

UNION PACIFIC RAILROAD COMPANY
Eastern District

Kansas Division

Special Rules
No. 14

Effective Monday,
OCTOBER 15, 1956

Superseding Special Rules No. 13.

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

E. H. BAILEY,
General Manager

G. A. CUNNINGHAM,
General Superintendent

W. O. HORNE,
Superintendent

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

Note.—Referring to note on page 17 of Operating Rules:

The term "conductor" as used in Operating Rules, Special Rules, Superintendent's Bulletins or Notices will also apply to yard pilots. The term "brakeman" also applies to engine herders.

Railroad Watches

2 (R). In addition to employes listed in Operating Rule 2, switchmen who have attained one or more years seniority must, while on duty, have a reliable railroad grade watch.

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, 10 or 17 need not compare time with engineer as required by Operating Rule 3 (C).

Signals

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

Reduce and Resume Speed Signs

10 (R). Referring to Operating Rule 10 (J), signs are located on engineer's side of track, except as follows:

Location	Direction	Sign	Located
First Subdivision			
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.
Second Subdivision			
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.
Fourth Subdivision			
MP 7.2 to 7.4	Westward	Reduce Speed	On fireman's side.
MP 36.7 to 37.1	Westward	Reduce Speed	On fireman's side.
MP 43.4 to 45.6	Westward	Reduce Speed	On fireman's side.
MP 48.2 to 49.0	Westward	Reduce Speed	On fireman's side.
MP 58.3 to 58.8	Westward	Reduce Speed	On fireman's side.
Hanover, within city limits	Westward	Reduce Speed	On fireman's side.

Markers

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

19 (S). When rear car of a passenger train is equipped with an oscillating red rear end light on which an auxiliary marker is mounted, markers need not be displayed as required by Operating Rules 19, 19 (A) and 19 (E).

When such train is clear of main track at night and rear end protection is not required, the red rear end light must be extinguished and the auxiliary marker must display green light to rear.

Rear trainman is responsible for proper display of the auxiliary marker as well as the rear end light.

Inspection and Repair Protection

26 (R). Second paragraph of Operating Rule 26 (C) is changed to read:
Where mechanical blue flag protection is in service at P.F.E. icing platforms, when blue signal is displayed, any train, engine or cars on icing platform tracks between points where blue signals are displayed, must not be coupled to or moved. Other trains, engines or cars required to enter tracks thus protected must stop before passing the blue signal at end of icing platform and may then proceed at restricted speed but must not couple to or move other cars, engines or trains so long as blue signals are displayed.

Switch Lights

27 (R). 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.

Train Register

83 (R). All trains may register by registering ticket at Kaw Junction.

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

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.

83 (U). First class trains may register by registering ticket at Sharon Springs, Hugo and Limon.

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

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

83 (X). 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 (Y). 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.

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;
Topeka passenger depot	—all U. P. trains and all eastward C. R. I. & P. passenger trains;
Topeka C. R. I. & P. tower	—all eastward C. R. I. & P. freight 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 eastward C. R. I. & P. and A. T. & S. F. 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.
Marysville	—all 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
Union Station.	Westward trains.	First Subdivision.	Kaw Jct.
Junction City.	Westward trains.	First Subdivision.	Kaw 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.
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.
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).

Continued on Opposite Side.

98 (R). Continued.

Location	Railroad Crossed, or Junction With	Trains Which Have Precedence	How Governed
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).
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 (S).
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 (T).
Pullman. (M. P. 2.2)	Outbound main track.	Wyoming Division.	Block Signals. Special Rule 98 (X).
36th Street. (M. P. 1.8)	Outbound main track.	Westward.	Block Signals. Special Rule 98 (X).
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 (V).
Hanover. (M. P. 128.1)	C.B. & Q.		Automatic Interlocking and CTC. Special Rule 98 (V).
Endicott. (M. P. 147.1)	C.B. & Q.		Interlocking and CTC. Special Rule 98 (U).
Fairbury. (M. P. 152.7)	C.R.I. & P.		Automatic Interlocking and CTC. Special Rule 98 (V).
Fairbury. (M. P. 154.4)	C.R.I. & P.		Automatic Interlocking and CTC. Special Rule 98 (V).

