

UNION PACIFIC RAILROAD COMPANY

Eastern District

Wyoming Division

Special Rules No. 7

Effective Friday, August 1, 1947

Superseding Special Rules No. 6

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

A. E. STODDARD,
General Manager

ELGIN HICKS,
General Superintendent

C. E. BRETERNITZ,
Superintendent

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

Employees listed below and other employees as may be designated 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.)

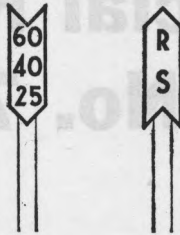
Safety Agents	Flagmen
Trainmasters	Firemen
Assistant Trainmasters	Hostlers
Traveling Conductors	Outside Hostler Helpers
Road Foremen of Engines	Yardmasters
Traveling Firemen	Assistant Yardmasters
†Station Agents	Engine Foremen
†Operators	Switchtenders
Conductors	Engine Herders
Engineers	Such other employes 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.

10 (R).



Rule 10 (H) is cancelled.

Reduce speed signs as illustrated above will be located 1000 feet from beginning of restricted territory and will indicate by figures the maximum speed permitted as shown in current time-table. 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.

Signs bearing the letters RS will be placed to indicate the end of the restricted territory.

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.

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, and then extinguish white headlight..

A train on adjacent track must stop before passing headlight and be governed by 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 Rule 17 (B), after which, if switch is lined to permit opposing train to enter siding, red headlight will be extinguished.

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

Display of red headlight does not relieve enginemen nor trainmen from protecting front of train in accordance with 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). Rule 17 (C) is cancelled.

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

17 (T). Referring to Rule 17 (D): When a Diesel engine not displaying back-up headlight is standing or moving about yards at night under conditions not requiring display of markers, a red light must be displayed on rear of engine.

19 (R). Oscillating red rear end light on passenger trains will be designated as a night signal in accordance with Rule 9 and will 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 Rule 99 nor any other rule.

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

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

Superior Branch;	Winton Branch;
Gunn Branch;	Dines Branch;
South Pass Branch;	Park City Branch;
Lionkol Branch;	Ontario Branch;
Reliance Branch.	Stansbury Branch.

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

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

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

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

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 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 passenger station must be prepared to stop clear of cross-overs opposite ice house unless proceed signal is received from yardman in charge of switches.

Trains leaving 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.

Trains and engines using Colorado Division 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, must stop clear of cross-over opposite Signal 5654 unless proceed signal is received from switchtender.

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.

95 (R). Where 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.

Example: A clearance reading "First 7 green signals" will authorize display of green signals.

A clearance reading "Second 7 no signals" will authorize movement without display of signals.

96 (R). A clearance must be received by all trains at Evanston.

A clearance received at Evanston by a first-class train will confer the same authority as when received at its initial station.

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

Location	Railroad Crossed, or Junction With	How Governed
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 or 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 Granger, color light dwarf signal 05 located 500 feet west of depot governs movement of westward trains on Idaho Division main track to Signal 15.

Middle light of three-indication color light interlocking signal located just east of depot governs movements from Wyoming Division westward main track to dwarf Signal 05.

99 (R). Last paragraph of Rule 99 is changed to read:

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

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

This does not change the requirements of Rule 99 (F).

Each caboose must be equipped with a red lantern for use as required by Rule 19 (C).

The equipment of each engine must include a red lantern as required by Rule 869.

Last sentence of Rule 870 is cancelled.

99 (S). Trains may be relieved from protecting against following extra trains by the use of Example (7) of Form E on branch lines only.

103 (R). Referring to Rule 103 (D), when Diesel yard engine is used, a yardman or trainman may ride on side steps or platform in direction engine is moving instead of on leading footboard.

103 (S). Where reference is made in Rule 103 (C) to rear of tender of engines, this requirement will also apply to rear end of Diesel engines.

103 (T). 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 (U). At Hanna, eastward freight trains stopping between 6 A.M. and midnight, must stop clear of cross-over east of depot a sufficient distance to permit opening 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.

103 (V). All trains and engines must stop, and a man 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;
Gunn Branch	—Lincoln Highway;
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 (W). 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 (X). 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.

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

103 (Z). At Echo, train standing on eastward, westward or center siding, and standing on crossing at Mile Post 953.4, must be parted immediately and crossing left clear until train is ready to proceed.

When crossing is cut, Rule 103 (A) must be observed.

