

OTTO C. PERRY
3 FOX STREET
DENVER 9, COLO.

UNION PACIFIC RAILROAD COMPANY

Eastern District

Wyoming Division

Special Rules No. 10

Effective Thursday, February 1, 1951

Superseding Special Rules No. 9

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

H. E. SHUMWAY,
General Manager

E. H. BAILEY,
General Superintendent

C. J. COLOMBO,
Superintendent

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 a 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.

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.

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, 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.

—Continued Opposite Side.

17 (R). Continued.

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 Light

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.

19 (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.

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 operation by Operating Rule 251 is in effect, helper engines to be 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 lights 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:

| | |
|--------------------|-------------------------|
| Superior Branch; | Boulder Branch; |
| South Pass Branch; | Fort Collins Branch, |
| Lionkol Branch; | between Fort Collins |
| Reliance Branch; | and Buckeye; |
| Winton Branch; | Greeley Branch; |
| Dines Branch; | Pleasant Valley Branch; |
| Stansbury Branch; | Park City Branch. |

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

Conditional Stops

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

Use of Engine Bell

30 (R). The bell must be kept ringing while an engine (with or without cars) is moving within the city limits of Fort Collins.

Train Register

D-83 (R). Operating Rule D-83 is modified as follows: Where Operating Rule 251 is in effect, a train must not leave its initial station, or a junction until it has been ascertained whether all first-class trains due in the same direction have left.

83 (S). 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.

Starting Passenger Trains

84 (R). At Ogden, passenger trains must not leave passenger depot without a signal from stationmaster or passenger director.

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 or trains, the following will govern:

The time of Nos. 101, 102, 103, 104, 105 and 106 must be cleared not less than five minutes by first-class trains and not less than fifteen minutes by second-class and extra trains; the time of other first-class trains must be cleared not less than ten minutes by second-class and extra trains.

Movements in Yards

93 (R). Where Operating Rule 251 is in effect, time on first-class trains issued orally or by message by train dispatcher, may be used within yard limits where there are continuous block signals in determining when necessary to protect against first-class trains.

93 (S). At Cheyenne, between west wye switch and Tower A, all trains and engines must approach cross-over switches in main tracks carefully, expecting to find tracks in vicinity of passenger station occupied by trains or cars, and switches lined for other than main track movement.

Eastward trains and engines approaching west end Cheyenne passenger station must be prepared to stop clear of cross-over unless proceed signal is received from yardman in charge of switches.

Westward trains and engines approaching east end Cheyenne passenger station must be prepared to stop clear of cross-overs at east end of passenger yard tracks unless proceed signal is received from yardman in charge of switches.

Trains leaving Cheyenne passenger station must not foul lead or cross-overs until proceed signal is received from yardman in charge of switches.

Proceed signal must be answered.

At Cheyenne, trains and engines using First Subdivision main track between Tower A and passenger station must move expecting to find the track occupied, and a speed of 20 MPH must not be exceeded under any circumstances.

All eastward trains must approach west end of Cheyenne yard prepared to stop unless it can be seen that the lead is clear and switch is properly lined for their head-in track. When view is obscured or lead occupied, trainman must precede movement and know that switches are properly lined and lead clear before giving proceed signal.

93 (T). At Laramie, trains and engines leaving west yard through cross-over just west of Fremont Street must stop clear of cross-over unless proceed signal is received from switchtender.

Trains or engines moving east on westward main track from passenger station, will be governed by dwarf signal C-5654 through east end of Laramie Yard to eastward main track.

93 (U). At Laramie, trains must not head in new long leads 1, 2 and 3, west of ice house, unless authorized by dispatcher or yardmaster. All eastward freight trains will call yardmaster on telephone at long lead, for track.

93 (V). At Laramie, at east end, all switches on eastward pullout track from No. 12½ switch eastward, must be left lined for eastward pullout track after having been used.

Sections

95 (R). Where Operating Rule 251 is in effect, clearance Form 2643 issued to a train at its initial station will establish identity of train to the end of its run on that subdivision. Sections will display green signals when clearance so indicates.

Clearances

96 (R). At Gill, clearance must be received when operator on duty.

96 (S). At Rawlins and Evanston, clearance must be received by all trains.

96 (T). Trains are not required to receive clearance as per Operating Rule 96 as follows:

At Pullman;
At Sand Creek Jct., when train order signal displays Proceed indication;
At Ara;
At Galeton, when no operator on duty;
At Dent, when no operator on duty.

96 (U).

| Clearance Received At | By | Will Confer The Same Authority On | As When Received At |
|-----------------------|--|-----------------------------------|---------------------|
| Boulder | Eastward trains | Boulder Branch | Ara. |
| La Salle | Trains going to Denver via Dent Branch | First Subdivision | Sand Creek Jct. |
| La Salle | Trains going to Fort Collins Branch | Fort Collins Branch | Dent. |
| Fort Collins | Eastward trains | Dent Branch | Dent |
| Rawlins | Any train | Third Subdivision | Initial Station |
| Evanston | Any train | Fourth Subdivision | Initial Station |

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 |
|--------------------------|------------------------------------|------------------------------|--|
| Pullman (M. P. 2.2) | Outbound main track | Wyoming Division | Block Signals. Special Rule 98(V). |
| 36th Street (M. P. 1.8) | Outbound main track | Westward | Block Signals. Special Rule 98(V). |
| Eaton (M. P. 59.3) | G. W. | U. P. | Semi-automatic Interlocking. Operating Rule 616. |
| St. Vrains (M. P. 22.2) | Boulder Branch | Dent Branch | Semi-automatic Interlocking. Operating Rule 616 |
| Erie (M. P. 15.1) | C. B. & Q. | U. P. | Stop signs. Special Rule 98(S). |
| Valmont Spur (M. P. 1.0) | C. & S. | U. P. | Gate. |
| Ara (M. P. 26.0) | C. & S. | C. & S. | Gate. |
| Milliken (M. P. 2.0) | G. W. | U. P. | Gate. |

Continued on page 4.

98 (R). Continued.

| Location | Railroad Crossed, or Junction With | Trains Which Have Precedence | How Governed |
|-------------------------------|---|------------------------------|---|
| Kelim (M. P. 9.0) | G. W. | G. W. | Stop signs. |
| Fort Collins (M. P. 25.2) | C. & S. | C. & S. | Derails. Special Rule 98(U). |
| Fort Collins (M. P. 25.3) | C. & S. | C. & S. | Gate. |
| Cheyenne (M.P. 508.4) | Westward freight trains cross eastward track. | | When there is not an eastward first-class train due, westward freight trains will cross over at east switch Cheyenne yard under block signal protection. If an eastward first-class train is due, they must not cross over without permission from the train dispatcher and, if an eastward train is seen approaching on eastward track, switch must not be opened nor cross-over occupied until approaching train has stopped. |
| Laramie (M.P. 564.4) | Eastward and westward main tracks cross. | | When stopped by signal governing cross-over, movement may be made only under flag protection. |
| Lionkol Junction (M.P. 3.26) | South Pass Branch | | Stop sign. |
| Reliance Junction (M.P. 5.54) | South Pass Branch | | Stop sign. |
| Hay Junction (M.P. 2.4) | Winton Branch | | Stop sign. |

98 (S). At Erie, C. B. & Q. Crossing, after stopping at Stop sign, westward trains must send member of crew to crossing to give proceed signal from crossing if no conflicting movement is evident. When visibility is reduced by weather conditions, eastward trains must also send member of crew to crossing to give proceed signal from crossing if no conflicting movement is evident.

98 (T). Eastward trains using Greeley Branch main track between Greeley Junction and cross-over located at M.P. 53.1 (near rendering plant), must stop clear of cross-over unless it is known switches are properly lined and track is clear.

98 (U). At Fort Collins, C. & S. Crossing, M.P. 25.2, westward U.P. trains must throw derail, and it must not be relined until the entire train is clear of the crossing. Eastward U.P. trains must stop clear of the crossing and not proceed until the derails are thrown.

98 (V). 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 or 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:

Employe 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:

- Third Subdivision Branches;
- Greeley Branch;
- Pleasant Valley Branch;
- Fort Collins Branch, between Fort Collins and Buckeye;
- Boulder Branch, between Erie and Ara;
- Park City Branch.

99 (U). On Greeley and Pleasant Valley Branches between 7:30 A.M. and 5:01 P.M. daily except Sunday, a speed of 10 MPH must not be exceeded by all trains approaching and moving on curves and where view is obscured, looking out carefully at all points for track cars and men working on track without flag protection. Speed on curves must be such as to be able to stop within one-half the distance track is seen to be clear and whistle signal 14 (I) must be sounded frequently.