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Location	Railroad Crossed, or Junction With	Trains Which Have Precedence	How Governed
Belvidere. (M. P. 177.0)	C.B. & Q.		Automatic Interlocking and CTC. Special Rule 98 (V).
Davenport. (M. P. 191.2)	C. & N.W.		Automatic Interlocking and CTC. Special Rule 98 (V).
Edgar. (M. P. 200.5)	C.B. & Q.		Automatic Interlocking and CTC. Special Rule 98 (V).
Hastings. (M. P. 226.4)	M. P.		Automatic Interlocking and CTC. Special Rule 98 (V).
Hastings. (M. P. 227.2)	C. B. & Q.		Interlocking and CTC. Special Rule 98 (W).
Irving. (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 C. R. I. & P. Crossing, M. P. 68.2, Topeka, manually controlled signals are under control of CTC operator at UP Tower.

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 (T). 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 (U). 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.

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.

98 (V). At railroad crossings shown below, 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—

In compliance with Operating Rules 267, 528 and 612 at:

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, Davenport (M. P. 191.2);
C. B. & Q. Crossing, Edgar (M. P. 200.5).

In compliance with Operating Rules 267 and 612 at:

C. R. I. & P. Crossing, Fairbury (M. P. 154.4);
C. B. & Q. Crossing, Belvidere (M. P. 177.0);
M. P. Crossing, Hastings (M. P. 226.4).

98 (W). At C. B. & Q. Crossing, Hastings (M. P. 227.2), when a train or engine is stopped by interlocking signal and no conflicting train movement is evident, in addition to complying with Operating Rule 609, member of crew must communicate with dispatcher and be governed by his instructions, but need not receive Form C clearance.

98 (X). 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). 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;
Manhattan Branch;
Leavenworth Branch;
Junction City Branch;
Solomon Branch;
McPherson Branch;
Plainville Branch.

99 (S). In C.T.C. territory, when a work train has been authorized in accordance with Rule 266, the work train may occupy the main track and move in either direction within the designated limits without protection by flagman. This does not, however, modify requirements for proper observance of signal indications or for protection of adjacent tracks not included in the working authority.

Switches

104 (R). No. 14 turnouts are installed at all dual control switches in C.T.C. territory except those at C. R. I. & P. Junction, Topeka; west cross-over switches at west end of Menoken, and at east end of passenger main at Elm Street, Marysville.

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.

Centralized Traffic Control System

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

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). C.T.C. Stop signals, located as follows, are designated as "starting signals":

- Topeka —First eastward signal east of M. P. 69.
- First westward signal west of M. P. 69.
- Marysville—Eastward signal at west end passenger depot platform.
- Westward signal at M. P. 114.2.
- Hastings —Eastward signal from Grand Island, near 12th Street.
- Eastward signal near 12th Street.
- Westward signal M. P. 1.4.

When stopped by a "starting signal," member of crew must communicate with dispatcher or operator and be governed by his instructions. Flagman need not be sent ahead unless instructed to do so by dispatcher or operator, but movement must be made at restricted speed and Operating Rule 267 must be complied with.

267 (S). At Hastings, when first eastward "A" signal east of yard office displays Approach indication, switching movement is authorized between that point and C. B. & Q. Crossing.

Eastward train must not proceed on such indication except on verbal authority from dispatcher.

267 (T). At Hastings, when westward C.T.C. signals at west end of yard display Approach indication, switching movement is authorized between that point and C.T.C. signal at M. P. 4, Hastings Branch. A westward train must not proceed on such indication except on verbal authority from dispatcher.

