

17 (R). On engine equipped with Mars red oscillating Figure 8 headlight, red headlight must be displayed by engineer in case of break-in-two or other emergency which requires protection.

Enginemen and trainmen of trains moving in opposite direction observing the red indication displayed must take immediate action to stop their train and determine cause.

Display of red headlight does not relieve trainmen nor enginemen from complying with Rule 102 nor any other rule.

Extreme care must be exercised by enginemen to avoid display of red headlight except in case of break-in-two or other emergency.

21 (R). White flags as required by Rule 21 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.	

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 trains or engines will be governed by day indication.

93 (R). 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.

Eastward freight trains must not exceed 15 MPH from cross-over at Tower A to Stop sign at east end of south lead.

Inbound eastward freight trains will head in northwest yard through cross-over west of Crow Creek, and must approach this cross-over expecting to find it occupied.

93 (S). 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 (T). At Laramie, trains must not head in new long leads 1, 2 and 3, west of ice house, unless authorized by dispatcher or yardmaster.

96 (R). A clearance must be received by all trains at Evanston. A clearance received at Evanston by the only section of a first or second-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)	South Pass Branch	Stop sign.
Reliance Junction (M.P. 5.54 South Pass Branch)	South Pass Branch	Stop sign.
Hay Junction (M. P. 2.4 Winton Branch)	Winton Branch	Stop sign.

99 (R). 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). 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 (S). All trains and engines must stop, and a man must be sent ahead to act as crossing watchman, before passing over the following crossings:

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 (T). 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 (U). 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 (V). When cars are handled ahead of engine on Winton, Superior or Keetley Branch, a trainman need not precede the movement over public crossings, but movement must be made at restricted speed.

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.

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 cutting out and turning of helper engines, and westward trains must not use this siding except in emergency, and must then 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.

221 (R). High speed train order transmitters have been installed at the following locations:

Lookout —South side of eastward track in front of telegraph office;

Walcott —North side of westward track opposite telegraph office;

Point of Rocks —South side of eastward track opposite telegraph office.

These transmitters are equipped with a hook on which lantern will be hung when orders are to be delivered at night.

Employes must look out for close side clearance of these transmitters.

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	9890	M.P. 988.70 to M.P. 988.66
5463	M.P. 546.96 to M.P. 547.11		M.P. 983.23 to M.P. 982.89
6575	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	9634	M.P. 963.15 to M.P. 963.12
9603	M.P. 961.15 to M.P. 961.33	9624	M.P. 961.98 to M.P. 961.88
9615	M.P. 961.58 to M.P. 961.98	9616	M.P. 961.65 to M.P. 961.15
9627	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
9803	M.P. 980.76 to M.P. 980.91	7876	M.P. 985.67 to M.P. 985.64
	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. 892.25	6644	M.P. 663.55 to M.P. 663.47
	M.P. 982.65 to M.P. 982.71	6592	M.P. 658.22 to M.P. 658.10
9829	M.P. 982.90 to M.P. 983.00	5478	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 — 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	Peterson

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

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.
Vico.	East switch.	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.

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.

Whenever placards or car certificates become detached or lost in transit, they must be replaced. If both car certificates are missing, proper inspection, in so far as possible, must be made and new car certificates applied. (BE 589-c)

Cars placarded "Explosives" must be placed in through freight trains near the middle of the trains and must be not nearer than the sixteenth car from the engine, or a caboose in service if next to engine, electric locomotive, or motor car, nor the eleventh car from the rear end caboose, if the length of the train will permit. Cars placarded "Explosives" in all cases must be not nearer than the second car from engine, electric locomotive, motor car, or caboose. Where helper engines or electric locomotives are employed ahead of caboose, cars placarded "Explosives" must be separated from such helpers by at least one car. (BE 589-g)

Cars placarded "Explosives" may be placed in local freight trains or mixed trains when authorized herein, not nearer than the second car from the engine, electric locomotive, motor car, or a caboose in service, when placing them near the middle of the train would require additional switching at way stations. (BE 589-h)