Dead Engines

101 (R). In handling dead engine, it must be placed 12 cars behind the road engine, and if a second dead engine is in the train, the second dead engine should be 25 cars behind the road engine. In handling three dead 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, when conditions make it necessary, a trainman must remain at front end of such cars to signal engineer when returning.

Riding on 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 a trainman need not ride on leading footboard of engine as follows:

- Between Denver and Sand Creek Junction, continuous main track movement;
- At Denver, on stockyards lead, over Wynkoop Street and Brighton Boulevard.

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 Otto, freight trains must cut crossing west of stock yards between 7:30 A.M. and 9:00 A.M.; 3:30 P.M. and 5:00 P.M.

At Hanna, when eastward freight trains stop, they must stop clear of cross-over east of depot a sufficient distance to permit cutting the crossing, and avoid blocking the cross-over. The head brakeman must remain at crossing until the train is recoupled.

At Wamsutter, westward freight trains must cut crossing east of depot while taking coal and water between 8 A.M. and 9 A.M., 12 Noon and 1 P.M., 3:45 P.M. and 4:15 P.M. Between 5:00 P.M. and Midnight this crossing must not be blocked longer than 30 minutes.

At Evanston, employes' crossing near power house must not be blocked by trains between 6:30 A.M. and 7:00 A.M., 12:00 noon and 12:15 P.M., 12:45 P.M. and 1:00 P.M., 6:00 P.M. and 6:15 P.M.

At Sand Creek Jct., eastward Dent Branch trains stopped must stand west of Brighton paved road until movement can be made.

103 (W). All trains and engines must stop, and member of crew must be sent ahead to act as crossing watchman, before passing over the following crossings:

- Hanna —Lincoln Highway on 4-A mine spur;
- Rock Springs —Lincoln Highway on South Pass Branch at Bridger Avenue intersection;
- Rock Springs —West Flat Street, just north of old repair track;
- Brighton Sugar Factory —Lincoln Highway at Division Street;
- Fort Collins —North College Avenue;
- Park City Branch —Keetley Highway, just west of Keetley Junction;
- Keetley —All crossings.

Train and engine crews will be held equally responsible for knowing that the crossing is properly protected.

103 (X). At Greeley, trains, engines or cars moving over any street or avenue on track other than main track, a speed of 10 M.P.H. must not be exceeded when engine in forward motion and no cars being shoved ahead of engine, and a speed of 5 M.P.H. when in backward motion or when cars are shoved ahead of engine. When engine in backward motion or when cars are shoved ahead of engine, trainman must precede movement and act as crossing watchman except when such crossings are protected by crossing watchman on duty.

Above requirements will also apply over streets or avenues on C&S trackage.

Trainmen and enginemens will be held equally responsible for knowing that crossings are properly protected.

103 (Y). At Laramie, highway crossing just east of the Monolith Cement Works must not be blocked to exceed ten minutes. Train following another train closely into Laramie must wait east of this crossing until it is seen that their train can enter yard without blocking this crossing.

103 (Z). When cars are handled ahead of engine on South Pass, Lionkol, Reliance, Stansbury, Winton, Dines, Superior or Ontario Branch, a trainman need not precede the movement over public crossings, but movement must be made at restricted speed.

Switches

104 (R). No. 14 turnouts are installed at all power operated switches at Granger except east switch of eastward siding.

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

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

- Green River —West switch of cross-over between old yard track 3 and passenger lead, for movement from passenger lead to old yard track 3;
- East switch of cross-over from west end of new yard to westward main track, for movement from new yard to chippy track;
- Wahsatch —Derail 130 feet from end of tail track of wye, in non-derailing position except when car is spotted at loading dock;
- Riverdale —Tail track switch, for tail track.

104 (T). At Borie, when cars are left on siding, they must be left west of west switch to house track and that switch must be left lined for house track in order to provide derail protection.

At Superior, switch to safety track at lower end of load storage track at D. O. Clark Mine must be left lined for safety track when not being used.

On Stansbury Spur, switch to safety track must be kept lined for safety track when not being used.

104 (U). At Wahsatch, crotch switch at east end of center siding is equipped with electric lock and switch indicator. When a train or engine is to move from east end of center siding to westward main track, or to east leg of wye, trainman must be governed by indication displayed by switch indicator before attempting to operate crotch switch.

Crotch switch must be lined for movement to westward main track before any other switch leading to westward main track or east leg of wye is changed from its normal position.

Continued opposite side.

104 (U). Continued.

When semaphore arm of switch indicator is horizontal, if no westward train or engine is seen or heard approaching, crotch switch may be operated as follows: Trainman must ascertain from train dispatcher that no westward train is approaching. He may then operate time release located in east relay box north of westward main track. Trainman will then go to the crotch switch and when white light appears on top of relay box, he must depress foot pedal releasing switch lever. If foot pedal is not depressed while white light is burning switch will again automatically lock.

Westward trains desiring to enter center siding must occupy "unlock section" between Signal 9265 and east switch to center siding, which will automatically release electric lock.

Use of Sidings

105 (R). Cars must not be set out on siding at Sherman, Buford or short No. 11 at Evanston.

At Rock Springs, westward siding is used as a switching lead by yard engines, 5:30 A.M. to 9:30 P.M. daily, and must not be used by other trains and engines between those times.

105 (S). At Wahsatch, center siding is used for movement of helper engines. Trains entering this siding must look out for helper engines, and when view is obscured must send flagman ahead a sufficient distance to insure full protection against helper engine movements.

Movements Against Current of Traffic

D-151 (R). At points shown below, trains and engines may move against the current of traffic within yard limits without being preceded by a flagman, except when a first-class train is due or when view is obscured:

- Cheyenne —Between M.P. 509.2 and Tower A;
- Buford —On eastward track between Signal "A" located 240 feet east of west end of eastward siding, and the cross-over located 1321 feet west of signal "A";

- Laramie
 - Rawlins
 - Rock Springs
 - Green River
 - Evanston
- Between extreme east and west switches.

D-151 (S). Except as provided in Special Rule D-151 (R), where Operating Rule 251 is in effect no movement against the current of traffic may be made by a work extra unless full protection is provided against all trains, except when such work extra has been given right over all trains; and no movement against the current of traffic may be made by any other train unless full flag protection is provided against all trains, except when authorized by train order to move against the current of traffic.

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."

Cross-over Movements—Cheyenne

D-152 (R). At Cheyenne, movements through cross-over just east of east leg of the wye, may be made under block signal protection. If a train or engine is seen approaching, switch must not be opened nor cross-over occupied until approaching train or engine has stopped.

Train Order Signals

200 (R). Light will not be kept burning at night in train order signal at Superior and Coalville and trains will be governed by day indication.

221 (R). At St. Vrain, trains on Dent and Boulder Branches must observe and be governed by the indication of the train order signal at all times.

Movement of Trains by Block Signals

251 (R). Where Operating Rule 251 is in effect, the movement of trains will be supervised by the train dispatcher, and oral and message instructions issued by him must be complied with, except that when necessary to provide single track operation on double track, or for operation of trains against the current of traffic, or for operation of work trains, train order authority must be obtained.

Electric Locked Switches

494 (R). When authority to operate an electric locked switch has been received, following will govern:

Switch operating lever must be left in its socket and no attempt made to operate switch until indicator at the lock shows lock released.

This indication is given in one of the following ways:

- Indicator changes to Clear position;
- The word "Clear" or "Unlocked" appears;
- Small light on face of electric lock which flashes during operation of time element changes to a steady light.

After indication is received showing lock has released, lock and switch may be operated and train or engine may proceed without waiting three minutes as required by Operating Rule 517.

Lifting or attempting to move switch operating lever before lock has released will result in binding of the lock rod, which will prevent movement of lock lever.

494 (S). In using electric lock when communication has failed, or electric lock is out of order, mechanical release seal on lock so equipped may be broken. After high lock has been released by moving crank to left or, on low lock, by removing padlock and releasing electric lock with switch key, member of crew must wait three minutes before lining switch; after which, train or engine may proceed as required by Operating Rule 509.

After using the switch or derail equipped with high electric lock, switch and derail must be returned to normal position and locked; crank on electric lock must be restored to normal position against stop block. Door of case must be locked and, except when communication has failed, dispatcher notified.

494 (T). Where electric switch locks are in service, instructions for operating lock are inside of case.

Siding Indicator

501 (R). Referring to Operating Rule 501 (AA):

Fixed signal with which Siding Indicator is connected may display either Stop or Approach indication.