267 (U). In C.T.C. territory between Topeka and Hastings, push-buttons have been installed in telephone booths of relay houses at dual control switch locations for emergency use when the dispatcher cannot clear signals or when a Stop indication is displayed and communication has failed.

Two push-buttons are installed at each location, one marked "East" and the other marked "West" and the operation of the button for the proper direction will, when conditions permit, cause signals to clear for the movement. The following will govern:

Emergency push-buttons installed in telephone booths of relay houses at dual control switch locations may be used in an attempt to obtain proceed signal indication only when so instructed by dispatcher, or when communication fails.

When instructed by dispatcher to use emergency button and a Clear indication is received, train or engine may proceed in accordance with signal indications.

When stopped by a Stop indication and communication has failed, proper push-button may be used, and if a Clear indication is then displayed, the train or engine may proceed, but must move at restricted speed to the next Stop signal in advance, keeping close lookout for track car or obstruction. A report must be made by wire to Superintendent and Chief Dispatcher at first stop or first open telegraph office.

Interlocking

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

- 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
For cross-over, 700 feet east of crossing 0 — 0
- At Hastings (M. P. 227.2):
For main track — — —
For diverging track — 0

General Regulations

702 (R). Operating Rule 702 (A) is changed to read as follows: *Employee must not sleep while on duty.*

Exchanging Signals and Inspection of Trains

713 (R). Where Operating Rule 713 (A) or Special Rule requires a trainman to be stationed on rear of train in position to give or receive signals, on freight trains he must be on rear platform of caboose; on passenger trains, including streamline trains, he must be on rear platform or in rear door, or if rear car is a business, dining or observation car, he must be on front platform of rear car or rear platform of car next ahead, and vestibule door must be open.

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

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

713 (T). 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 eastward trains, a trainman need not be on rear platform when passing station at Herkimer if it can be seen that there are no messages or orders to pick up.

713 (U). 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. 296.3 and M. P. 297.0
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. 53.5 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.

Handling of Explosives or Other Dangerous Articles

802 (R). 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.

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 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.

Continued on Opposite Side.

802 (R). Continued.

(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; except as provided in paragraph (1) of this section.
2. Occupied combination car; except as provided in paragraph (1) of this section.
3. Any car placarded "Dangerous" or "Dangerous—Class D Poison."
4. Engine.
5. Any car placarded "Poison Gas."
6. Wooden underframe car (except on narrow gauge railroads).
7. Loaded flat car, except that cars carrying trailers or containers placarded "EXPLOSIVES" as authorized by the regulation in this chapter may be coupled to each other.
(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 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).

Continued on Page 7.

802 (R). Continued.

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" or "Poison Gas," or Both, When Accompanied by Cars Carrying Guards or Gas Handling Crews

BE 589 (l). A car requiring "Explosives" or "Poison Gas" placards, or both, shall be next to and ahead of the car occupied by the guards or gas handling crews accompanying such car; except that when the car occupied by guards or gas handling crew is equipped with a lighted heater or stove it shall be the fourth car behind a car or cars requiring "Explosives" placards.

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 "Dangerous" placards removed or replaced by "Dangerous-Empty" placards.

Riding Footboards of Engines

802 (S). 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.

Movements at Stations

802 (T). 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 (U). 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.

Inspection of Trains

811 (R). 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

Continued on Opposite Side.

811 (R). Continued.

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. "Main" or "WMB" trains, consisting entirely of passenger equipment, need not be stopped for additional inspections between regular inspection points, except when visibility is such that trains cannot be inspected while running.

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 (S). 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 diesel units uncoupled from train.

Where 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.

811 (T). Referring to Operating Rule 811 (E):

On turbine or diesel locomotives, wheels with flat spots two inches or longer are condemnable and when discovered, conductor or engineer must immediately report to train dispatcher and be governed by his instructions.