Cars placarded "Explosives" must not be placed in through or local trains next to dead engines, placarded tank cars, wooden-frame flat or gondola cars; or carloads of pipe, lumber, poles, iron, steel, or similar lading which by shifting may break through end of car placarded "Explosives" due to rough handling; refrigerator cars equipped

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with automatic refrigeration of the gas-burning type; nor next to cars containing lighted heaters, stoves, or lanterns; or cars with live stock or poultry occupied by an attendant. (BE 589-i)

Cars placarded "Explosives" must not be placed in through or local trains next to cars which bear "Dangerous" placards, unless the remainder of the train consists only of such cars. (BE 589-j)

Placarded loaded tank cars must not be placed in trains next to cars placarded "Explosives" nor next to cars containing lighted heaters, stoves, or lanterns; nor next to refrigerator cars equipped with automatic refrigeration of the gas-burning type; nor next to flat cars with lading such as logs, lumber, rails, or pipe, or gondola cars with such lading higher than ends, that is liable to shift. In through trains such tank cars must not be placed nearer than the sixth car from the engine, electric locomotive or motor car, or a caboose in service, and in local trains not nearer than the second car from engine, electric locomotive, motor car or a caboose in service, when length of train permits and cars other than loaded tank cars are in the train. (BE 589-k)

When handling cars placarded "Explosives" in yards or on sidings, explosive cars must be coupled to engine, electric locomotive, or motor car, protected by a car between. (BE 589-l)

When necessary to switch a train in which there are cars loaded with explosives, such cars should be set over before switching is commenced, and when switching completed, cars should be picked up and replaced in train. All moves with cars loaded with explosives must be made with air brakes cut in and operative and with hand brakes operative.

Cars containing dangerous explosives, class A, poison gases or liquids, class A, and tank cars requiring "Dangerous" placards must not be hauled in a passenger train. If freight train service is not operated such cars may be hauled in mixed trains. (BE 598-v)

In mixed train service or when passengers are carried in a caboose car of a freight train, a car containing a shipment of dangerous explosives, class A, or poison gases or liquids, class A, or a tank car placarded "Dangerous" may be hauled but such cars must not be placed next to cars carrying passengers, and whenever it is practicable to do so cars placarded "Explosives" must be placed between cars not bearing "Dangerous" or "Poison Gas" placards. (BE 589-w)

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".

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). 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;

Laramie —Between east yard and Monolith Cement Plant, and between ice house and yards.

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 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.

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.

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.

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 Jet.	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 Jet. 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.

869 (R). Westward passenger trains handled by coal-burning engine, will take full box of sand at Hanna.

Westward passenger trains handled by oil-burning engines will take full box of sand at Rock Springs, unless due to adverse weather or rail conditions and in judgment of engineer sand required sooner, it will be taken at Hanna.

Eastward passenger trains handled by oil-burning engines will take full box of sand at Rock Springs.

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

At initial terminals, before departure, firemen will go through engine rooms and make careful inspection of gauge indications, oil levels, engine temperatures, shutter controls and will operate the steam separator blow-down valves and soot blower valves of steam generating units, first blowing down steam separator, after which soot blower will be operated. 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 or snow sheds.

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, and will take water at 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 and Spring Valley.

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

- Buford —Beyond one engine length on north pit bank track, middle track and buckling track;
- Buford —Beyond 200 feet west of derails from south end of south pit tracks, except 1900 and 3500 class or lighter engines may operate from east end to spot coal for pump house, and from west end to spot trash car;
- Any track leading off west pit lead, except 2200 and 3500 class or lighter engines;
- West pit lead, beyond 50 feet west of road crossing;
- Ballooning track in new gravel pit;
- Granite Canon —By tippie in new gravel pit;

- Hermosa —Safety spur;
—Beyond switch from rock quarry track to track at rock pile;
- Hanna —4A Mine safety spur;
—By tipples on Elk Mountain Coal Company's loading tracks and tippie 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;
- Fort Steele —East of crusher;
- Superior Branch: —Beyond Bridge 9.26 on Premier loading track;
—Beyond frog of switch leading to No. 1 tippie 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:

- Cheyenne —Old rip tracks 1, 2, 3, 4, 5 and 6;
- Hanna —Nugget Coal Company safety spur;
- Rawlins —West leg of old wye track;
- Rock Springs —Sweetwater track;
- Granger —Gravel pit tracks;
- Leroy —Turntable track;
- Spring Valley —Old mine spur;
- Aspen —Old outfit spur;
- Evanston —Almy Branch;
—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 tippie tracks.