Block Signals

509 (R). On Second Subdivision, during stormy or foggy weather when a train, except a light engine, is stopped by a block signal, a flagman must be sent ahead immediately, looking out for a train, obstruction, broken rail, condition of slide warning device, switch not properly lined, or anything that may affect movement of train. The train must wait five minutes after the flagman has started, then proceed at a speed not exceeding ten miles per hour through the entire block to the next home signal. If a point is reached from which track ahead is seen to be clear and the signal next in advance is in plain view, flagman may be picked up and train proceed at a speed not exceeding ten miles per hour to the next home signal.

If, after stopping, signal changes to Approach or Proceed indication, train will be governed by indication of the signal.

509 (S). At Cheyenne, when dwarf signal located between eastward and westward main tracks 525 feet west of M.P. 509, or dwarf signals at the fouling point on C. B. & Q. transfer track, old ice house track and old shop track or Signals 5083 or 5089 display Stop indication, a flagman must be sent ahead to next signal or to "End of Block" sign.

509 (T). At Borie, when dwarf signal at east end of eastward siding indicates Stop, movement must not be made from siding to main track when an eastward train or engine is approaching, unless it is positively known that the approaching train or engine has stopped clear of the spring switch.

At Buford, when Signal "A" indicates Stop, movement must not be made from siding to main track until approaching eastward train has passed or has stopped clear of switch.

At Laramie, lower unit of Signal 5653 governs westward movements on eastward track to Signal 5654 and westward movements into freight yard. When Signal 5654 or Signal 5653 displays Stop indication, member of crew must be sent ahead to provide flag protection.

509 (U). At Green River, when Signal 8155 displays Stop indication, a train or engine which is to enter new yard or cross over from westward to eastward main track into old yard, may pass this signal without stopping, provided switch is set for movement and proper hand signal is received from man in charge of switch.

509 (V). When an eastward train, except a light engine, is stopped by Signal 8182, west of Green River, and view of track ahead is restricted by a train on the westward track, a flagman must be sent ahead to the east side of Green River bridge. Train must wait five minutes after flagman has started, and may then proceed but must move at restricted speed.

509 (W). At Riverdale, dwarf signal west of tail track switch governs eastward movements from lead to eastward main track and to first eastward block signal.

No attempt should be made to operate tail track switch and west switch of cross-over while a train is approaching on either main track.

509 (X). Between M.P. 900 and M.P. 905, when a train moving in either direction on westward track is stopped by a block signal, single track block signal rules will apply.

When westward main track between M.P. 900 and M.P. 905 is under single track operation, to insure proper signal operation trains, engines and M. of W. self-propelled equipment on eastward track between those locations must remain west of Signal 9002 at east end, and clear of main track between Signal 9050 and Signal 9036 at west end.

509 (Y). At Altamont, when a train is stopped by Signal 9036, it may proceed being governed by Operating Rule 509 (d) to west portal of Aspen tunnel and if vision is then obscured by smoke or steam in tunnel, stop must be made and flagman must be sent ahead through tunnel to a point east of east portal of tunnel. Train must wait 15 minutes after flagman has started and then proceed at restricted speed.

After flagman has reached a point east of east portal of tunnel and track is seen to be clear and other conditions permit, he may be picked up and train may proceed at restricted speed to next signal.

Dual Control Switches

Definition: A Dual Control Switch is a power operated switch which is also equipped for hand operation.

513 (R). Where dual control switches are installed, in addition to Operating Rules 513 and 514, the following Special Rules 513 (S) to 513 (X) must be complied with.

513 (S). Before a train or engine may, under any condition, pass a Stop indication of a signal governing movement over dual control switches, selector lever on dual control switches over which movement is to be made must be moved to HAND position. After any part of train or engine has passed signal, selector lever must be restored to MOTOR position, and, except when communication has failed, operator notified.

513 (T). After passing a signal governing movement over a dual control switch, if train or engine stops before passing next opposing signal and makes a reverse movement out of that block, no forward movement may be made into that block without authority from operator, or until selector lever on dual control switch has been placed in HAND position.

513 (U). If a train or engine over-runs a signal displaying Stop indication governing movement over a dual control switch, member of crew must communicate with operator at once and be governed by his instructions. Front of train must be protected immediately.

513 (V). Dual control switches must not be hand-operated without authority from operator, except when communication fails.

Authority to use a dual control switch for switching movements must be given verbally to member of crew by operator. Time the switch or track may be used and designated limits must be clearly stated and understood.

513 (W). To hand-operate a dual control switch, following will govern:

After engineer has been informed that switch is to be hand-operated, selector lever must be moved to HAND position and left in that position during hand operation. Indications of signals governing movement over that switch may be considered suspended during hand operation.

When communication fails, switch must not be hand-operated until three minutes after selector lever has been placed in HAND position.

513 (X). When a member of crew of a train or engine which is switching or standing observes a white light burning on relay house or telephone booth, he must communicate at once with operator.

513 (Y). At Granger, dual control switch and remote control signals controlled by operator are in service at east switch to westward siding.

When movement is made against current of traffic, except on signal indication, movement must be preceded by flagman.

When movement is authorized against current of traffic by signal indication, such authority applies only to sign near M.P. 844.8 reading; "End of Block Eastbound."

When Signal 8449 displays Stop indication, trains or engines governed by this signal must send flagman ahead and must wait ten minutes before proceeding at restricted speed to next signal.

Signals Governing Movements to Main Track

519 (R). At Sherman, when dwarf signal governing movement from east leg of wye to eastward main track displays Stop indication, or light not burning on signal, movement must not be made until yellow indication is displayed, except if it is immediately after an eastward train has passed, spring switch must be opened as soon as train has cleared switch, and if other conditions permit, movement may be made at once.

520 (R). At Buford, in making movement from west end of eastward siding to eastward main track, if Main Track Clear indication is displayed by switch indicator, switch may be opened, then, if yellow indication is displayed on dwarf signal, movement may be made at once.

If, after switch has been opened, red indication is displayed by dwarf signal, train or engine must wait three minutes before movement may be made and in addition flag protection against eastward trains must be provided.

Member of crew must remain at switch during the three-minute wait, prepared to close switch if train is seen approaching on main track.

520 (S). At Evanston, dwarf signal located at fouling point on Almy Spur governs movement from Almy Spur against current of traffic on westward track to Signal 9183.

When dwarf signal displays Stop indication after switch has been lined for movement to westward track, in addition to complying with Operating Rule 520, a flagman must be sent ahead to Signal 9183 to protect against opposing trains on westward track, train must wait five minutes after flagman has started, and may then proceed at restricted speed.

When a westward train or engine is stopped by Signal 9183 and view of track ahead is restricted by a train on the eastward track, a flagman must be sent ahead to Almy Spur switch, train must wait five minutes after flagman has started and may then proceed at restricted speed.

520 (T). At Evanston, dwarf signals at east end of westward siding and just west of Signal 9165 govern movements between these signals. When either signal displays Stop indication, flagman must be sent ahead to protect movement. Switch indicator located near east switch on westward siding will indicate if that portion of westward siding governed by dwarf signals is occupied. Operating Rule 520 will govern.

Interlocking

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

At Tower A:

For movement from any track to—

- Stock Yard..... —o—
- First Subdivision main track..... —o—
- New yard south lead..... —o—
- Eastward main track..... o—o
- Westward main track..... o—o

Exchanging Signals and Inspection of Train

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:

- Bosler Henefer Valmont
- Sinclair Devils Slide Milliken
- Point of Rocks

713 (S). 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 employees at train order stations, must look their

Continued Opposite Side.

713 (S). Continued.

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. 518.8 and M.P. 519.9 reverse curves
- M.P. 544.4 and M.P. 545.1 reverse curves
- M.P. 587.7 and M.P. 588.4 reverse curves
- M.P. 616.0 and M.P. 617.5 reverse curve
- M.P. 657.2 and M.P. 657.8 reverse curves
- M.P. 690.5 and M.P. 691.4 reverse curve
- M.P. 780.0 and M.P. 782.0 reverse curve
- M.P. 836.0 and M.P. 837.0 reverse curves
- M.P. 868.0 and M.P. 869.2 reverse curves
- M.P. 931.1 and M.P. 931.7 reverse curves
- M.P. 950.8 and M.P. 951.4 reverse curves
- M.P. 964.2 and M.P. 965.2 reverse curves
- M.P. 980.5 and M.P. 981.0 reverse curves

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 mine runs between Rock Springs and Winton, and between Rock Springs and Superior and on freight trains on Greeley and Pleasant Valley Branches.

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.

Riding on Cars

722 (R). Employes must not ride on top or on side ladders of cars being moved by or under tipples or other structures at coal mines.