Track Restrictions

899 (R). Diesel engines heavier than indicated below must not go on the tracks named:

Location	Track	Heaviest Engine Permitted
All stations.....	All business and industry tracks, except as otherwise provided..	Any diesel engine, but must not exceed 5MPH.
Armstrong.....	7 stub radial tracks adjacent to turntable..... Wye track (Armourdale)..... New receiving track wye.....	Diesel switch engines.
Muncie.....	Sand spur.....	None permitted beyond east sand tipple.
Forest Lake.....	Alongside high sand piles on sand loading tracks.....	None permitted.
Sunflower.....	Tracks Nos. 1, 2, 3, 4 and 5..	None permitted beyond south cement plant paved driveway crossing.
Topeka.....	Kaw sand spur.....	None permitted beyond point 150 ft. south of dike road crossing.
Manhattan.....	Ramey spur, beyond clearance point..... Hollenbeck Spur.....	None permitted. None permitted.
Denver.....	Safeway track, east of Colorado Blvd..... Public Service Company tracks. East end of wrecker track..... Stock car cleaning tracks..... Outside creamery track..... East end of repair tracks at 23rd Street viaduct..... Cross-over inbound to out-switches Nos. 36 and 36-A, Tower B.....	Diesel switch locomotive only. Consolidation. Heavy MacArthur. Heavy MacArthur. Heavy MacArthur. Heavy MacArthur. Heavy MacArthur.

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Location	Track	Heaviest Engine Permitted
Denver	All industry tracks including Blake and Market St. leads... Coach yard tracks... Freight house tracks and leads and cross-overs leading there-to... Stake and train yards... All Pullman shop tracks except engine tracks leading to and from turntable and transfer table... All coal storage tracks... Summit track...	Heavy MacArthur. Heavy MacArthur. Heavy MacArthur. Heavy MacArthur. Heavy MacArthur. Heavy MacArthur. Heavy MacArthur.
Quartzite	Cement track, beyond loading ramp	None permitted.
M. P. 183.5, Manhattan Branch	Inside track	None permitted.
M. P. 238.84 Fourth Sub-division	Industry track	None permitted beyond two car lengths from east end of loading dock.
Briscoe	North spur, beyond white post 1247 feet from switch... South spur, beyond white post 450 feet from switch	None permitted. None permitted.

899 (S). Pennsylvania box cars, series 36987-37090, inclusive, may be operated over main tracks and branch lines, also sidings and yard tracks ordinarily used by through freight trains, but 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.
Kaw Junction	Train order delivery crane	Side on westward track.
M. P. 4.96	Bridge	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 Opposite Side.

Location	Structure or Obstruction	Clearance of Engine or Car Is Close At—
First Subdivision.		
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 Passenger Station	Train order delivery crane	Side on both tracks.
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.
M. P. 117.61	Bridge	Sides.
M. P. 137.18	Bridge	Sides and top.
M. P. 151.55	Bridge	Sides.
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.
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.
Third Subdivision.		
M. P. 514.94	Bridge	Sides.
M. P. 522.79	Bridge	Sides.
M. P. 534.63	Bridge	Sides.
Agate	Train order delivery crane	Side.
Deer Trail	Train order delivery crane	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.
Denver	Signals 22 and 24	Side.
Fourth Subdivision.		
M. P. 20.51	Bridge	Sides.
Marysville	Standpipe	Side.
Marysville	Coal chute	Sides.
M. P. 114.40	Bridge	Sides and top.
M. P. 117.75	Bridge	Sides.
Hastings	Standpipe	Side.
St. Joseph Branch.		
M. P. 0.37	Bridge	Sides and top.
M. P. 25.74	Bridge	Sides and top.
Hiawatha	Standpipe	Side.
Sabetha	Standpipe	Side.
M. P. 76.22	Bridge	Sides.

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900 (R). Continued.

