraph.)
8. Open-top car when any of the lading extends or protrudes above or beyond the ends or sides thereof.
9. Car equipped with automatic refrigeration or any other apparatus utilizing an open-flame light or an internal combustion engine in its operation.
10. Car containing lighted heaters, stoves, or lanterns.
11. Car loaded with live animals or fowl, occupied by an attendant.
12. Occupied caboose (except when train consists only of placarded loaded cars).

Position in Freight Train or Mixed Train of Cars Placarded "Poison Gas" or Containing Poison Liquids Class A

BE 589 (k). In a freight train or mixed train either standing or during transportation thereof, a car placarded "Poison Gas" or containing poison liquids, Class A, shall not be next to other freight cars placarded "Explosives" or cars placarded "Dangerous."

Position in Freight Train or Mixed Train of Cars Placarded "Explosives" and "Poison Gas" or Containing Poison Liquids when Accompanied by Cars Carrying Gas Handling Crews

BE 589 (l). A car placarded "Poison Gas" or containing poison liquids Class A in drums, tanks or bombs, or a car placarded both "Explosives" and "Poison Gas" shall at all times be next to and ahead of the car occupied by gas handling crews, when accompanying such car.

BE 589 (l). (1) A car or cars placarded "Explosives" shall be next to and ahead of a car occupied by guards accompanying such car, except that when the car occupied by guards is equipped with a heater it shall be the fourth car behind the car or cars placarded "Explosives."

Continued on Page 9.

802 (S). Continued.

Cars Containing Explosives or Poison Gas and Tank Cars Placarded "Dangerous" in Passenger or Mixed Trains

BE 589 (m). Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars requiring "Dangerous" placards shall not be transported in a passenger train. Such cars may be transported in mixed trains but only at such times and between such points that freight train service is not in operation.

BE 589 (m). (1) Cars containing explosives, Class A, poison gases or liquids, Class A, and tank cars placarded "Dangerous" shall not be transported next to occupied cabooses or cars carrying passengers in mixed trains except as provided in paragraph (1) of this section.

BE 589 (m). (2) When a car containing explosives, Class B, or dangerous articles other than explosives requiring labels (not including Class A poison gases or liquids) is moved in a mixed train and such car is not occupied by an employe of the carrier, placards must be applied to the car as required by this part.

Position in Train of Cars Containing Class D Poison

BE 589 (n). In a freight train or mixed train either standing or during transportation thereof, a car placarded "Dangerous-Class-D Poison" must not be handled next to cars placarded "Explosives" or next to carload shipments of undeveloped film.

Empty Tank Cars

Empty tank cars must not be moved from stations unless dome cover and all outlet caps have been replaced and wrenched tight, shipping tags and cards removed from car and "Inflammable" placards removed or replaced by "Dangerous Empty" placards.

Track Scales

802 (T). Locomotives must not be moved over live rails of track scales and when moved over dead rails of track scales, a speed of 5 MPH must not be exceeded.

Sanders or injectors must not be used over track scales and locomotives or cars must not stand on dead rail over scale deck or platform of track scales.

Cars to be weighed must be stopped on scales and uncoupled at both ends while being weighed, except on scales equipped with automatic weighing device.

Cars must not be violently stopped by impact, sudden application of brakes or by blocking wheels. After cars are weighed, they must not be moved over live rails if possible to avoid it. When making impact with cars on scales, speed must not exceed 2 MPH and 4 MPH must not be exceeded over scales in any case.

Cars on live rail must not be moved by other cars or engines moving on dead rail, or vice versa. Cars must not be moved over scale with one truck on live rail and other truck on dead rail.

Movements at Stations

802 (U). At Manhattan, before using cross-over from middle track south of Poyntz Avenue, it must be known that cross-over is not blocked by cars in process of unloading.

802 (V). At Russell, before making switch movements, it must be known that cars on dock spur and house track do not foul north elevator track; also that cars on south side cross-over switch do not foul east end of south elevator track.

Cars with Roller Bearings

804 (R). Cars equipped with roller bearings will start with much less effort than those otherwise equipped. When such cars are set out, either in yards or on line, hand brakes must be set if there is any possibility of their moving.

Switching Cars with Air Brakes Cut in

804 (S). Air must be cut in and automatic brake used when switching passenger train cars and occupied outfit cars; however, independent or straight air brake may be used when making couplings. Engineman must exercise care to avoid rough handling.

Pushing Streamline Trains

805 (R). Operating Rule 805 is cancelled.

Position of Cars in Trains

807 (R). *Open top or flat cars loaded with pipe, lumber, poles or other lading which has tendency to shift, must not be handled in train next to locomotive or caboose.*

Open top or flat cars containing shipments of creosoted lumber, piling, etc., handled by coal burning locomotive, must be entrained in rear portion of train, but not next to caboose.

807 (S). Open top or flat cars loaded with glass shipments, packed with straw or excelsior, handled by coal burning locomotive, must be entrained next to caboose.

807 (T). Stock cars containing horses may be handled next to Diesel-electric locomotive.

807 (U). Last paragraph of Operating Rule 807 is cancelled.

Running Locomotives Backward

808 (S). Operating Rule 808 (A) is changed to read:

"Steam locomotives and Diesel-electric locomotives other than Diesel road-switch and switch locomotives must not be run backward in road service where wye tracks or turntables are available, except in an emergency. When back-up movement is necessary, engineer must secure authority from train dispatcher."

Inspection of Trains

811 (R). On locomotive, tender and freight car wheels, flat spots two and one-half inches or longer, or if there are two or more adjoining spots each two inches or longer, and on passenger cars including streamline train equipment one inch or longer, are condemnable and when discovered in train, conductor or engineer must immediately report to chief dispatcher and be governed by his instructions.