Spreaders and Snow Plows

732 (R). On the tracks shown below, rotary snow plows with wings out will not clear the following bridges:

| Bridge Number | Track | Bridge Number | Track |
|---------------|-------------------|---------------|-------------------|
| 560.09 | Eastward track. | 960.41 | Both main tracks. |
| 567.86 | Both main tracks. | 963.13 | Both main tracks. |
| 573.35 | Both main tracks. | 963.56 | Both main tracks. |
| 806.42 | Both main tracks. | 963.85 | Both main tracks. |
| 814.28 | Both main tracks. | 964.26 | Both main tracks. |
| 814.83 | Both main tracks. | 978.25 | Both main tracks. |
| 880.23 | Both main tracks. | 978.42 | Both main tracks. |
| 935.31 | Westward track. | 979.04 | Both main tracks. |
| 936.12 | Westward track. | 979.28 | Both main tracks. |
| 939.03 | Westward track. | 979.58 | Both main tracks. |
| 940.27 | Eastward track. | 981.01 | Westward track. |
| 940.41 | Westward track. | 984.05 | Westward track. |
| 941.46 | Both main tracks. | 984.20 | Eastward track. |
| 954.16 | Both main tracks. | | |

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732 (R). Continued.

In movement of wedge plow, stop must be made before passing cross-overs shown below, and it must be ascertained that plow point properly clears 131-pound rail at connection with 100-pound rail:

| Station | Location of Cross-Over | Direction Plow Headed |
|--------------|---|-----------------------|
| Cheyenne. | M.P. 511.75, west end stock yard track. | West. |
| Corlett. | Opposite water tank. | West. |
| Wyoming. | East switch of siding. | East. |
| Cooper Lake. | West switch of siding. | West. |
| Wilcox. | East switch of siding. | West. |
| Hanna. | All cross-overs in yard. | East. |
| Percy. | East switch of westward siding. | East. |
| Wamsutter. | All cross-overs in yard. | West. |
| Green River. | All cross-overs in yard. | East or West. |

Spreaders and snow plows will not clear brick platforms at Greeley, Cheyenne, Laramie, Sinclair, Rawlins, Rock Springs and Morgan passenger depots.

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.

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). Adjustment 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 (a)(1). A car requiring car certificates and "Explosives", "Dangerous" or "Poison Gas" placards under the provisions of these regulations shall not be transported unless such freight car is at all times placarded and certificated as required by these regulations. Placards lost in transit shall be replaced at next inspection point and those not required must be removed.

BE 589(a)(2) 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(b)(1) 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(b)(2) 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(b)(3) Closed cars placarded "Explosives" shall have doors closed before they are moved.

Switching of Cars Containing Dangerous Articles

BE 589(c)(1) 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(c)(2) 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(d)(1) 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 (e)(1). 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

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802 (S). Continued.

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 (f)(4). 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:

- (a) 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;
- (b) 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;
- (c) 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 section 589 (i).

BE 589 (f)(2). 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".
4. Engine.
5. Any car placarded "Poison Gas".
6. Wooden underframe car (except on narrow gauge railroads).
7. Loaded flat car.
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 of the gas-burning type.
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 sec. 589 (i).

Position in Train of Loaded Placarded Tank Car

BE 589(g)(1)(a). In a freight train or a mixed train, except a train consisting entirely of placarded loaded tank cars and as provided in sec. 589(g)(2), 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(g)(1)(b) 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(g)(1)(c) 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.

BE 589(g)(2). 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.
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 of the gas-burning type.
10. Car containing lighted heaters, stoves, or lanterns.

Continued on opposite side

802 (S). Continued.

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(h)(1) 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(i) (1). 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 the gas handling crews, when accompanying such car.

BE 589(i) (2) A car or cars placarded "Explosives" shall at all times 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".

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

BE 589(j)(1). 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(j)(2) 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 sec. 589 (i).

BE 589(j)(3) 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 these regulations.

BE 589(k)(1). 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.

Explosives and Inflammables in Mixed Trains

802 (T). The cars designated below must not be handled in mixed trains except No. 334 and Nos. 211 and 212:

- Tank cars, empty or loaded, except when containing wine or coconut oil;
- Cars containing highly inflammable commodities;
- Shipments of explosives, including cars placarded "Explosives".

Track Scales

802 (U). Locomotives must not be moved over live rails of track scales and when moved over dead rails of track scales, a speed of 5 miles per hour 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 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 scales with one truck on live rail and other truck on dead rail.

Handling Cars Ahead of Engine

802 (V). Cars may be handled ahead of engine between stations when necessary as follows:

On Winton, Superior, South Pass, Lionkol, Reliance, Stansbury, Dines and Ontario Branches;

At Park City, from lower yard to depot and high line;

Between St. Vrains and Parkdale Junction.

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 in accordance with Operating Rule 804 (A), if there is any possibility of their moving.

Operative Air Brakes

804 (S). Air brakes must be cut in and operative on all cars being handled at the following points:

Cheyenne —Between Union Pacific yard and C. & S. and C. B. & Q. transfers.

Use of Hand Brakes

804 (T). At Cheyenne, at least five hand brakes must be set on extreme east end of all cuts of cars and trains left standing in yard west of Central Avenue viaduct.

At Granite Canon gravel pit, hand brakes must be set on all loads, one hand brake set for each three empties, and hand brake must be set on rear end, in middle and in head end of all empties spotted for loading.

At Rawlins, when train stops on main track or yard track, and engine is detached, ten percent of the cars in train must have hand brakes set on down grade end.

At Rock Springs, in new yard, sufficient hand brakes must be set on cars in west end of all tracks.

At Rock Springs, in opposite yard, sufficient hand brakes must be set on cars on west end of all tracks. In addition, hand brakes must be set on one car at east end of cut on each track.

At Green River, three to five hand brakes must be set on all cuts of cars and trains west end of new yard. When cars are set on either end of new yard, sufficient hand brakes must be set to prevent cars rolling to center of yard. On high line, belt track, and east end of No. 17 track, sufficient hand brakes must be set to hold cars.

At Evanston, sufficient hand brakes must be set on down-grade end of cut, on all cars set out.

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, rail, lumber, poles or other lading which has tendency to shift, must be handled in head end of train, but must not be entrained immediately behind Diesel-electric locomotive.

Exception: Open top cars containing shipments of creosoted lumber, piling, etc., handled by coal burning locomotive, must be entrained in rear portion of train.

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.

807 (V). Cars must not be handled behind caboose as follows:

Between Cheyenne and Speer —Eastward;

Between Carr and Borie —Westward.

Helper Engines

808 (R). When helper engine is cut out of a train at any point, the train must not be moved until helper engine is clear of the track to be used by the train. Whistle signal for backward movement of train engine must not be given by helper engine when hand signal can be seen. When whistle signal is necessary, it must not be given until engineer of helper engine has been so instructed by conductor of the train.

808 (S). Helper engines on eastward and westward trains will go through to Sherman, unless otherwise directed by train dispatcher.

808 (T). When helper engine is placed on head end of streamline train at Cheyenne, engine will stop just west of Signal 5099, west of passenger station, and wait at that point until train has stopped, and will not couple on to train until proper signal received.

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). In addition to making inspection of train as often as practicable as per Operating Rule 811, every freight train must stop and must be inspected at the following points:

| | |
|------------------------------|---|
| Carr | —Eastward freight and mixed trains; |
| La Salle | —Eastward and westward; |
| La Salle | —Eastward mixed trains; |
| Borie | —Eastward trains using retaining valves—remain standing 10 minutes; |
| Otto | —Eastward trains using retaining valves—remain standing 10 minutes; |
| Granite Canon | —Eastward—remain standing 10 minutes (stop must be made with engine west of Signal 5286); |
| Buford | —Eastward, when necessary to turn up retaining valves; |
| Hanna or Rock River | —Eastward and westward; |
| Bitter Creek or Wamsutter | —Eastward and westward; |
| Evanston | —Eastward and westward; |
| Carter | —Eastward and westward; |
| Echo | —Eastward and westward. |

When visibility does not permit close observation of train, freight trains must be inspected at Hanna and Bitter Creek.

Eastward solid express trains must stop at Buford, Granite Canon and Borie to inspect train and cool wheels.

Gravel trains, in addition to regular designated inspection points, must stop for inspection and remain standing 10 minutes at:

| | | | |
|---------|--------------|----------------|-------------|
| Borie | Rock River | Wamsutter | Castle Rock |
| Otto | Medicine Bow | Point of Rocks | Gateway |
| Ozone | Walcott | Rock Springs | |
| Hermosa | Riner | Granger | |

Gravel trains must stop at Buford, Hermosa and Wahsatch and turn up retaining valves.

Note.—The term gravel trains, as referred to in this rule, applies to any train when more than 50% of the tonnage is gravel.