104 (R). At Buford, derail at east end of eastward siding will be set in derailing position only when there are cars, or a train with engine detached, on that track.

At Wahsatch, derail located 130 feet from end of tail track of wye will be set in derailing position only when a car is spotted at loading dock.

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 (S). At Wahsatch, crotch switch at east end of center siding is equipped with an electric lock and switch indicator, the switch indicator being located on west relay box on north side of westward main track.

When a train or engine is to move from east end of center siding to westward main track, or to east leg of wye, trainmen must be governed by indication displayed by switch indicator before attempting to operate crotch switch.

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

Continued on Page 4.

104 (S). Continued.

To operate switch machine the foot pedal must be lifted to disengage the switch lock, and after removing lock, foot pedal must be depressed to release switch lever. Switch lever must then be changed to reverse position, latched and locked until movement completed, then returned to normal position, foot pedal raised in order to engage switch lock in hasp, then lock.

Westward trains, to enter center siding, will operate crotch switch same as any other crotch switch, as electric lock will release when main track switch is opened.

When semaphore arm of switch indicator is horizontal, attempt must not be made to line any switch for movement from center siding to westward main track or to east leg of wye while a westward train is approaching; when no westward is seen or heard approaching, crotch switch may be operated as follows:

Trainman must definitely ascertain from train dispatcher that there is no westward train approaching, after which trainman will operate time release in east relay box on north side of westward main track by turning button on top of the relay to right as far as it will go and then releasing it. Trainman will then return to the crotch switch. When white light appears on top of relay box, trainman must depress foot pedal so that switch lever can be thrown. Failure to depress pedal while white light is burning will result in switch again electrically locking.

104 (T). Electrically locked switch machines installed on following switches Wyoming Division:

Sherman	—Facing point switch from eastward main track to center siding west end governing trains moving from center siding to eastward main track.
Fort Steele	—Crotch switch east end center siding governing train movements from center siding to eastward main track.
Rawlins	—Facing point switch on cross-over between eastward and westward main tracks governing trains crossing over from westward main track to eastward main track. Lock on each end of this cross-over.
Thayer Jet.	—Crotch switch east end center siding governing train movements from center siding to westward main track.
Rock Springs	—Facing point switch to lead west end Blairtown yard M. P. 803.5 governing train movements from yard to eastward main track.
Wahsatch	—Crotch switch east end center siding governing train movements from center siding to westward main track.
Riverdale	—Trailing point switch west end cross-over governing train movements between eastward and westward main tracks.
Riverdale	—Switch west end cross-over governing train movements from tail track to westward main track.
Ogden	—Facing point switch east end drill track westward main track M.P. 990.5, governing train movements from drill track to westward main track.

105 (R). Cars must not be set out on siding at Sherman.

At Thayer Junction, center siding must be used only for setting out eastbound loads.

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.

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

105 (S). Engines must not move to or from west leg of wye at Thayer Junction while an eastward train is passing.

105 (T). At Henefer and Peterson, when conditions permit, westward trains in center siding must use switch at west end of center siding instead of cross-over to head out on westward main track.

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 ice house 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 and Evanston —between extreme east and west switches.

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.

D-152 (S). Eastward trains or engines on south lead from Tower A must stop before passing Stop sign west of cross-over east of Tower A, and must not proceed until cross-over switches are properly lined for movement.

509 (R). On Fifth 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, 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.

509 (U). 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.

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

Normal position of tail track switch is for tail track. Tail track switch and west switch of cross-over are equipped with electric locks.

No attempt should be made to operate these switches while a train is approaching on either main track.

509 (Y). Block signals listed below operate in connection with rock slide protection fences.