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

- Buford —North pit bank track; middle track; buckling track;
- Laramie —Horn track back of roundhouse;
- Rawlins —Old wye track;
- Granger —Material and ice house tracks;
- Evanston —River track.

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;

Park City Branch;
Ontario Branch.

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:

- Laramie —Track serving freight house platform;
- Howell —House track;
- Lookout —Wye track;
- Rock River —Temporary spur north of snow shed;

Continued on page 7.

896 (R). Continued.

Hanna	—Enginehouse tracks;
Walcott	—S. & E. V. transfer track from west switch of cross-over east of stockyards to 200 feet east of depot;
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;
Vico	—Storage tracks.
9000 class and heavier engines must not go on the following tracks:	
Granite Canon	—Rock quarry spur south of main tracks;
Laramie	—Old sand spur beyond a point 200 feet from switch;
Ramsey	—Coal spur, beyond derail;
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). 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.
Howell.....	Standpipe.....	Side on both tracks.
Rock River....	Coal chute 8.....	Side on both tracks.
M. P. 648.....	Signal 6480.....	Side on eastward track.
Seventh Subdivision		
Wamsutter.....	Signal 7245.....	Side on westward track.
Wamsutter.....	Signal 7246.....	Side on eastward track.
Bitter Creek...	Coal chute.....	Side on eastward track.
Bitter Creek...	Coal chute.....	Top on both tracks.
Rock Springs...	Coal chute.....	Side on both tracks.
Rock Springs...	Standpipe.....	Side on eastward track.
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. 928.31....	Tunnel No. 3.....	Side and top 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.
Emory.....	Signal 9429.....	Side on westward track.
M. P. 960.37....	Bridge alarm bell.	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. 962.68....	Signal 9627.....	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. 979.58....	Bridge.....	Side and top on westward track.
M. P. 982.09....	Tunnel No. 10....	Side and top on westward track.
Gateway.....	Standpipe.....	Side on eastward track.
Ogden.....	Union Station train sheds.....	Sides.
Park City Branch		
Atkinson.....	Stockyards.....	Side.
Coalville.....	Stockyards.....	Side.

900 (S). 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 (T). 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.

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 (U). 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.

900 (U). Continued.

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 (V). 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 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 enginemen 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.

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.

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.

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 66⅔ per cent.

Type of Engine	Numbers (Inclusive)	Cheyenne to Buford	Buford to Rawlins	Rawlins to Wahsatch	Wahsatch to Ogden	Ogden to Wahsatch	Wahsatch to Rawlins	Rock Springs to Wamsutter	Rawlins 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	23¾ 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	3700	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	3700	4100
4-6-6-4 3 69 4 5	21-21 32	404 407 406	3950 to 3969 3975 to 3999 3930 to 3949	2100	4100	4100	4900	3000	4100	6500	4100	3700	4100
4-8-8-4 1 68 2	23¾-23¾ 32	540 545	4000 to 4019 4020 to 4024	2800	5100	5100	4900	3800	5100	6700	5100	5100	4100
TTT 63	29½ 30	286 311	5000 to 5089	1600	3000	3000	4900	2000	3400	5500	3400	2900	4100
UP 67	27 31-32	368 372	9000 to 9087	2100	4100	4100	4900	3000	4100	6500	4100	3700	4100

EXPLANATION

“C”.....Consolidation
 “MacA”.....MacArthur
 “SA-C”.....Simple Mallet
 “MC”.....Mallet
 “CSA”.....Challenger Type
 “TTT”.....2-10-2 Type
 “UP”.....4-12-2 Type

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.