811 (U). In addition to inspection of train as often as practicable as per Operating Rule 811, trains handling military equipment in either passenger, freight or mixed service, must stop and be inspected at the following points:

| | |
|--------------|-------------------------|
| La Salle | —Eastward and westward; |
| Sherman | —Westward; |
| Buford | —Eastward; |
| Hanna | —Eastward and westward; |
| Bitter Creek | —Eastward and westward; |
| Carter | —Eastward and westward; |
| Echo | —Eastward and westward. |

If in judgment of trainmen or enginemen additional inspection for any reason is necessary, it must be made.

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".

869 (S). Westward passenger train handled by coal-burning engine will take full box of sand at Hanna, and if not sufficient sand to make Evanston, will take sand at Rock Springs.

Westward passenger train handled by oil-burning engine will take full box of sand at Rawlins coal chute except when weather conditions are favorable and they have sufficient sand left to make Evanston.

Eastward passenger train handled by oil-burning engine will take full box of sand at Rawlins.

No. 17 will take sand at Rock Springs unless advised by chief dispatcher that their engine will cut out at Green River.

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 Employees 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 instructions 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 |
|---------|-------------------------|
| 1- 2 | Green River and Ogden |
| 17- 18 | Green River and Granger |
| 37- 38 | Denver and Green River |
| 101-102 | Cheyenne and Ogden |
| 103-104 | Cheyenne and Ogden |
| 105-106 | Cheyenne and Granger |
| 111-112 | La Salle 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. At points where firemen change, incoming fireman will assist outgoing fireman in making patrol.

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

Continued opposite side.

874 (R). Continued.

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.

Enginemen 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.

Use of Blow-Off Cocks and Sludge Removers

879 (R). Blow-off cocks or sludge removers must not be used immediately adjacent to or passing through tunnels.

879 (S). To avoid high concentration which builds up between Green River and Rawlins, engineers on eastward freight trains between Rawlins and Laramie must purify boilers all possible in order to get engines to Laramie with concentration materially reduced, and must blow boilers frequently, and all possible between Rawlins and Rock River.

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.

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.

Taking Fuel and Water

890 (S). Eastward trains will take only enough water at Colores to make Buford.

At Medicine Bow, water supply is very limited and is for use of work trains only.

At Riner and Wamsutter, trains will take only enough water to insure going to Rawlins and Bitter Creek.

At Riner, avoid all possible waste account switches nearby filling with water.

At Rock Springs, trains will not take coal unless absolutely necessary.

At Evanston, eastward freight trains handled by 3800 and 3900 class oil-burning engines, must take fuel when less than 3500 gallons in tank of engine.

890 (T). Eastward passenger trains handled by 800 or 3900 class oil-burning engines will stop at west end of platform Laramie and take fuel when less than 2000 gallons in tank of engines going to Cheyenne, or less than 3000 gallons in tank of engines going to Denver.

Incoming engineers at Laramie must know that they have sufficient oil to go through before proceeding to station.

890 (U). At Echo, when necessary to take water on helper engine at rear of an eastward freight train, entire movement must be stopped five to ten car lengths east of coal chute, where helper engine will be cut off train in accordance with Air Brake Rule 1048 (C) and then return to coal chute.

Member of train crew must stay with head portion of train and be in position to open angle cock should movement start.

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.)

(Note: 3900, 4000 and 9000 class engines picking up or setting out cars will hold onto sufficient cars so that engine will not pass beyond main track frog leading to industries on house tracks or pass beyond siding frog leading to back tracks off of sidings.)

| Location | Track | Heaviest Engine Permitted |
|-------------------------|---|---------------------------|
| Denver | 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 outbound switches Nos. 36 and 36-A, Tower B | Heavy MacArthur |
| | All industry tracks including Blake and Market Street 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 | |
| Brighton | Wye track | 2-10-2 |
| | Sugar factory tracks | Heavy MacArthur |
| | Tracks serving Kuner-Empson Company | Heavy MacArthur |
| Lupton | Sugar company trestles | None permitted. |
| La Salle | Turntable | Heavy MacArthur |
| | Depressed track of cinder pit | None permitted |

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896 (R). Continued.

| Location | Track | Heaviest Engine Permitted |
|---|--|-------------------------------|
| Greeley | Wye track | 2-10-2 |
| | Sugar company trestles | None permitted |
| | Post Coal Spur | Heavy MacArthur |
| | No. 4 storage track | Heavy MacArthur |
| Greeley Jct. | C. & S. connection | 2-10-2 |
| | Wye track | 2-10-2 |
| Eaton | Sugar company trestles | None permitted |
| | East end mill tracks | Heavy MacArthur |
| Pierce | Wye track | 2-10-2 |
| Cheyenne | Government yard tracks | Light MacArthur |
| | Old west No. 1 | Light MacArthur |
| | Power house No. 1 and No. 2 | Light MacArthur |
| | Outfit track, old Hay spur | Light MacArthur |
| | Track between Omaha lead and yard lead east of roundhouse | Light MacArthur |
| | Old tank shop track, north of machine shop | Light MacArthur |
| | Machine shop track, south of blacksmith shop | Light MacArthur |
| | Sand track, south of sand bins | Light MacArthur |
| | Cinder loading track at coal chute | Light MacArthur |
| | All MacArthur tracks | Light MacArthur |
| | West end of C. & S. receiving track | Light MacArthur |
| | East end of C. & S. delivery track | Light MacArthur |
| | Connecting wye track to C. & S. at Reed Street | Light MacArthur |
| | House track | Light MacArthur |
| | Cross-over track between east lead track to south yard and drill track at east end of south yard | Light MacArthur |
| Old rip tracks 1, 2, 3, 4, 5 and 6 | Light MacArthur | |
| Diesel servicing tracks which are first two tracks south of scale track | Must not be used by other than Diesel locomotives | |
| Cross-overs between store yard tracks 1, 2, and 3 | None permitted | |
| Granite Canon | Under tipples in ballast pit | None permitted |
| Dale Creek | House track | Must not be used by 800 class |
| Laramie | Horn track back of enginehouse | Light MacArthur |
| | Old sand spur beyond a point 200 feet from switch | 2-10-2 |
| Cooper Lake | Business track | 2-10-2 |
| Hanna | 4A Mine safety spur | None permitted |
| | By tipples on Elk Mountain Coal Co. loading tracks and tipple tracks | None permitted |
| | Public Coal Company spur past unloading ramp | None permitted |
| | Nugget Coal Co. safety spur | None permitted |
| | Enginehouse tracks | Heavy MacArthur |
| | No. 4A Mine tracks | Heavy MacArthur |
| Ft. Steele | House tracks | Heavy MacArthur |
| | Elk Mountain Coal Company loading tracks | Heavy MacArthur |
| Sinclair | Tie yard | 2-10-2 |
| | Spur track to new chemical storage warehouse of Sinclair Co. When necessary to switch on this track not less than 8 cars must be handled ahead of engine | None permitted |
| Sinclair | Tracks leading to refinery and beyond highway | Must not be used by 800 class |

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896 (R). Continued.

| Location | Track | Heaviest Engine Permitted |
|--|--|--|
| Rawlins | Old wye track | Light MacArthur |
| | No. 2 stock yard track | 2-10-2 |
| | Sheep track off stock yard track | 2-10-2 |
| | Coal storage tracks 1, 3, 4 and 5 | 2-10-2 |
| | Team tracks 1 and 2 | 2-10-2 |
| | Sand track on south side of sand bin | Must not be used by 800 class |
| Hadsell | Wool loading track | 2-10-2 |
| Creston | Wye track | 3900 class |
| Wamsutter | East turnout of water track | 2-10-2 |
| | Pump house track | 2-10-2 |
| | East switch of middle storage track | 2-10-2 |
| | Switch from storage track to west siding | 2-10-2 |
| | East switch north storage track located west of coal chute | 2-10-2 |
| | House track | 2-10-2 |
| Tipton | Freight house platform spur | 2-10-2 |
| | Cross-overs at east and west ends | Diesel-electric "A" units in tandem must not go through these cross-overs. |
| | House track | Must not be used by 800 class |
| Superior | Premier Mine loading track beyond 600 feet from switch | None permitted |
| Rock Springs | Sweetwater track | Light MacArthur |
| | All belt line tracks from South Pass Branch to main line | Heavy MacArthur |
| | Long Lizzy spur | Heavy MacArthur |
| | Stable track on South Pass Branch | Heavy MacArthur |
| Green River | Spur track to sand plant and electric light plant | 2-10-2 |
| | Caboose tracks | 2-10-2 |
| | Independent Gas and Oil Co. spur at tail of wye | 2-10-2 |
| | Business car spur | 2-10-2 |
| | Rip track lead from east switch to dirt track switch | 2-10-2 |
| | Peters spur | 2-10-2 |
| | Heating plant spur | 2-10-2 |
| | B. & B. tracks Nos. 1 and 2 | 2-10-2 |
| | M. of W. tracks Nos. 1 and 2 | 2-10-2 |
| | Scale track | 2-10-2 |
| Diesel servicing track which is first track south and east of coal chute | Must not be used by other than Diesel locomotives | |
| Peru | House track | Heavy MacArthur |
| Granger | Material and ice house tracks | Light MacArthur |
| | Spur north side of yard tracks opposite depot | Heavy MacArthur |
| | Old wye track at pump house | Heavy MacArthur |
| Spring Valley | Gravel pit track | Light MacArthur |
| | Old mine spur | Consolidation |
| Aspen | Old outfit spur | Light MacArthur |
| Evanston | Circle track to Altamont tunnel | Heavy MacArthur |
| | Outfit spur | Consolidation |
| Evanston | Almy spur | Consolidation |
| | River tracks | Consolidation |