WESTWARD		EASTWARD	
Signal No.	Location of Rock Slide Protection Fence	Signal No.	Location of Rock Slide Protection Fence
5435	M.P. 544.56 to M.P. 544.60	9874	M.P. 986.54 to M.P. 986.49
5463	M.P. 546.96 to M.P. 547.11		M.P. 983.23 to M.P. 982.89
6573	M.P. 658.10 to M.P. 658.22	9832	M.P. 982.78 to M.P. 982.65
6635	M.P. 663.47 to M.P. 663.55		M.P. 982.58 to M.P. 982.51
6831	M.P. 683.36 to M.P. 683.46		M.P. 982.21 to M.P. 982.14
7855	M.P. 785.64 to M.P. 785.67	9822	M.P. 982.09 to M.P. 981.96
8195	M.P. 820.01 to M.P. 820.24		M.P. 981.46 to M.P. 981.36
8203	M.P. 820.24 to M.P. 820.47	9816	M.P. 980.68 to M.P. 980.48
9589	M.P. 959.33 to M.P. 959.40	9652 9634	M.P. 963.15 to M.P. 963.12
9603	M.P. 961.15 to M.P. 961.33	9634	M.P. 961.99 to M.P. 961.88
	M.P. 961.56 to M.P. 961.66		M.P. 961.66 to M.P. 961.56
9615	M.P. 961.88 to M.P. 961.99	9616	M.P. 961.33 to M.P. 961.15
	M.P. 963.12 to M.P. 963.15	9596	M.P. 959.40 to M.P. 959.33
9803	M.P. 980.48 to M.P. 980.68	8208	M.P. 820.47 to M.P. 820.01
	M.P. 980.76 to M.P. 980.91	7860	M.P. 785.67 to M.P. 785.64
	M.P. 982.00 to M.P. 982.08	6842	M.P. 683.46 to M.P. 683.36
9819	M.P. 982.20 to M.P. 982.25	6644	M.P. 663.55 to M.P. 663.47
	M.P. 982.65 to M.P. 982.71	6580	M.P. 658.22 to M.P. 658.10
9829	M.P. 982.90 to M.P. 983.00	5478 5470	M.P. 547.11 to M.P. 546.96
		5454	M.P. 544.60 to M.P. 544.56

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 switch indicator is in Proceed position, 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 Thayer Junction, in making movement from east leg of wye to westward main track, if dwarf signal displays yellow indication 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 westward 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 (T). At Evanston, dwarf signals at east end of westward siding and just west of Signal 9165 govern movement of trains or engines 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. Rule 520 will govern.

520 (U). At Evanston, dwarf signal located at fouling point on Almy Spur track, normally displays Stop indication, and it is necessary to line switch for movement to westward main track before signal will display "Proceed at restricted speed" indication. This dwarf signal governs movement of trains or engines against the current of traffic on westward main track to Signal 9183. When a train or engine is stopped by this dwarf signal or Signal 9183, flag protection against opposing train must be provided.

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 —
Colorado Division main track.....	— o —
New yard south lead.....	— — o
Wyoming Division eastward main track.....	o — o
Wyoming Division westward main track.....	o — o —

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	Point of Rocks	Devils Slide
Sinclair	Henefer	

719 (R). Passengers with tickets may be carried on mine runs between Rock Springs and Winton, and between Rock Springs and Superior.

721 (R). Unauthorized persons, including deadhead train or engine crews, must not occupy cab of trailing unit of Diesel engine on freight or passenger train.

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.
939.03	Westward track.	979.28	Both main tracks.
940.27	Eastward track.	979.58	Both main tracks.
940.41	Westward track.	981.01	Westward track.
941.46	Both main tracks.	984.05	Westward track.
954.16	Both main tracks.	984.20	Eastward track.

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.

Spreaders and snowplows will not clear brick platforms at Cheyenne, Laramie, Sinclair and Rawlins passenger stations.

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.

733 (S). Dangerous gases, present in exhausts from Diesel locomotives, Clarkson Steam Generator, or engines of Waukesha air conditioning equipment may cause incapacitation or fatalities if in sufficient concentration as might result when a Diesel locomotive is stopped in a tunnel. These gases are not generally associated with the obnoxious odors given off by the exhausts of gasoline engines, and cannot be readily detected even in dangerous quantities.

When a Diesel locomotive is stopped in a tunnel under conditions preventing prompt movement, Diesel engines must be promptly shut down, Clarkson Steam Generator shut off, and passenger cars equipped with Waukesha air conditioning systems must have both the ice engine and engine generator shut off. Fresh air intakes on such cars must be closed, and circulating fans shut off.

When Diesel propulsion engines are shut off, air brakes must be fully applied and, in addition, a chain must be placed securely at front and rear of a traction wheel for blocking 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 they 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.

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.

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.

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.

Continued Opposite Side.

802 (S). Continued.

Switching of Cars Containing Dangerous Articles

BE 589(c)(1) In switching operations where use of hand brakes is not 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 train

BE 589(e)(1) At all terminals or other places where trains are made up, the railroad shall execute a consecutively numbered notice showing the location in the freight train of every car placarded "Explosives". A copy of such notice shall be delivered to the train and engine crew and a copy thereof showing delivery to the train and engine crew shall be kept on file by the railroad at each point where such notice is given. At points other than terminals where train or engine crews are changed, the notice shall be transferred from crew to crew.