Location	Structure or Obstruction	Clearance of Engine or Car Is Close At—
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.
M. P. 179.68.....	Bridge.....	Sides.
M. P. 180.67.....	Bridge.....	Sides.
M. P. 187.79.....	Overhead bridge.....	Sides and top.
Junction City Branch.		
M. P. 22.41.....	Bridge.....	Sides.
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.
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.

900 (S). 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). 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.

Station Service

910 (R). Last sentence of Operating Rule 910 is changed to read as follows:
They must see that train bulletin boards are kept in a neat condition and bear such information regarding trains as required by instructions or by law.

Air Brake Rules

1001 (R). Hostlers handling diesel units and locomotives must know air brake equipment is functioning and adequate air pressure is maintained on units before any movement is made. A setup and release of independent brakes and brake cylinder pressure must be noted on gauge.

In moving units at terminals for servicing, stop must be made before going onto turntable on both incoming and outgoing movements, also before entering enginehouse or diesel servicing buildings and facilities where elevated tracks or pits are used.

At terminals where units are cut in and out of locomotive sets, hostlers will check to know air brake hoses are coupled and air cut in with brakes functioning on all units before any movement is made.

At terminals where hostlers handle units to and from stations, relieving inbound engine crews, brakes must be tested with independent brake valve immediately after units detached from train to insure brakes operating properly and provide proper retardation of units.

In handling units around enginehouses and diesel servicing and maintenance facilities, movements must be made not to exceed 5 miles per hour under any circumstances.

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.

1037 (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 conventional passenger trains in accordance with Air Brake Rules 1037, 1037-A 1037-B and 1037-E.

“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 DIESEL LOCOMOTIVES IN FREIGHT SERVICE IN TONS OF 2,000 POUNDS
 Total weight of trains, exclusive of locomotives, 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 Single Unit	Numbers	Kansas City to Salina	Salina to Ellsworth	Ellsworth to Ellis	Ellis to Denver	St. Joseph to Moray	Moray to Hamlin	Hamlin to Marysville	Menoken to Marysville	Marysville to Hanover	Hanover to Hastings	Marysville to Beatrice
EMD GP-7 1500 H.P.	100 to 129	4320	1510	1950	1640	2150	1950	1640	2600	1640	2850	3610
EMD GP-9 1750 H.P.	130 to 244	4320	1510	1950	1640	2150	1950	1640	2600	1640	2850	3610
Baldwin 1600 H.P.	1260 to 1265					2800	2530	2130				
EMD F-7 1500 H.P.	1400 to 1496	4320	1510	1950	1640	2150	1950	1640	2600	1640	2850	3610
ALCO 1500 H.P.	1600 to 1643	4320	1510	1950	1640	2150	1950	1640	2600	1640	2850	3610

Type of Single Units	Numbers	Denver to Cedar Point to Kit Carson	Cedar Point to Kit Carson to First View to McAllister to Winona to Ellis	Kit Carson to First View to McAllister to Winona to Ellis	Ellsworth to Salina	Salina to Kansas City	Marysville to Hiawatha	Hiawatha to Severance	Severance to Troy	Troy to St. Joseph	Hastings to Hanover	Hanover to Marysville	Marysville to Aikins	Aikins to Menoken	Beatrice to Marysville
EMD GP-7 1500 H.P.	100 to 129	1640	3610	3830	1680	4320	1510	3800	1410	4320	5360	1710	2400	2700	2700
EMD GP-9 1750 H.P.	130 to 244	1640	3610	3830	1680	4320	1510	3800	1410	4320	5360	1710	2400	2700	2700
Baldwin 1600 H.P.	1260 to 1265						1970	4940	1830	5620					
EMD F-7 1500 H.P.	1400 to 1496	1640	3610	3830	1680	4320	1510	3800	1410	4320	5360	1710	2400	2700	2700
ALCO 1500 H.P.	1600 to 1643	1640	3610	3830	1680	4320	1510	3800	1410	4320	5360	1710	2400	2700	2700