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896 (R). Continued.

| Location | Track | Heaviest Engine Permitted | |
|----------------------------------|---|--|-----------------|
| Evanston (Cont.) | Asylum spur | Heavy MacArthur | |
| | Scale track | Heavy MacArthur | |
| | Track connecting legs of wye between east wye track switch and switch east of west wye track switch | Heavy MacArthur | |
| | Becker spur | Heavy MacArthur | |
| | West end of house track | Heavy MacArthur | |
| | Power house track | Heavy MacArthur | |
| | Beyond a point 300 feet from west switch of track No. 1 | Heavy MacArthur | |
| | All ballast pit tracks | Must not be used by 800 class | |
| | Echo | Track leading from Park City Branch to turntable | Heavy MacArthur |
| | | Cement spur beyond cross-over switch | Heavy MacArthur |
| Morgan | Canning factory spur | Heavy MacArthur | |
| Frederick | Sterling mine tipple tracks | Heavy MacArthur | |
| | Baum Mine tipple tracks | Heavy MacArthur | |
| | Industry track east of elevator track | Heavy MacArthur | |
| Dent | Wye track | 2-10-2 | |
| Superior Branch | Beyond Bridge 9.26-S on Premier Mine tracks | None permitted | |
| | M.P. 6.43 safety track, from 15 feet behind frog | None permitted | |
| | M.P. 7.66 safety track, from 10 feet behind frog | None permitted | |
| | M.P. 9.00 safety track, from 100 feet behind frog | None permitted | |
| Lionkol | South lead to D. O. Clark mine, safety track from 5 feet behind frog | None permitted | |
| | Beyond frog of switch leading to No. 1 tipple track on empty lead to "D" mine | None permitted | |
| Lionkol | Safety track, from 40 feet behind frog | None permitted | |
| Reliance | Safety track, from 150 feet behind frog | None permitted | |
| Winton | Safety track, from 10 feet behind frog | None permitted | |
| Dines | Safety track, from 5 feet behind frog | None permitted | |
| Dines Branch | Bridges 1.57-S-1, 1.57-S-2 and 1.57-S-3 located between scales on upper end of tipple tracks | Consolidation | |
| Sweetwater No. 1 | Safety track, from 15 feet behind frog | None permitted | |
| Stansbury | Safety track, from 15 feet behind frog | None permitted | |
| Superior and South Pass Branches | Material track | Heavy MacArthur | |
| | All tracks | 3500 class | |
| Park City | Safety track at Park City Consolidated Mine, from 125 feet behind frog | None permitted | |
| Park City Branch | All tracks | Light MacArthur | |
| Ontario Branch | All tracks | Light MacArthur | |
| Valmont | Sharp curve at west end of Public Service Co. power plant | None permitted | |

896 (T). 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 S. & E. V. R. R. Co.

Close Clearances

900 (S). 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:

Note.—At Ogden, employes are prohibited from riding on top of freight or passenger cars on passenger yard tracks.

(Snow plows must not exceed 5 M.P.H. on main track or siding by these locations).

| Location | Structure or obstruction | Clearance of engine or car is close at— |
|-----------------------------|--|---|
| At all stations... | Mail cranes..... | Side. |
| First Subdivision. | | |
| Denver..... | Signal 22..... | Side. |
| | Signal 24..... | Side. |
| M. P. 15.58..... | Bridge..... | Side. |
| M. P. 16.36..... | Bridge..... | Side. |
| Brighton..... | Signal 192..... | Side. |
| Greeley..... | Depot platform will not clear snow plow and spreaders. | |
| | Standpipe east of depot..... | Side. |
| | Train order signal..... | Side. |
| | Standpipe west of depot..... | Side. |
| Pierce..... | Standpipe..... | Side. |
| Speer..... | Standpipe..... | Side. |
| Fort Collins Branch. | | |
| Fort Collins..... | Standpipe..... | Side. |
| M. P. 26.79..... | Bridge..... | Side. |
| M. P. 31.84..... | Bridge..... | Side. |
| Second Subdivision | | |
| Cheyenne..... | Passenger depot train sheds... | Sides. |
| Corlett..... | Signal 5149..... | Side on westward track. |
| Borie..... | Signal 5199..... | Side on westward track. |
| Otto..... | Signal 5243..... | Side on westward track. |
| Granite Canon... | Signal 5286..... | Side on eastward track. |
| Granite Canon... | Standpipe..... | Side on eastward track. |
| Buford..... | Signal 5365..... | Side on westward track. |
| Dale Creek..... | Water tank spout..... | Side and top on westward track. |
| Hermosa..... | Hermosa Tunnel..... | Side and top on westward track. |
| Hermosa..... | Hermosa Tunnel..... | Side and top on eastward track. |
| Red Buttes..... | Water tank spout..... | Side and top on westward track. |
| M. P. 560.09..... | Bridge..... | Side on eastward track. |
| Third Subdivision. | | |
| M. P. 567.86... | Bridge..... | Side on both tracks. |
| Rock River..... | Coal chute 8..... | Side on both tracks. |
| Bitter Creek..... | Coal chute..... | Side on eastward track. |
| Bitter Creek..... | Coal chute..... | Top on both tracks. |
| M. P. 814.28... | Bridge..... | Side on eastward track. |
| M. P. 814.83... | Bridge..... | Side on westward track. |
| Fourth Subdivision | | |
| Granger..... | Westward interlocking signal. | Side on westward track. |
| Leroy..... | Standpipe..... | Side on both tracks. |
| Leroy..... | Signal 8907..... | Side on westward track. |
| Spring Valley... | Signal 8975..... | Side on westward track. |
| Aspen..... | Aspen tunnel..... | Side and top. |
| Evanston..... | Signal 9177..... | Side on westward track. |
| Wahsatch..... | Standpipe..... | Side on eastward track. |
| M. P. 930.13... | Tunnel No. 4..... | Side and top on eastward track. |
| M. P. 931.27... | Tunnel No. 5..... | Side and top on westward track. |
| M. P. 931.12... | Tunnel No. 6..... | Side and top on eastward track. |
| M. P. 935.53... | Tunnel No. 7..... | Side and top on eastward track. |
| Castle Rock..... | Standpipe..... | Side on eastward track. |
| Echo..... | Coal chute..... | Side on westward track. |
| M. P. 960.41... | Bridge..... | Side and top on westward track. |
| M. P. 961.45... | Signal 9615..... | Side on westward track. |
| M. P. 963.13... | Bridge..... | Side and top on eastward track. |
| M. P. 963.21... | Tunnel No. 8..... | Side and top on both tracks. |
| M. P. 964.01... | Tunnel No. 9..... | Side and top on both tracks. |
| M. P. 976.48... | Signal 9765..... | Side on westward track. |
| M. P. 982.09... | Tunnel No. 10..... | Side and top on eastward track. |
| Ogden..... | Union depot sheds..... | Side. (See note above.) |
| Ogden..... | Water column, east slip switch. | Side. |
| Ogden M.P.O. 14. | 24th St. viaduct..... | Side and top. |
| Park City Branch | | |
| Atkinson..... | Stockyards..... | Side. |
| Coalville..... | Stockyards..... | Side. |

900 (T). 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 (U). At Cheyenne passenger station, the following freight equipment must not be moved through umbrella sheds, account insufficient clearance:

Automobile cars: UP 261100 to 261199 inclusive, UP 361000 to 361199 incl., UP 561000 to 561199 incl., UP 761100 to 761199 incl. Caboose: UP 3700 to 3899 incl.

In addition, movement of excessively high or wide foreign freight equipment or high and wide loads through these sheds is prohibited.