Position in Train of Cars Containing Explosives

BE 589(f)(1) In a train either standing or during transportation thereof, a car placarded "Explosives" shall, when the length of the train permits, be not nearer than the sixteenth car from both the engine or occupied caboose; and shall, when the length of the train will not permit them to be so placed, be as near as possible to the middle of the train.

BE 589(f)(2) In a freight train or mixed train either standing or during transportation thereof, a car placarded "Explosives" must not be handled next to any car placarded "Dangerous". A car placarded "Explosives" or a placarded loaded tank car shall not be next to:

1. Occupied passenger car, other than gas handlers accompanying shipment.
2. Occupied combination car, other than gas handlers accompanying shipment.
3. Engine. (Except when train consists only of placarded loaded tank cars.)
4. Car placarded "Poison Gas".
5. Wooden under-frame car.
6. Loaded flat car.
7. Open-top car when any of the lading extends or protrudes above or beyond the ends or sides thereof.
8. Car equipped with automatic refrigeration of the gas-burning type.
9. Car containing lighted heaters, stoves, or lanterns.
10. Car loaded with live animals or fowl, occupied by an attendant.
11. Occupied caboose. (Except when train consists only of placarded loaded tank cars.)

Position in Train of Loaded Placarded Tank Cars

BE 589(g)(1) In a train either at rest or during transportation thereof, a placarded loaded tank car shall not, when the length of the train permits, be nearer than the sixth car from the engine or occupied caboose, but in no instance nearer than the second car in such train unless the entire train consists of such cars.

Continued on Page 7.

802 (S). Continued.

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

BE 589(h)(1) In a train either at rest or during transportation, a car placarded "Poison Gas" or containing poison liquid Class A shall not be next to other freight cars placarded "Explosives" or cars placarded "Dangerous".

**Position in Train of Cars Placarded "Explosives" and
"Poison Gas" or Containing Poison Liquids
When Occupied 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 gas handling crews, when accompanying such car.

**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 between points between which freight train service is not operated.

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)(1).

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.

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.

802 (T). U. P. flat cars 55519, 56000, 56052 and 56228 are equipped with gas cylinders (high pressured flasks), to transport compressed gas, and are assigned between Wilmington and Pocatello-Council Bluffs.

This gas is highly inflammable and extreme care must be exercised switching in yards and handling in trains. In case of leakage, no open flame should be permitted in the vicinity of the cars, and cars must be handled in accordance with Bureau of Explosives regulations.

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

On Winton, Gunn, Superior and Ontario Branches, and on Weber Spur;
At Park City, from lower yard to depot and high line.

802 (V). The cars designated below must not be handled in mixed trains:

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

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

804 (R). Assistant Supervisor Oil-Gas-Electric Mobile Power is responsible for the proper sealing of cut-out cock controlling the safety control feature in air brake equipment of Diesel-electric road locomotives; however, engineer must know that cut-out cock is sealed in proper position when taking over Diesel road locomotive and before departure of train from terminal.

804 (S). Stock 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 Rule 804 (A), if there is any possibility of their moving.

804 (T). 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.

804 (U). 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 slip switches.

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.

805 (R). Rear of lounge cars operating in "City of Portland" must not be coupled into with passenger car equipped with diaphragm, account insufficient clearance.

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). On Fifth Subdivision, helper engines on westward trains must go through to Sherman, unless authorized by chief dispatcher to cut off at Buford. Helper engines on eastward trains must go through to Sherman and must be on head end of train from Laramie to Sherman.

On Eighth Subdivision, helper engines on eastward freight trains must go through to Wahsatch, and must be on head end of train from Ogden to Wahsatch.

808 (T). Engines helping streamline trains from Cheyenne, will stop just west of Signal 5099, west of passenger depot, and wait at that point until train has stopped, and will not couple on to train until proper signal received.

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

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	—Eastward and westward;
Bitter Creek	—Eastward and westward;
Carter	—Eastward and westward;
Echo	—Eastward and westward.

Continued on Page 8.

811 (S). Continued.

Trains handling lumber in open top cars must make additional stop at Evanston, Wamsutter, Rock River and Buford to inspect lumber.

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	Hermosa	Walcott	Point of Rocks	Castle Rock
Otto	Rock River	Riner	Rock Springs	Gateway
Ozone	Medicine Bow	Wamsutter	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.