811 (S). When a train with Diesel-electric locomotive is passing, trainmen, enginemen, yardmen and others should observe wheels under power units to see if wheels are turning. In event locked wheels are noticed, stop signal must be given to crew of passing train and proper precautions taken to prevent damage to equipment.

811 (T). When trains stop in sidings or other intermediate locations, such walking inspections of train must be made as time will permit. Walking inspection from rear will proceed until entire train is inspected, or until movement starts and engineer must comply with Operating Rule 811 (A) to afford slow roll-by inspection and pick up crew on rear.

When train is stopped to be met or passed by another train, crew of standing train will make thorough inspection of passing train. When safe to do so, head brakeman will cross track and inspect passing train from the farther side and rear trainman or conductor will inspect the passing train from side nearest his own train. Crew on passing train will be in position to receive signals and take immediate action when necessary.

811 (U). In addition to making inspection of train as often as practicable as per Operating Rule 811, every freight and mixed train must stop and must be inspected at either Cedar Point, Agate, Deer Trail, Bennett or Watkins. At least one standing inspection must be made of every U. P. freight train between Bonner Springs and Frankfort and between Bonner Springs and Fort Riley.

Freight, mixed and extra passenger trains designated by symbol "MI," "MTX," "Main" or "WMB" must be given thorough inspection of entire train at Topeka, Carleton, Oakley, Kit Carson and Deer Trail. If in the judgment of train crews on such trains, due to adverse weather or other conditions, an additional inspection is necessary, it should be made at whatever location conductor considers advisable.

Freight trains, tonnage of which consists 50% or more grain, must not exceed 35 MPH, and on First Subdivision inspection of such Union Pacific trains must be made at Wamego and Topeka.

811 (V). After stop is made in yard at Marysville and Hastings, following roll-by inspection of through freight train, engineer will make full service brake application before locomotive or Diesel units uncoupled from train.

Where locomotive or Diesel units remain attached to train, incoming engineer will make a full service application and hold brakes applied until signal received from carmen for release.

Hot Boxes

826 (R). When a hot box is detected on a train between stations, in addition to Operating Rules 810 and 826 the following will govern:

As quickly as hot box is detected train must be stopped, hot box inspected and no attempt made to run to next station until it has been ascertained it is safe to do so.

When a car is set out account hot box, packing must be removed and fire extinguished. In addition, conductor must ascertain that there is no fire on car body and that dust guard is not burning nor smouldering, taking whatever action necessary to preclude possibility of fire before car is left.

Closing Doors on Freight Cars

855 (R). Referring to Operating Rule 855:

Conductors will be held responsible for knowing that doors on cars in their train are properly closed. When necessary to close doors found open, hasps and locking mechanisms must be operated to keep secured. When doors of cars in train, or on cars to be picked up, cannot be closed by trainmen the car must be considered as bad order and car set out. Wire report of such occurrence must be made to superintendent, chief dispatcher and car foreman.

Duties of Engine Men

866 (R). The Mechanical Department will be charged with responsibility, and enginemen relieved, of complying with the following Operating Rules and portions thereof:

- Rule 816;
- Rule 869, first paragraph;
- Rule 869 (A), first paragraph;
- Rule 884, first sentence;
- Rule 885, first sentence.

Engine crew will leave from roundhouse or designated point promptly when engine is available for service.

869 (R). Last sentence of first paragraph of Operating Rule 869 is changed to read: "Engineer must know that engine is supplied with 12 torpedoes, 6 fuses, a red flag and equipment for train signals."

870 (R). Last sentence of Operating Rule 870 is cancelled.

Movement of Diesel Locomotives

872 (R). When a Diesel-electric locomotive consisting of two "A" units operated rear end to rear end, with or without "B" unit or units, is to be moved by hostlers in yards or around enginehouses, locomotive must be operated from lead "A" unit according to direction in which movement is to be made.

Duties of Employes on Diesel Locomotives

874 (R). Second paragraph of Operating Rule 874 is cancelled.

On Diesel-electric locomotives in road service, not more than five men may ride in control cab.

The following instruction will govern firemen and head brakemen in performing their duties on Diesel-electric locomotives in road service, and will supersede and cancel all previous instructions, either written or oral, not consistent therewith.

Firemen will patrol engine rooms and make inspection of engine, temperatures, steam heat facilities and other parts, and give such attention as may be required. Any unusual condition or irregularity detected must be reported to engineer, and fireman will be governed by engineer's instructions.

On multiple-unit Diesel-electric locomotives on high-speed, streamlined, or main line through passenger trains, a fireman shall be in control cab at all times when the train is in motion.

This applies to the following trains:

Nos.	Between
9-10	Kansas City and Denver
37-38	Kansas City and Denver

This rule shall be strictly observed and firemen who violate it shall be subject to discipline.

When a fireman is required by this rule to remain in control cab at all times while train is in motion, his patrol of engine rooms will be made at initial stations and at other stops when time will permit.

Continued on Opposite Side.

874 (R). Continued.

On other trains, fireman will patrol engine rooms at initial stations and at other stops. When time between stops is 30 minutes or more, and at such other times as may be directed by engineer, fireman will patrol engine rooms while train is in motion.

On freight trains, head brakeman must ride in control cab except while performing duties requiring him to be elsewhere, as specifically provided by rules. When necessary to ride elsewhere in freight locomotive, he will immediately return to control cab on signal from engineer. When fireman is patrolling engine rooms while train is in motion, head brakeman must remain in control cab during fireman's absence and must observe signals and other conditions prescribed by Operating Rule 810.