900 (V). Due to the length of 4000 class engines, the overhang at the front of boiler and rear of cab is greater on curves than obtains with any other class of engine, which reduces the clearance between these engines and cars, trains, or engines on adjacent parallel tracks.

More clearance will be required on yard turn-outs and enginemens must know that cars on adjacent tracks near turn-outs are sufficiently back of clearance point to properly clear these engines.

Yardmen must see that engines and cars are kept at least three car lengths from fouling point at each end of yard tracks to insure proper clearance for these engines heading into yard tracks.

Enginemens, in taking these engines to or from roundhouse tracks, must know positively that proper clearance obtains.

These engines must not enter or leave center sidings while trains handling loads 12 or more feet wide are passing on either main track.

Due to length of this class engine restricting left view of engineer for a considerable distance ahead, it is imperative that firemen comply literally with requirements of Operating Rule 893, particularly in movements about yards.

At Laramie, account close clearance, 4000 class engines must not pass another engine or pass wide loads at the switches on No. 12½ track where east switch to westbound pull-out track and west switch leading to roundhouse are opposite each other on east side of University Viaduct.

There is close clearance between No. 6 repair track and engine house track at west end of repair track for a distance of 300 feet, and 4000 class engines must not pass another engine or wide load at that location.

There is close clearance at cross-over track between west switching lead and stock track, and 4000 class engines must not move over cross-overs to or from stock track while switching lead is occupied by another engine or wide load.

At these locations the movement of 4000 class engines must be preceded by herder or brakeman.

High and Wide Cars

900 (W). Chief Engineer's drawings 80180, 80181 and 80300 are posted in yard offices and engineer's rooms.

Drawing 80180 provides information with respect to maximum heights and widths of eastbound loads that can be handled between Los Angeles and Council Bluffs or Kansas City, either via Denver or North Platte, direct through Aspen Tunnel and between Council Bluffs and Los Angeles direct through Altamont Tunnel westbound.

Drawing 80181 provides information with respect to maximum heights and widths of westbound loads that can be handled from Kansas City to Los Angeles via North Platte and via Ellis, direct through Altamont Tunnel.

Drawing 80300 provides information with respect to maximum heights and widths of eastbound loads that will not clear Aspen Tunnel but can be handled with advance notice to General Superintendent Transportation for routing via McCammon and Granger.

The maximum published width of 12 feet is the maximum width of load that can be handled without restrictions, between above points, and is limited by wide loads or equipment on adjacent tracks, based on minimum track centers of 13 feet. Twelve feet 6 inches is the maximum width of load that can be moved with special handling between the

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900 (W). Continued.

limiting heights as given in the tabulations on the drawing. Advance approval of General Superintendent Transportation must be obtained for the movement of any shipment having an effective width in excess of 12 feet in order that protection can be arranged for other shipments exceeding 12 feet in width that may be moving in the same territory.

In all cases the measurements are based on symmetrical loads being exactly centered on car (not over 43 feet center to center of trucks), and it is important to know that loads are so centered. The effective width of an eccentric load is double the maximum extension of the load from the center of the car at any given height above the top of rail.

900 (X). The following specially equipped excessive height cars assigned to service of Boeing Airplane Company between Wichita, Kansas and Seattle, Washington, may be handled westbound through Altamont Tunnel but must not, under any circumstances, be handled through Aspen Tunnel:

| | | |
|-----------|-----------|-----------|
| UP 562109 | UP 563071 | UP 564024 |
| " 562140 | " 563090 | " 564047 |
| " 562148 | " 563152 | " 564100 |
| " 562149 | " 563162 | " 564129 |
| " 562173 | " 563182 | " 564143 |

None of the above cars may be handled on tracks equipped with umbrella sheds.

Air Brake Rules

1006 (R). Standard brake pipe pressures in freight and mixed train service are as follows:

| Westward | Eastward |
|--|--|
| Cheyenne to Sherman..... 70 lbs. | Third and Fourth Subdivisions..... 90 lbs. |
| Sherman to Laramie..... 90 lbs. | Laramie to Sherman..... 70 lbs. |
| Third and Fourth Subdivisions..... 90 lbs. | Sherman to Cheyenne..... 90 lbs. |
| Denver to Sherman..... 70 lbs. | Sherman to Denver..... 90 lbs. |
| On Third and Fourth Subdivision branches on descending grades..... 90 lbs. | On Third and Fourth Subdivision branches on descending grades..... 90 lbs. |
| Speer to Cheyenne..... 90 lbs. | Cheyenne to Denver..... 90 lbs. |

Exception: With trains consisting of all empties or not to exceed ten per cent loads, 70 pounds brake pipe pressure may be maintained as follows:

Laramie to Green River —Westward;
Green River to Sherman —Eastward.

Train and enginemens must know required brake pipe pressure is being maintained.

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 as required by Air Brake Rule 1035 must be made at the following points:

Buford —Eastward;
Sherman —Westward;
Speer —Eastward;
Speer —Westward, except via Borie;
Wahsatch —Westward, near east yard limit sign.

1035 (S). On freight trains, air test as required by Air Brake Rule 1035 must be made at:
One mile east of Echo —Westward.

1040 (R). Upon arrival at Evanston, after spot is made at the water crane and after brake pipe is charged to standard pressure, the engineer will give one short sound of the engine whistle and make service reduction as required by Air Brake Rule 1040 (C) and leave brakes applied until trainman arrives at the engine advising that all brakes are working, after which release will be made and trainmen will determine if brakes are released as the train pulls by.

Engine must not be detached to set out or pick up cars until trainman has arrived from the rear and has advised condition of brakes.

Incoming engineer must apply brakes and advise outgoing engineer.

1040 (S). Eastward freight trains between Speer and Carr must make test required by Air Brake Rule 1040 (C) when angle cock has been turned or hose separated.

1041 (R). In addition to literal observance of Air Brake Rules 1040 (A), 1040 (C) and 1040 (D), when making test as prescribed by Rule 1040 (D), an additional test as prescribed by Air Brake Rule 1041 must be made as follows:

Buford —Eastward freight trains must stop and may then proceed if maximum air pressure is indicated on caboose gauge.

1041 (S). Between Wahsatch and Uintah, both inclusive, when necessary to make air brake test as prescribed by Air Brake Rule 1040 (D), westward freight trains must also make brake pipe test as prescribed by Rule 1041.

1042 (R). Retaining valves must be used as follows:
Borie to Carr —on 50% of cars in all eastward freight trains of 2500 tons or more.

Buford, until train has passed Corlett Junction —on all eastward freight trains;
Buford, to head-in switch at Cheyenne —on all eastward gravel trains;
Hermosa to M.P. 554.8 —on all westward gravel trains;
On all branches —on all freight and mixed trains descending heavy grades.

Wahsatch to Echo;
Gateway to Uintah.

Exception.—Trains averaging not to exceed sixty gross tons per car may be handled without the use of retaining valves when handled by engines equipped with two air compressors which are operative.

Gravel trains must stop at Corlett, and if in the judgment of engineer and conductor the train is holding properly, retaining valves will be turned down. The engineer must be consulted in each case.

1048 (R). When a helper locomotive is added to a train, except when operated as lead locomotive, brakes on such locomotive must be tested as prescribed by Air Brake Rule 1040 (D), which covers test of brakes on one or more cars added to a train at any point subsequent to a terminal test of air brakes.

1238 (R). On streamline trains, running test as required by Air Brake Rule 1238 must be made at the following points:
Speer—Eastward;
Speer—Westward, except via Borie.

1244 (R). When Fairbanks-Morse Diesel units 700, 700-B and 701 are used together, the low braking range on dynamic brake must not under any circumstances be used at a speed in excess of 36 M.P.H. Dynamic brake on locomotives 1360 and 1370 inclusive should be used only when handling single and must not be used when double-heading with other power or handling trains.

1251 (R). When a helper locomotive is added to a train, except when operated as lead locomotive, brakes on such locomotive must be tested as prescribed by Air Brake Rule 1242 (E), which covers test of brakes on one or more cars added to a train at any point subsequent to a terminal test of air brakes.

OTTO C. PERRY
3 FOX STREET
DENVER 9, COLO.