823 (R). On multiple unit Diesel engine, not more than four men may ride in cab of leading unit. On freight train when cab is occupied by four men, head brakeman will ride in cab of trailing unit.

869 (R). 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, and need not take sand at Hanna or Rock Springs, unless necessary.

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

869 (S). When operating on ascending ruling grades, height of water in water glass of 3670-3674 class engines must not be less than one inch above bottom of water glass on Superior and Reliance Branches, and 2½ inches on Winton and Dines Branches.

874 (R). Duties of firemen on multiple unit Diesel-electric road locomotives:

Second paragraph of Rule 874 is changed to read: "On Diesel-electric through passenger trains that make few or no stops, fireman will remain in control room at all times when train is in motion."

At initial terminals, before departure, fireman will go through engine rooms and make careful inspection of gauge indications, oil levels, engine temperatures and shutter controls. Any unusual condition detected or irregularity found must be reported to engineer.

At all intermediate stations or stops, when time permits, fireman will make same observations in engine rooms as outlined above.

At points where firemen change, incoming fireman will assist outgoing fireman in inspecting gauges, blowing boilers and other required duties.

At stations where locomotive is to be detached, fireman will close main valve to train heat line.

When locomotive is coupled to train at initial or intermediate station, or where cars are cut in or cut out of train, fireman, on request or proper signal, will open main valve to train heat line. Unless locomotive equipped with remote control valve, opening or closing of main valve to train heat must be done while train is standing.

Warning lights located in cab on left side of panel board indicate:

1. Low oil pressure;
2. Hot engine;
3. Fire out in steam heat generator.

Warning bell located in cab will ring when any of the above indications are displayed. If necessary, train must be stopped for inspection and necessary attention.

875 (R). When an engine crew has taken charge of an oil-burning engine, the engine must not be left without an engineman in charge until delivered to roundhouse employe.

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.

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 on the Seventh Subdivision, engineers on eastward freight trains on Sixth Subdivision must purify boilers all possible in order to get engines to Laramie with concentration materially reduced. Sixth Subdivision engineers will blow boilers frequently, and all possible between Rawlins and Rock River.

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

Idaho Division freight trains will take only enough water at Granger to make Kemmerer.

No water available at Dale Creek or Fort Steele.

890 (S). 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.

896 (R). Engines of any class must not go on the following tracks:

Buford	—Beyond one engine length on buckling track;
	—West pit lead beyond 50 feet west of derail;
	—Balloon track in new gravel pit;
	—Under tipples in new gravel pit;
Granite Canon	—Beyond switch from rock quarry track to track at rock pile;
Hermosa	—4A Mine safety spur;
Hanna	—By tipples on Elk Mountain Coal Company's loading tracks and tipple tracks;
Sinclair	—Spur track to new chemical storage warehouse of Sinclair Company, and when necessary to switch on this track not less than 8 cars must be handled ahead of engine;
Superior Branch	—Beyond Bridge 9.26 on Premier loading track;
	—Beyond frog of switch leading to No. 1 tipple track on empty lead to "D" mine;
M.P. 6.43	—Safety track, beyond 15 feet behind frog;
M.P. 7.66	—Safety track, beyond 10 feet behind frog;
M.P. 9.00	—Safety track, beyond 100 feet behind frog;
South lead to C.O.	
Clark mine	—Safety track, beyond 5 feet behind frog;
Gunn	—Safety track, beyond 10 feet behind frog;
Lionkol	—Safety track, beyond 40 feet behind frog;
Reliance	—Safety track, beyond 150 feet behind frog;
Winton	—Safety track, beyond 10 feet behind frog;
Dines	—Safety track, beyond 5 feet behind frog;
Sweetwater No. 1	—Safety track, beyond 15 feet behind frog;
Stansbury	—Safety track, beyond 10 feet behind frog;
Park City	—Safety track at Park City Consolidated Mine, beyond 125 feet behind frog.

1900 class and heavier engines must not go on the following tracks:

Hanna	—Nugget Coal Company safety spur;
Granger	—Gravel pit tracks;
Leroy	—Turntable track;
Spring Valley	—Old mine spur;
Aspen	—Old outfit spur;
Evanston	—Outfit spur;
Riverdale	—Storage tracks;
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.

2200 class and heavier engines must not go on the following tracks:

Cheyenne	—Old rip tracks 1, 2, 3, 4, 5 and 6;
Laramie	—Horn track back of roundhouse;
Rawlins	—Old wye track;
Rock Springs	—Sweetwater track;
Granger	—Material and ice house tracks;
Evanston	—River track;
	—Almy Branch.