When necessary for trainmen to ride in cab of trailing unit, they must not occupy engineer's seat and must not tamper with or manipulate any of the switches or valves nor place feet on dashboard or windshield.

Unauthorized persons, including deadhead trainmen and enginemen, must not occupy cab of trailing unit of Diesel-electric locomotive on any train.

Oil-Burning Engines

875 (R). Adequate spot fire to provide near maximum steam pressure must be maintained on oil-burning engines when not working steam to avoid fire box leakage.

Leaving Locomotives Unattended

875 (S). Operating Rule 875 is cancelled and the following will govern:

Locomotive must not be left without a man in charge, except at designated places and under authorized conditions. Locomotives must not be left standing so they will block or foul adjacent tracks.

When locomotive coupled to cars is left unattended, hand brakes must be set on not less than ten cars, or on all cars in case locomotive is coupled to only ten cars or less.

Engineer must see that air compressors are running, throttle closed, latched and safety pin inserted, cylinder cocks opened, independent or straight air brakes applied in full application position and brake cylinder pressure noted before leaving locomotive. Driver and tender brake cut-out cocks must be cut in, reverse lever latched in center position when on level track, and when on a grade, the reverse lever must be placed in the corner position in ascending grade direction.

When a Diesel-electric locomotive is left unattended, reverse handle must be placed in neutral position and handle removed, independent brake set in full application position, field generator switch pulled and hand brake set on each unit.

875 (T). Where engine crews with 3800 and 3900 class locomotives eat at intermediate stations, one member of crew must stay with engine at all times.

Fireman Handling Locomotive

876 (R). Operating Rule 876 is cancelled.

Engineers must not permit any unauthorized person to handle the locomotive. The fireman, when competent, may handle the locomotive when in road freight and yard service under the supervision of the engineer, the engineer being responsible. The fireman must not be permitted to handle the locomotive when in road passenger service, except in emergency.

Car Sprinkler Devices

878 (R). On locomotives so equipped, car sprinkler device must be used when locomotive is operating in forward train movement, but must not be used through yards and stations or at other locations which might result in injury to persons or property, and must not be used when livestock shipments are being handled next to engine, or during freezing weather.

Diesel Motors Cut Out

883 (R). When Diesel units are operating with less than full complement of motors or when it is necessary to cut out one or more of the motors at any time enroute, train dispatcher must be notified immediately.

Speedometers

883 (S). On locomotive equipped with speedometer, engineer must verify accuracy of speedometer not less than twice during each trip, by using watch to make time check between mile posts.

First check will be made at first opportunity after departure from point where engineer takes charge of locomotive. Care should be exercised to make check while speed is constant between mile posts, and, when possible, speed should be 30 MPH or over.

When check indicates speedometer is not registering correctly, wire report must be made to train dispatcher promptly as possible, giving miles per hour that speedometer is slow or fast.

Inspecting Locomotives

883 (T). When standing at inspection points, and when stopped in yards and at points between terminals where time will permit, engineers must get on ground and inspect both sides of their locomotive. This applies to both passenger and freight trains, and to any type of locomotive.

Diesel Equipment and Control Locker Seals

883 (U). When necessary to break seals on equipment and control lockers on Diesel road units, notation must be made on engineer's work report with explanation of necessity for breaking seals.

800 Class Locomotives

889 (R). 800 class locomotives must not be worked with less than 33% cut-off to avoid hot main pins.

Movements Around Fueling Stations, etc.

890 (R). Before moving an engine and during movement of an engine in the vicinity of fueling stations and servicing tracks, engineers and hostlers must sound whistle to warn men working about such tracks.

Rules for Hostlers

894 (R).

(1) Hostlers must comply with rules for engineers and all other employees that relate in any way to their own duties or to the safety of operation.

(2) Hostlers are in charge of their helpers and attendants and must know they are familiar with and perform their duties; instruct them if necessary and caution them as to risks; inefficiency or insubordination must be reported to the proper officer.

(3) Hostler must not move an engine or any part of its machinery unless he knows it can be done without injury to anyone.

(4) Hostler must not permit any unauthorized person to handle an engine.

(5) Before moving an engine from coal chute, fuel oil or water standpipe, hostler must know that chute or spout has been removed from engine tank and securely fastened in proper position.

(6) While switching or moving an engine, hostler must be able to see his helper or attendant at all times.

(7) Hostler must know that track to be used is not restricted for class of engine being handled.

(8) Engine must be stopped immediately before moving on to turntable and receive signal from helper or turntable attendant located at receiving end of table to move on to table. At night, signals must be given with white light.

Track Restrictions

896 (R). Engines heavier than indicated below must not go on the tracks named:

(Exception: Tracks which may be used by 0-6-0 or heavier engines may be used by Diesel-electric switch locomotives.)

Location	Track	Heaviest Engine Permitted
All stations.....	All business and industry tracks except as otherwise provided.....	2-10-2, but must not be used by 800 class.
Armstrong.....	7 stub radial tracks adjacent to turntable..... Wye track (Armourdale).....	Consolidation. 2-10-2.
Muncie.....	Sand spur, over bridge..... Business track..... Sand spur, east of bridge.....	None permitted. Consolidation. Heavy MacArthur, but must not exceed 5 MPH.

Continued on Opposite Side.

896 (R). Continued.