RATING OF STEAM 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 La Salle | La Salle to Carr | Carr to Borie | Speer to Cheyenne | Cheyenne to Speer | Borie to La Salle | La Salle to Denver | Fort Collins to Dent | Dent to Fort Collins |
|----------------------|---|--------------------|------------------|---------------|-------------------|-------------------|-------------------|--------------------|----------------------|----------------------|
| C 57 | 190 | 3000 | 1450 | 1000 | 3000 | 1100 | 3000 | 2500 | 1800 | 1800 |
| C 57 | 162 171 | 2500 | 1250 | 750 | 2500 | 1000 | 2000 | 2000 | 1600 | 1600 |
| MacA 57 | 206 210 | 3000 | 1600 | 1200 | 3500 | 1200 | 3000 | 3000 | 2000 | 2200 |
| MacA 63 | 212 228 | 4000 | 1900 | 1200 | 3500 | 1300 | 4000 | 3100 | 2400 | 2500 |
| MacA 63 | 222 | 4000 | 2300 | 1400 | 3500 | 1400 | 4000 | 3400 | 2900 | 2900 |
| SA-C 59 | 475 | 5000 | 3900 | 2900 | 4500 | 2800 | 5000 | 4900 | | |
| CSA 69 | 400 394 407 | 5000 | 3700 | 2700 | 4300 | 2600 | 4800 | 4700 | | |
| 4-6-4 3 69 4 5 | 406 3930 to 3949 3950 to 3969 3975 to 3999 | 5000 | 3900 | 2900 | 4500 | 2750 | 5000 | 4900 | | |
| 4-8-4 1 68 2 | 540 4000 to 4019 4020 to 4024 | 5000 | 4000 | 3200 | 5000 | 3500 | 8000 | 8000 | | |
| TTT 63 | 286 311 | 5000 | 2900 | 1700 | 3500 | 1700 | 5000 | 3900 | | |
| UP 67 | 368 372 | 5000 | 3900 | 2900 | 4500 | 2400 | 5000 | 4900 | | |
| FEF 77 | 266 | | 2130 | 1780 | | 1720 | | 5480 | 2950 | 2950 |
| FEF 80 | 266 | | 1460 | 1220 | | 1190 | | 3720 | 2010 | 2010 |
| P 77 | 163 165 167 184 187 193 | | | | | | | | | |
| MT 73 | 256 261 | | 1870 | 1590 | | 1550 | | 4770 | 2580 | 2580 |

EXPLANATION

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

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

C 57 162
30

RATING OF STEAM 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) | Cheyenne to Buford | Buford to Rawlins | Rawlins to Green River | Green River to Rock Spgs. | Rock Spgs. to Wamsutter | Wamsutter to Laramie | Laramie to Buford | Buford to Cheyenne | Cheyenne to Wabatch | Wabatch to Green River |
|----------------------|--|--------------------|-------------------|------------------------|---------------------------|-------------------------|----------------------|-------------------|--------------------|---------------------|------------------------|
| C 57 | 210 to 358 | 975 | 1850 | 1850 | 1850 | 2400 | 1850 | 1850 | 4100 | 1850 | 1850 |
| MacA 57 | 206 210 | 975 | 2000 | 2000 | 1900 | 3000 | 1900 | 1900 | 4100 | 2800 | 1900 |
| MacA 63 | 212 228 | 1000 | 2100 | 2100 | 2100 | 3300 | 2100 | 2100 | 4100 | 4000 | 2100 |
| MacA 63 | 222D | 1100 | 2350 | 2350 | 2350 | 3500 | 2350 | 2350 | 4100 | 4000 | 2350 |
| SA-C 59 | 3500 to 3569 | 2100 | 4100 | 4100 | 4100 | 6500 | 4100 | 4100 | 4100 | 4900 | 4100 |
| 2-8-2 57 | 493D 494D 508S | 2400 | 4500 | 4500 | 4300 | 6500 | 4900 | 4100 | 4100 | 4900 | 4900 |
| CSA 69 | 400 394 407 | 2100 | 4100 | 4100 | 4100 | 6500 | 4100 | 4100 | 4100 | 4900 | 4100 |
| 4-6-4 3 69 4 5 | 3830 to 3949 3950 to 3969 3975 to 3999 | 2150 | 4290 | 4290 | 4290 | 6500 | 4290 | 4290 | 5100 | 5100 | 4290 |
| 4-8-4 1 68 2 | 4000 to 4019 4020 to 4024 | 3250 | 6000 | 6000 | 6000 | 7800 | 5900 | 5800 | 6100 | 6100 | 6090 |
| TTT 63 | 286 311 | 1600 | 3400 | 3400 | 3400 | 5500 | 3400 | 3400 | 4100 | 4900 | 3400 |
| UP 67 | 368 372 | 2100 | 4100 | 4100 | 4100 | 6500 | 4100 | 3800 | 4100 | 4900 | 4100 |
| FEF 77 | 266 | | | | | | | | | | |
| FEF 80 | 266 | | | | | | | | | | |
| P 77 | 163 165 167 184 187 193 | 1350 | 2550 | 2550 | 2550 | 3860 | 2550 | 2550 | 2550 | 1870 | 2550 |
| MT 73 | 256 261 | 1210 | 2240 | 2240 | 2240 | 3390 | 2240 | 2240 | 2240 | 1660 | 2240 |

EXPLANATION

UP.....Consolidation locomotive having 57 inch drivers, cylinders 22 inch diameter and 30 inch stroke, and weighing 190,000 pounds on drivers:
MacA.....MacArthur
SA-C.....Mallet
CSA.....Challenger
TTT.....2-10-2

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

C 57 162
30

Note.—With helpers, Cheyenne to Buford, add 66 2/3 percent. Tipton to Green River, 150 loaded or empty cars is tonnage rating limit. Tonnage ratings, Buford to Cheyenne, are based on locomotives equipped with two air compressors. On Second Subdivision, the tonnage shown must not be exceeded with locomotives equipped with—Only one 8 1/2-inch air compressor—3500 tons. Only one No. 5 air compressor—2500.

RATING OF DIESEL-ELECTRIC 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.

| Type | No's. | H.P. | No. Units | Green River to Wahsatch | Wahsatch to Ogden | Ogden to Echo | Echo to Wahsatch | Wahsatch to Green River | Type | No's. | H.P. | No. Units | Green River to Wahsatch | Wahsatch to Ogden | Ogden to Echo | Echo to Wahsatch | Wahsatch to Green River | | | | | | |
|---------------------------|---------------------------|-------------|-----------|-------------------------|-------------------|---------------|------------------|-------------------------|---|-----------|------------|-----------|-------------------------|-------------------|---------------|------------------|-------------------------|---------------------------|---------------------------|-------------------|-------------------|--------------|--|
| EMD | 1000-1095 | | | 1050 | 45 Cars | 770 | 770 | 1050 | EMD | 1400-1477 | Frts. 4500 | 3 | 4400 | Car Limit | 3400 | 3200 | 4400 | | | | | | |
| ALCO | 1100-1153 | Yard SW | | 1200 | 45 Cars | 950 | 950 | 1200 | ALCO | 1600-1643 | Frts. 4500 | 3 | 5500 | Car Limit | 4300 | 3750 | 5500 | | | | | | |
| FM | 1300-1304 | 1000 | 1 | 1430 | 45 Cars | 1090 | 1050 | 1430 | EMD | 1400-1477 | Frts. 6000 | 4 | 5800 | Car Limit | 4500 | 4250 | 5800 | | | | | | |
| Baldwin | 1200-1210 | | | 1390 | 45 Cars | 845 | 845 | 1390 | ALCO | 1600-1643 | Frts. 6000 | 4 | 7400 | Car Limit | 5800 | 5000 | 7400 | | | | | | |
| ALCO | 1180-1195 | Rd. SW 1500 | 1 | 1880 | 45 Cars | 1140 | 1140 | 1880 | <p>Note: Tonnage rating limited to maximum of 45 cars for single unit with one air compressor.</p> <p align="center">TOTAL LOADED WEIGHT ON DRIVERS</p> <table border="0"> <tr> <td align="center">220,000 to 237,000 pounds</td> <td align="center">235,000 to 243,000 pounds</td> </tr> <tr> <td align="center">Nos. 1400 to 1477</td> <td align="center">Nos. 1600 to 1643</td> </tr> <tr> <td align="center">1550 to 1563</td> <td></td> </tr> </table> | | | | | | | | | 220,000 to 237,000 pounds | 235,000 to 243,000 pounds | Nos. 1400 to 1477 | Nos. 1600 to 1643 | 1550 to 1563 | |
| 220,000 to 237,000 pounds | 235,000 to 243,000 pounds | | | | | | | | | | | | | | | | | | | | | | |
| Nos. 1400 to 1477 | Nos. 1600 to 1643 | | | | | | | | | | | | | | | | | | | | | | |
| 1550 to 1563 | | | | | | | | | | | | | | | | | | | | | | | |
| FM | 1325-1329 | Rd. SW 1500 | 1 | 1430 | 45 Cars | 1090 | 1090 | 1430 | | | | | | | | | | | | | | | |
| FBM | 1360-1370 | Rd. SW 2000 | 1 | 1820 | 45 Cars | 1110 | 1110 | 1850 | | | | | | | | | | | | | | | |