Continued on Page 9.

896 (R). Continued.

Engines heavier than 2200 class must not go on the following tracks:

- Cheyenne
 - Old west No. 1 and No. 2;
 - Power house No. 1 and No. 2;
 - Old spur west end Crow Creek;
 - Outfit track, old Hay Spur;
 - Track between Omaha lead and yard lead east of new roundhouse;
 - Old tank shop track, north of machine shop;
 - Machine shop track, south of blacksmith shop;
 - Sand track, south of sand bins;
 - Cinder loading track at coal chute;
 - All MacArthur tracks;
 - West end of C&S receiving track;
 - East end of C&S delivery track;
 - House track;
- Westvaco
 - Extension to spur;
- Park City Branch
 - All tracks;
- Ontario Branch
 - All tracks.

Engines heavier than 3600 class must not go on Superior or South Pass Branches.

5000 class and heavier engines must not go on the following tracks:

- Howell
 - House track;
- Lookout
 - Wye track;
- Rock River
 - Temporary spur north of snow shed;
- Hanna
 - Enginehouse tracks;
 - No. 4-A mine tracks;
 - House track;
 - Elk Mountain Coal Co. loading tracks;
- Gunn Branch
 - All tracks;
- Rock Springs
 - All belt line tracks from South Pass Branch to main line;
 - Outfit spur, south of coal chute;
 - “Long Lizzy” spur track;
 - Stable track on South Pass Branch;
- Green River
 - Spur track to sand plant and electric light plant;
 - Caboose tracks;
 - Independent Gas and Oil Co. spur at tail of wye;
 - Business car spur;
 - Rip track lead may be used only from east switch to dirt track switch;
 - Peters spur;
 - Heating plant spur;
 - M. of W. tracks Nos. 1 and 2;
 - B&B tracks Nos. 1 and 2;
 - Sand and gravel spur; just west of river bridge;
 - Scale track;
- Peru
 - House track;
- Granger
 - Old wye track at pumphouse;
- Evanston
 - Asylum spur;
 - Scale track;
 - Track connecting legs of wye between east wye track switch and switch east of west wye track switch;
 - Becker spur;
 - West end of house track;
 - Power house track;
 - Beyond a point 300 feet from west switch of No. 1 nor on River tracks;
- Echo
 - Track leading from Park City Branch to turntable;
- Devils Slide
 - Cement spur beyond cross-over switch;
- Morgan
 - Canning factory spur.

Engines heavier than 5000 class must not go on the following tracks:

- Cooper Lake
 - Business track;

Continued Opposite Side.

896 (R.) Continued.

9000 class and heavier engines must not go on the following tracks:

- Laramie
 - Old sand spur beyond a point 200 feet from switch;
- Fort Steele
 - Tie yard;
- Rawlins
 - No. 2 stockyard track;
 - Sheep track off stockyard track;
 - Nos. 1, 3, 4 and 5 coal storage tracks;
 - Nos. 1 and 2 team tracks;
- Hadsell
 - Wool loading track;
- Creston
 - Wye track;
- Wamsutter
 - East turnout water track;
 - Pump house track;
 - East switch of middle storage track;
 - Switch from storage track to west siding;
 - East switch north storage track located west of coal chute;
 - House track;
 - Freight house platform spur;
- Point of Rocks
 - Pump house track.

At Wamsutter, Diesel-electric locomotive “A” units in tandem must not go through cross-overs at east and west ends.

900 (R). Pennsylvania box cars, series 36987-37090 inclusive, inside length 60 feet 6 inches and height over running board 15 feet 2 1/2 inches. The handling of these cars must be closely watched when movements made over yard, warehouse and industrial tracks and tracks adjacent to umbrella and train sheds at passenger stations, to know there is sufficient clearance.

These cars, when loaded to axle capacity, will have gross weight of 169,000 pounds for car and lading, and must not be moved over the following branch lines:

- L. N. P. & W. — Account rail
- S. & E. V. — Account rail and bridges
- Almy Spur — Account rail

They may be operated over main tracks and other branch lines, also passing and yard tracks ordinarily used by through freight trains.