Location	Track	Heaviest Engine Permitted
Forest Lake.....	Alongside high sand piles on sand loading tracks.....	None permitted.
Sunflower.....	Tracks Nos. 5 and 6 and gypsum track..... Any track, except lead track, at Lone Star Cement Company plant.....	None permitted. Consolidation.
Bonner Springs.....	Business track.....	Heavy MacArthur.
Coldspur.....	Industry tracks in refrigeration cave.....	Steam locomotives not permitted inside cave.
Loring.....	Quarry tracks.....	Heavy MacArthur.
Lenape.....	Business track.....	Heavy MacArthur.
Linwood.....	Business track..... Tudhope track.....	Heavy MacArthur. Heavy MacArthur.
Lawrence.....	River tracks.....	Consolidation.
Midland.....	Business track.....	Heavy MacArthur.
Topeka.....	No. 1 track in east yard..... Enginehouse tracks, east of cinder pit..... Coach track.....	Consolidation. Light MacArthur. Light MacArthur.
St. Marys.....	College spur, over hopper hole north of street crossing..... College spur.....	None permitted. Light MacArthur, but with Light MacArthur movement must be made with engine backing up only, and any engine must not exceed 5 MPH.
Wamego.....	Mill spur.....	Consolidation.
Manhattan.....	Ramey spur, beyond clearance point..... Hollenbeck spur..... Ice plant spur..... Perry Packing & Wholesale Company spur..... Team spur at freight house..... House spur..... Middle track, around curve near Poyntz Avenue..... Any side track east of C. R. I. & P. crossing on north side of main track..... Manhattan Branch main track to Blue Valley track switch... West end of freight house track. Middle track from west switch to Houston Street.....	None permitted. None permitted. Consolidation. Consolidation. Light MacArthur. Light MacArthur. Light MacArthur. Light MacArthur. Heavy MacArthur. 2-10-2. 2-10-2. 2-10-2.
Fort Riley.....	House track..... West hill track.....	Light MacArthur. Light MacArthur.
Junction City.....	Hogan Mill spur..... Baby wye track.....	Consolidation. Consolidation.
Abilene.....	Security Mill track.....	400 Class Consolidation.
Solomon.....	Wye Track.....	9000 Class, but must not exceed 5 MPH, except 400 Class Consolidation or lighter engines must not exceed 15 MPH.

Continued on Page 12.

Location	Track	Heaviest Engine Permitted
Salina.....	Wissing and International spur, west of 9th Street.....	0-6-0.
	Industry track between Second and Third Streets from Elm to Ash Streets.....	400 class Consolidation.
	Rip tracks Nos. 3 and 4.....	Light MacArthur.
	No. 10 track.....	Light MacArthur.
	Old ice house track.....	Light MacArthur.
	Coal chute track, curve at west end.....	Light MacArthur.
	East leg of McPherson Branch wye south of Shellabarger Mill track switch.....	Light MacArthur.
	Softener track.....	Heavy MacArthur.
	No. 7 turn-outs to repair and caboose tracks.....	2-10-2.
	McPherson Branch wye track.....	2-10-2.
	East lead to roundhouse.....	2-10-2.
Kanopolis.....	Wye track.....	2-10-2.
Ellsworth.....	Old creamery spur.....	None permitted.
	Weber Mill spur.....	5000 class, but must not exceed 5 MPH.
	St. L. & S. F. connection.....	Heavy MacArthur.
Black Wolf.....	Elevator track.....	2-10-2.
Bunker Hill.....	Stock track.....	2-10-2.
Homer.....	Elevator track.....	2-10-2.
Balta.....	Elevator track.....	2-10-2.
Victoria.....	Stock track.....	2-10-2.
Toulon.....	Elevator track.....	2-10-2.
Yocemento.....	Track serving stock yards and elevators, beyond west elevator.....	None permitted.
	Track serving stock yards and elevators.....	Heavy MacArthur.
Ellis.....	Wrecker track.....	Light MacArthur.
	Wye track.....	2-10-2.
	Tracks 2 and 3 in old yard.....	Heavy MacArthur, but must not exceed 5 MPH.
	Stock track.....	Heavy MacArthur, but must not exceed 5 MPH.
	Elevator spur.....	Heavy MacArthur, but must not exceed 5 MPH.
Voda.....	Industry track.....	Mountain, but Mountain type only must not exceed 5 MPH.
Oakley.....	Enginehouse tracks.....	Heavy MacArthur.
	Wye track.....	2-10-2.
Winona.....	Wye track.....	Mountain, but Mountain type only must not exceed 5 MPH.
Sharon Springs....	House track.....	Mountain, but Mountain type only must not exceed 5 MPH.
	West coal chute lead.....	2-10-2.
	Wye track.....	2-10-2.
Kit Carson.....	Wye track.....	2-10-2.

Continued on Opposite Side.

Location	Track	Heaviest Engine Permitted
Hugo.....	Yard tracks Nos. 1, 2 and 3....	2-10-2. (If train with 800 class engine is required to take siding must use roundhouse lead.)
	Wye track.....	2-10-2.
Roydale.....	Wye track.....	Heavy MacArthur.
	Trackage to Rocky Mountain Arsenal.....	Heavy MacArthur.
Denver.....	Safeway track, east of Colorado Blvd.....	Diesel-Electric switch locomotive only.
	Public Service Company tracks.....	Consolidation.
	East end of wrecker track.....	Heavy MacArthur.
	Stock car cleaning tracks.....	Heavy MacArthur.
	Outside creamery track.....	Heavy MacArthur.
	East end of repair tracks at 23rd Street viaduct.....	Heavy MacArthur.
	Cross-over inbound to outswitches Nos. 36 and 36-A, Tower B.....	Heavy MacArthur.
	All industry tracks including Blake and Market St. leads.....	Heavy MacArthur.
	Coach yard tracks.....	Heavy MacArthur.
	Freight house tracks and leads and cross-overs leading thereto.....	Heavy MacArthur.
	Stake and train yards.....	Heavy MacArthur.
	All Pullman shop tracks except engine tracks leading to and from turntable and transfer table.....	Heavy MacArthur.
	All coal storage tracks.....	Heavy MacArthur.
	Summit track.....	Heavy MacArthur.
Beverly.....	House track.....	Consolidation, but must not exceed 5 MPH.
Wolf Creek.....	Spur track.....	Consolidation, but must not exceed 5 MPH.
Spica.....	House track.....	Consolidation, but must not exceed 5 MPH.
Grove.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Emmett.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Aikins.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Onaga.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Lillis.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Frankfort.....	Missouri Pacific transfer... Business or industry tracks..	2-10-2. 9000 class, but 800 and 9000 class must not exceed 5 MPH.
Winifred.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Marysville.....	East leg of wye.....	Heavy MacArthur.
	First track north side of roundhouse.....	Heavy MacArthur.

Continued on Page 13.

896 (R). Continued.

Location	Track	Heaviest Engine Permitted
Herkimer.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Bremen.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Hanover.....	West end of stock track.....	Heavy MacArthur.
	No. 6 track and yard tracks south of passing track.....	Heavy MacArthur.
	Turn-out of east switch of No. 6 track.....	2-10-2.
	South 2 Track, from west end to first crossover east..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
	Elevator track, from east end to Main Street.....	9000 class, but 800 and 9000 class must not exceed 5 MPH.
	Turntable track to clearance point.....	9000 class, but 800 and 9000 class must not exceed 5 MPH.
	Hollenberg.....	Business or industry tracks..
Steele City.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Endicott.....	Business track.....	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Fairbury.....	Mill track from Third Street west to west switch.....	Heavy MacArthur.
	Loop track.....	Heavy MacArthur.
	Beer spur.....	Heavy MacArthur.
	Alfalfa spur.....	Heavy MacArthur.
	City Light Plant spur.....	Heavy MacArthur.
	Auto dock spur.....	Heavy MacArthur.
	Business track from east switch to Fifth Street.....	Heavy MacArthur.
Business or industry tracks, except as otherwise provided (except tracks between Third and Fifth str.).....	9000 class, but 800 and 9000 class must not exceed 5 MPH.	
Alexandria.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Belvidere.....	Business track.....	2-10-2.
Carleton.....	Business or industry tracks (except west end of stock track).....	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Davenport.....	Business track.....	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Sedan.....	Business track.....	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Edgar.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Fairfield.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Anan.....	Business track.....	9000 class, but 800 and 9000 class must not exceed 5 MPH.

Continued on Opposite Side.

896 (R). Continued.

Location	Track	Heaviest Engine Permitted
Glenvil.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Ivel.....	Beyond gate on west leg of wye..	None permitted.
	Beyond sign on east leg of wye..	None permitted.
Hastings.....	City Light Plant spur.....	Heavy MacArthur.
	Freight house yard and storage tracks.....	2-10-2.
Briscoe.....	Sand spur beyond White Post east of crossing.....	None permitted.
Irving.....	Missouri Pacific transfer.....	Consolidation.
Blue Rapids.....	Plaster Mill tracks Nos. 2 and 3 beyond frog of No. 3 track switch.....	Light MacArthur.
	Business track.....	2-10-2.
Marietta.....	Business or industry tracks (Except between east elevator and west end of bridge).....	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Barneston.....	Business track.....	2-10-2.
Blue Springs.....	Business track.....	2-10-2, but must not exceed 5 MPH.
	Lead to business track.....	9000 class may move only to point 600 feet west of Bridge 110.75-S.
Holmesville.....	Business or industry tracks..	9000 class, but 800 and 9000 class must not exceed 5 MPH.
Beatrice.....	Turn-out of east switch of spur at M. P. 97.6.....	2-10-2.

896 (S). Pennsylvania box cars, series 36987-37090, inclusive, when loaded to axle capacity, will have gross weight of 169,000 pounds for car and lading, and must not be moved over the following branch lines:

- Leavenworth Branch —Account rail;
- Junction City Branch —Account bridges;
- Solomon Branch —Account bridges;
- McPherson Branch —Account rail;
- Plainville Branch —Account rail.

They may be operated over main tracks and other branch lines, also sidings and yard tracks ordinarily used by through freight trains. If necessary to operate these cars on outside spur tracks on curves at Kansas City passenger terminal, care must be exercised on account of close clearance of umbrella sheds adjacent thereto. They will clear bay window of Penn Avenue interlocking tower 3 inches vertically and 3¼ inches horizontally.

Close Clearances

900 (R). There are close clearances above and at the side of main tracks as shown below, and in addition thereto, at platforms and other structures above and at the side of industry, stock, and other tracks. Snow plows must not exceed 5 MPH on main track or siding by locations shown below account close clearance:

Location	Structure or Obstruction	Clearance of Engine or Car Is Close At—
At all stations.....	Mail cranes.....	Side.
First Subdivision.		
M. P. 0.88.....	Bridge.....	Sides and top on both tracks.
Kansas City, Kans.....	Standpipe.....	Side on westward track.
Kansas City, Kans.....	Tenth Street Viaduct...	Top on both tracks.
M. P. 6.87.....	Bridge.....	Sides on both tracks.
M. P. 11.38.....	Bridge.....	Sides on both tracks.
M. P. 27.86.....	Bridge.....	Sides on both tracks.
M. P. 34.35.....	Bridge.....	Sides on both tracks.
M. P. 35.95.....	Bridge.....	Sides on both tracks.
Lawrence.....	Train order delivery crane.....	Side on westward track.