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:

Location	Structure or obstruction	Clearance of engine or car is close at—
At all stations.	Mail cranes.....	Side.
Fifth Subdivision		
Cheyenne.....	Passenger station 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.....	Train order signal.	Side on westward 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.
Sixth Subdivision		
Laramie.....	Signal 5676.....	Side on eastward track.
M.P. 567.86....	Bridge.....	Side on both tracks.
Rock River....	Coal chute 8.....	Side on both tracks.
M.P. 648.....	Signal 6480.....	Side on eastward track.

Continued on Page 10.

900 (S). Continued.

Location	Structure or obstruction	Clearance of engine or car is close at—
Seventh Subdivision		
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.
Eighth Subdivision		
Granger.....	Westward interlocking home 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.....	Signal 9016.....	Side on eastward 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.
Emory.....	Standpipe.....	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 westward track.
Ogden.....	Union Station train sheds.....	Sides.
Park City Branch		
Atkinson.....	Stockyards.....	Side.
Coalville.....	Stockyards.....	Side.

900 (T). 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 (U). 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 turnouts and enginemen must know that cars on adjacent tracks near turnouts 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.

Enginemen, 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 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.

Continued Opposite Side.

900 (U). Continued.

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.

900 (V). A framed copy of Chief Engineer's Drawing No. 53663, revised September 24, 1944, is posted in yard offices and engineer's rooms.

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

The permissible maximum load line as shown on the drawing above a point 3 feet, 3 inches above top of rail is the limit for loads that can be moved between above points and taken through Aspen Tunnel. The permissible maximum load line shown on the print below a point 3 feet, 3 inches above top of rail is due to signals, switch stands, platforms and other structures along the balance of the route. In other words, the permissible maximum load line below 3 feet, 3 inches above top of rail does not refer to Aspen Tunnel.

Attention is called to the table appearing at the right of the diagram showing various heights above top of rail and opposite each height the maximum width of the load that can be handled at that height, when loaded on a car the length of which does not exceed 43 feet from center to center of trucks.

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. 12 feet, 6 inches is the maximum width on load that can be moved, with special handling, between the limiting heights as given in the table at the right hand side of the drawing. Advance approval of the General Superintendent of 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 the car, 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 top of rail.

See C. E. Drawing 53364 for dimensions of loads that can be handled between Los Angeles and Council Bluffs through Bear River Tunnel via McCammon and Granger.

See C. E. Drawing 54313 for dimensions of loads that can be handled between Los Angeles and Kansas City through Bear River Tunnel via McCammon, Granger and North Platte.

See C. E. Drawing 54398 for dimensions of loads that can be handled between Los Angeles and Kansas City through Bear River Tunnel via McCammon, Granger, and Denver.

900 (W). AT&SF 6450 to 6459 inclusive, specially constructed high, wide cars are in service.

These cars must not under any circumstances be handled between Granger and Ogden via Evanston but may be handled to Ogden via McCammon and Bear River Tunnel.

Union Pacific 961000 and 561000 series, oversize wing cars, must not be handled between Granger and Ogden via Evanston, but may be handled to Ogden via McCammon and Bear River Tunnel.

Union Pacific 661000 and 761000 series, oversize wing cars, may be handled to Ogden via Evanston and Aspen Tunnel.

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

1002 (R). On Fifth Subdivision, the tonnage shown must not be exceeded with engines equipped with—

Only one 8½-inch air compressor —3500 tons;

Only one No. 5 air compressor —2500 tons.

1006 (R). Standard brake pipe pressure for main line passenger trains is 110 pounds.

Standard brake pipe pressures in freight and mixed train service are as follows:

Westward	Eastward
Cheyenne to Sherman... 70 lbs.	Ogden to Wahsatch..... 70 lbs.
Sherman to Laramie.... 90 lbs.	Wahsatch to Gr. River.. 90 lbs.
Sixth Subdivision..... 90 lbs.	Seventh Subdivision... 90 lbs.
Seventh Subdivision.... 90 lbs.	Sixth Subdivision..... 90 lbs.
Eighth Subdivision.... 90 lbs.	Laramie to Sherman.... 70 lbs.
Speer to Sherman..... 70 lbs.	Sherman to Cheyenne... 90 lbs.
On all branches on descending grades.... 90 lbs.	Sherman to Denver..... 90 lbs.
	On all branches on descending grades.... 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 Evanston —Westward;
Ogden to Sherman —Eastward.

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

Westward freight trains must stop at Castle Rock and remain standing a sufficient time to recharge train line to full 90 pounds pressure.