Continued on Page 14.

900 (R). Continued.

Location	Structure or Obstruction	Clearance of Engine or Car Is Close At—
First Subdivision.		
Lawrence.....	Standpipe east of depot.	Side on eastward track.
M. P. 52.60.....	Bridge.....	Sides on both tracks.
M. P. 60.88.....	Bridge.....	Sides on both tracks.
M. P. 66.76.....	Bridge.....	Sides on both tracks.
Topeka.....	Standpipe east of passenger station.....	Side on eastward track.
West Topeka.....		
	Train order delivery crane.....	Side.
M. P. 84.29.....	Bridge.....	Sides.
M. P. 96.72.....	Bridge.....	Sides.
M. P. 97.13.....	Bridge.....	Sides.
M. P. 97.28.....	Bridge.....	Sides.
M. P. 99.66.....	Bridge.....	Sides and top.
Wamego.....	Standpipe west of depot.....	Side.
M. P. 117.61.....	Bridge.....	Sides.
M. P. 137.18.....	Bridge.....	Sides and top.
M. P. 151.55.....	Bridge.....	Sides.
Abilene.....	Standpipe west of depot.....	Side.
M. P. 173.62.....	Bridge.....	Sides and top.
M. P. 181.12.....	Bridge.....	Sides.
Salina.....	Standpipe.....	Side.
Salina.....	Coal chute.....	Side and top.
Second Subdivision.		
M. P. 187.12.....	Bridge.....	Sides.
M. P. 195.06.....	Bridge.....	Sides and top.
Brookville.....	Train order delivery crane.....	Side.
M. P. 201.94.....	Bridge.....	Sides.
M. P. 202.44.....	Bridge.....	Sides.
Dorrance.....	Coal chute.....	Side and top.
Dorrance.....	Standpipe.....	Side.
M. P. 274.01.....	Bridge.....	Sides.
M. P. 285.04.....	Bridge.....	Sides.
M. P. 290.62.....	Bridge.....	Sides and top.
Buffalo Park.....	Standpipe.....	Side.
Oakley.....	Standpipe west of depot.....	Side.
M. P. 405.61.....	Bridge.....	Sides.
M. P. 427.80.....	Bridge.....	Sides.
Sharon Springs.....	Standpipe east of depot.....	Side.
Third Subdivision.		
Sharon Springs.....	Standpipe west of depot.....	Side.
Cheyenne Wells.....	Standpipe.....	Side.
M. P. 514.94.....	Bridge.....	Sides.
M. P. 522.79.....	Bridge.....	Sides.
Clifford.....	Standpipe.....	Side.
M. P. 534.63.....	Bridge.....	Sides.
Hugo.....	Standpipe west of depot.....	Side.
Agate.....	Train order delivery crane.....	Side.
Deer Trail.....	Train order delivery crane.....	Side.
Deer Trail.....	Standpipe.....	Side.
M. P. 592.09.....	Bridge.....	Sides.
M. P. 602.15.....	Bridge.....	Sides.
Strasburg.....	Train order delivery crane.....	Side.
Strasburg.....	Standpipe.....	Side.
M. P. 607.80.....	Bridge.....	Sides.
Bennett.....	Train order delivery crane.....	Side.
Sable.....	Train order delivery crane.....	Side.
Denver.....	Signals 22 and 24.....	Side.
Fourth Subdivision.		
M. P. 7.09.....	Bridge.....	Sides and top.
M. P. 8.70.....	Bridge.....	Sides and top.
M. P. 20.51.....	Bridge.....	Sides.
M. P. 34.45.....	Bridge.....	Sides and top.
Marysville.....	Standpipe.....	Side.
Marysville.....	Coal chute.....	Sides.
M. P. 114.40.....	Bridge.....	Sides and top.
M. P. 117.75.....	Bridge.....	Sides.

Continued on Opposite Side.

900 (R). Continued.