1018 (R). Air Brake Rule 1018 is changed to read:

“Speed governor control with high speed control brake equipment must be in operation on passenger train cars so equipped, when handled in passenger trains and must be made inoperative when such cars are handled in freight and mixed trains. Toggle switch located adjacent to air brake control relay cabinet controls operation of speed governor control and must be placed in ‘On’ position for operation and in ‘Off’ position to discontinue operation. Safety valve on D-22 control valve must be adjusted to 75 pounds air pressure when speed governor control is in operation and this safety valve must be adjusted to 60 pounds air pressure when speed governor control is not in operation.”

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 used 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;
Wahsatch —Westward, approaching 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 the train line 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 the brakes and advise the outgoing engineer accordingly.

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 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;

Wahsatch to Uintah, both inclusive —Westward freight trains.

1042 (R). Retaining valves must be used as follows:

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

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.

1093 (R). Following has been added to Air Brake Rule 1093 (I):

If rear end of rear car is not equipped with inside operating lever to steam train line end valve, or if for any reason inside operating lever cannot be operated, trainman must fully open steam train line end valve from ground immediately after train is stopped.

RATING OF ENGINES IN FREIGHT SERVICE, IN TONS OF 2,000 POUNDS

Total weight of trains, exclusive of engine and tender, which the different classes of engines will haul in each direction between stations named, under favorable weather conditions.
A deduction of ten per cent may be made for fast trains. With helpers, Cheyenne to Buford, add 66 $\frac{2}{3}$ per cent.

Type of Engine	Numbers (Inclusive)	Cheyenne to Buford	Buford to Rawlins	Rawlins to Wahsatch	Wahsatch to Ogden	Ogden to Wahsatch	Wahsatch to Rock Springs	Rock Springs to Wamsutter	Wamsutter to Laramie	Laramie to Buford	Buford to Cheyenne		
C 57	22 30	190	201 to 358	975	1850	1850	2600	880	1850	2400	1850	1850	4100
MacA 57	23 $\frac{3}{4}$ 30	206 210	1900 to 1949	975	2000	2000	2800	1000	1900	3000	1900	1900	4100
MacA 63	26 28	212 228	2200 to 2320	1000	2100	2100	4000	1600	2100	3300	2100	2100	4100
MacA 63	26 30	222D	2480 to 2499	1100	2350	2350	4000	1700	2350	3500	2350	2350	4100
SA-C 59	23-23 30	475D	3500 to 3569	2100	4100	4100	4900	3000	4100	6500	4100	4100	4100
2-8-8-2 57	23-23 32	493D 494D 505S	3570 to 3599	2400	4500	4500	4900	3300	4300	6500	4300	4100	4100
CSA 69	22-22 32	400 394 407	3800 to 3839	2100	4100	4100	4900	3000	4100	6500	4100	4100	4100
4-6-6-4 3 69 4 5	21-21 32	404 407 406	3950 to 3969 3975 to 3999 3930 to 3949	2250	4290	4290	5100	3110	4290	6600	4290	4290	5100
4-8-8-4 1 68 2	23 $\frac{3}{4}$ -23 $\frac{3}{4}$ 32	540 545	4000 to 4019 4020 to 4024	3250	6090	6090	6100	4450	6090	8000	6090	6090	6100
TTT 63	29 $\frac{1}{2}$ 30	286 311	5000 to 5089	1600	3400	3400	4900	2000	3400	5500	3400	3400	4100
UP 67	27 31-32	368 372	9000 to 9087	2100	4100	4100	4900	3000	4100	6500	4100	3700	4100
FEF 77	24 $\frac{1}{2}$ 32	266	800 to 819										
FEF 80	25 32	266	820 to 844	1350	2550	2550	1870	2550	3860	2550	2550		
P 77	25 26	163 165 167 184 193	2860 to 2899 2900 to 2911 3114 to 3138 3218 to 3227	930	1750	1750		1290	1750	2610	1750	1750	
MT 73	29 28	256 261	7000 to 7038 7850 to 7869	1210	2240	2240		1660	2240	3390	2240	2240	

EXPLANATION

EXAMPLE: Consolidation engine having 57 inch drivers, cylinders 22 inch diameter and 30 inch stroke, and weighing 190,000 pounds on drivers:

C 57 22 190
 30

Note.—Tipton to Green River, 150 loaded or empty cars is tonnage rating limit.

Tonnage ratings, Wahsatch to Ogden, Buford to Cheyenne, are based on engines equipped with two air compressors.

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