Location	Structure or Obstruction	Clearance of Engine or Car Is Close At—
Fourth Subdivision.		
Hanover.....	Water tank spout.....	Side.
Edgar.....	Standpipe.....	Side.
Hastings.....	Standpipe.....	Side.
St. Joseph Branch.		
Severance.....	Water tank spout.....	Side and top.
M. P. 25.74.....	Bridge.....	Sides and top.
Hiawatha.....	Standpipe.....	Side.
Sabetha.....	Standpipe.....	Side.
M. P. 76.22.....	Bridge.....	Sides.
Seneca.....	Standpipe.....	Side.
Leavenworth Branch.		
M. P. 7.79.....	Bridge.....	Sides.
M. P. 14.01.....	Bridge.....	Sides.
M. P. 16.89.....	Bridge.....	Sides.
M. P. 26.27.....	Bridge.....	Sides.
M. P. 31.01.....	Bridge.....	Sides.
M. P. 1.69 (between Corral and Knox).....	Overhead bridge.....	Top.
Manhattan Branch.		
M. P. 100.50.....	Bridge.....	Sides.
M. P. 109.23.....	Bridge.....	Sides.
M. P. 123.26.....	Bridge.....	Sides.
M. P. 124.29.....	Bridge.....	Sides.
Marysville.....	Standpipe.....	Side.
Marysville.....	Coal chute.....	Side.
M. P. 135.10.....	Bridge.....	Sides.
M. P. 139.37.....	Bridge.....	Sides.
M. P. 146.03.....	Bridge.....	Sides.
M. P. 162.85.....	Bridge.....	Sides.
M. P. 167.97.....	Bridge.....	Sides.
Garrison.....	Standpipe.....	Side.
M. P. 179.68.....	Bridge.....	Sides.
M. P. 180.67.....	Bridge.....	Sides.
M. P. 187.79.....	Overhead bridge.....	Sides and top.
Junction City Branch.		
Wakefield.....	Water tank spout.....	Side and top.
M. P. 22.41.....	Bridge.....	Sides.
Clay Center.....	Water tank spout.....	Side.
M. P. 36.19.....	Bridge.....	Sides.
Solomon Branch.		
M. P. 23.65.....	Bridge.....	Sides and top.
McPherson Branch.		
Between 8 poles west of M. P. 3 and 4 poles east of M. P. 4.....	Anchor posts and tie wires west side of track.....	Side.
M. P. 21.42.....	Bridge.....	Top.
Plainville Branch.		
M. P. 1.16.....	Bridge.....	Sides.
M. P. 10.69.....	Bridge.....	Sides and top.
M. P. 33.36.....	Overhead bridge.....	Sides and top.
M. P. 33.45.....	Overhead bridge.....	Sides and top.
M. P. 33.66.....	Overhead bridge.....	Sides and top.
Bogue.....	Standpipe.....	Side.
M. P. 135.22.....	Bridge.....	Sides.
M. P. 139.67.....	Bridge.....	Sides.
M. P. 145.06.....	Bridge.....	Sides.
M. P. 145.91.....	Bridge.....	Sides.
M. P. 150.46.....	Bridge.....	Sides and top.
M. P. 151.49.....	Bridge.....	Sides and top.
M. P. 154.40.....	Bridge.....	Sides and top.
Hoxie.....	Standpipe.....	Side.
Colby.....	Standpipe.....	Side.

900 (N). Following are maximum clearances through all tracks except Track 10 at Denver Union Station:

From car floor to 14 feet above top of rail, maximum width must not exceed 12 feet.

From 14 feet above top of rail to 14½ feet above top of rail, maximum width must not exceed 10 feet.

From 14½ feet above top of rail to 15 feet above top of rail, maximum width must not exceed 8 feet.

15 feet above top of rail is maximum height for any car or load to clear umbrella train sheds.

Cars or loads exceeding the above dimensions must be handled through Denver Union Station on Track 10.

900 (T). 3900 and 4000 class locomotives, equipped with extensions on top of coal tenders, and 3700 and 3800 class cabooses, must not be moved under the following structures:

- | | |
|---------------------------|--------------------------|
| Kansas City Union Station | —Train sheds; |
| Kansas City Terminal | —Main St. viaduct; |
| Kansas City, Mo. | —St. Louis Ave. viaduct; |
| Denver Union Station | —Umbrella sheds. |

Air Brake Rules

1025 (R). On locomotives having automatic brake valve modified to provide pressure maintaining, first service cock should be in "In" position while making brake pipe reduction for terminal test and brake pipe test, and must be in "Out" position while checking brake pipe leakage during terminal test and when brake pipe reduction is being made from rear end of train during brake pipe test, and must be left in "Out" position thereafter until entire test is completed. After test is completed and automatic brake valve is returned to running position, first service cock must be placed in "In" position if pressure maintaining feature is to be used.

1030 (R). Where Sperry rail-detector car is working when temperature is below freezing, trains, engines and track cars must be operated at a safe speed, using sand where necessary to overcome slippery condition caused by use of calcium chloride solution by rail car.

1035 (R). On passenger trains, running air test must be made at the following points:

- | | |
|--------------------------------|-------------------------|
| M. P. 210.5 Second Subdivision | —Westward; |
| M. P. 216.7 Second Subdivision | —Eastward; |
| M. P. 75.5 Plainville Branch | —Eastward and westward. |

1036 (R). To prevent undesired emergency brake applications, engineers should be governed by the following in making the initial brake pipe reduction of 6 to 8 pounds when braking passenger trains in accordance with Air Brake Rules 1036, 1036-A, 1036-B and 1036-C.

"When applying brakes for making ordinary slow-downs or stops, the air gauge must be observed for measuring reductions and the initial reduction should be 6 from 70, 7 from 90, and 8 from 110 pounds as indicated by equalizing reservoir gauge."

RATING OF LOCOMOTIVES IN FREIGHT SERVICE, IN TONS OF 2,000 POUNDS.

Total weight of trains, exclusive of locomotive and tender, which the different classes of locomotives will haul in each direction between stations named, under favorable weather conditions. A deduction of ten per cent may be made for fast trains.

Type of Locomotive	Numbers (Inclusive)	Kansas City to Salina	Salina to Ellsworth	Ellsworth to Ellis	Ellis to Denver	St. Joseph to Double	Double to Hamlin	Hamlin to Marysville	Menoken to Marysville	Marysville to Hanover	Hanover to Hastings	Marysville to Beatrice	
C 57	$\frac{22}{30}$ 190	201 to 358	3770	1280	1670	1390	1280	1520	1280	2070	1430	2690	2070
C 57	$\frac{21}{30}$ 162 171	400 to 498	3430	1170	1520	1270	1180	1400	1180	1895	1300	2455	1895
MacA 57	$\frac{23\frac{3}{4}}{30}$ 206 210	1900 to 1949	4190	1410	1850	1550			2500	1600	3000	2500	
MacA 63	$\frac{26}{28}$ 212 228	2200 to 2320	4670	1590	2050	1710			2600	1650	3200	3400	
MacA 63	$\frac{26}{30}$ 222	2480 to 2499	4760	1620	2090	1740			2700	1800	3300	2700	
SA-C 59	$\frac{23-23}{30}$ 475	3500 to 3569	8700	2950	3830	3200							
4-6-6-4	$\frac{3}{69}$ $\frac{21-21}{5}$ 406 404 407	3930 to 3949 3950 to 3969 3975 to 3999	8500	2820	3720	3080							
TTT 63	$\frac{29\frac{1}{2}}{30}$ 286 311	5000 to 5089	6160	2060	2690	2240			3400	2290	4400	4500	
UP 67	$\frac{27}{31-32}$ 368 372	9000 to 9087	8530	2900	3790	3150			4500	3200	5200	6300	
FEF 77	$\frac{24\frac{1}{2}}{32}$ 266	800 to 819											
FEF 80	$\frac{25}{32}$ 266	820 to 844	5480	1780	2340	1940	2130	2130	1820	2910	1940	3530	2950
P 77	$\frac{22}{28}$ 149	2800 to 2859 3160 3202 to 3217	2600	840	1100	920			1800	1100	2000	1800	
P 77	$\frac{25}{26}$ 163 165 167 184 193	2860 to 2899 2900 to 2911 3114 to 3138 3218 to 3227	3720	1220	1610	1340	1460	1460	1270	1990	1340	2400	2010
MT 73	$\frac{29}{28}$ 256 261	7000 to 7038 7850 to 7869	4770	1590	2280	1710	1870	1870	1640	2550	1710	3100	2580

EXPLANATION

C.....Consolidation
MacA.....MacArthur
P.....Pacific
TTT.....2-10-2
UP.....4-12-2
FEF.....4-8-4
MT.....Mountain
SA-C.....Mallet

EXAMPLE: Consolidation locomotive having 57-inch drivers, cylinders 21-inch diameter and 30-inch stroke, and weighing 162,000 pounds on drivers:

C 57 $\frac{21}{30}$ 162

RATING OF LOCOMOTIVES IN FREIGHT SERVICE, IN TONS OF 2,000 POUNDS.

Total weight of trains, exclusive of locomotive and tender, which the different classes of locomotives will haul in each direction between stations named, under favorable weather conditions. A deduction of ten per cent may be made for fast trains.

Type of Locomotive	Numbers (Inclusive)	Denver to Cedar Point to Kit Carson to First View McAllaster to Winona	Cedar Point to Kit Carson First View to McAllaster Winona to Ellis	Ellis to Ellsworth	Ellsworth to Salina	Salina to Kansas City	Marysville to Hiawatha	Hiawatha to Stout	Stout to Double	Double to St. Joseph	Hastings to Hanover	Hanover to Marysville	Marysville to Aikins	Aikins to Menoken	Beatrice to Marysville	
C 57 $\frac{22}{30}$	190	201 to 358	1400	3150	2900	1420	3770	1275	2280	1180	2040	3560	1410	2330	3900	2070
C 57 $\frac{21}{30}$	162 171	400 to 498	1280	2870	2640	1290	3430	1175	2140	1090	1900	3250	1290	2140	3550	1895
MacA 57 $\frac{23\frac{3}{4}}{30}$	206 210	1900 to 1949	1540	3460	3200	1580	4190				3960	1600	2575	4300	2500	
MacA 63 $\frac{26}{28}$	212 228	2200 to 2320	1700	3900	3600	1750	4670				4200	1650	2760	4300	3400	
MacA 63 $\frac{26}{30}$	222	2480 to 2499	1730	3980	3670	1790	4760				4500	1700	2900	4500	2800	
SA-C 59 $\frac{23-23}{30}$	475	3500 to 3569	3200	7200	6650	3280	8700									
4-6-6-4 69 $\frac{3}{5}$	21-21 404 32 407	3930 to 3949 3950 to 3969 3975 to 3999	3070	7060	6500	3150	8500									
TTT 63 $\frac{29\frac{1}{2}}{30}$	286 311	5000 to 5089	2240	5140	4700	2290	6160				5500	2300	3800	4900	4500	
UP 67 $\frac{27}{31-32}$	368 372	9000 to 9087	3150	7150	6500	3210	8530				6500	3200	4800	6000	6300	
FEF 77 $\frac{24\frac{1}{2}}{32}$	266	800 to 819	1940	4540	4180	1980	5480	1780	5160	1640	2130	6200	2030	2480	3400	2200
FEF 80 $\frac{25}{32}$	266	820 to 844														
P 77 $\frac{22}{28}$	149	2800 to 2859 3160 3202 to 3217	910	2150	1990	960	2600				3000	1100	2100	3300	1700	
P 77 $\frac{25}{26}$	163 165 167 184 193	2860 to 2899 2900 to 2911 3114 to 3138 3218 to 3227	1340	3080	2830	1400	3720	1220	3500	1120	1460	4250	1400	2300	3300	1800
MT 73 $\frac{29}{28}$	256 261	7000 to 7038 7850 to 7869	1710	3950	3650	1810	4770	1590	4500	1460	1870	5410	1800	3200	3350	1920

EXPLANATION

C.....Consolidation
 MacA.....MacArthur
 P.....Pacific
 TTT.....2-10-2
 UP.....4-12-2
 FEF.....4-8-4
 MT.....Mountain
 SA-C.....Mallet

EXAMPLE: Consolidation locomotive having 57-inch drivers, cylinders 21-inch diameter and 30-inch stroke, and weighing 162,000 pounds on drivers:

C 57 $\frac{21}{30}$ 162