RATING OF DIESEL-ELECTRIC AND STEAM LOCOMOTIVES IN FREIGHT SERVICE IN TONS OF 2000 POUNDS

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

TYPE OF LOCOMOTIVE		NUMBERS (Inclusive)	Pocatello to Idaho Falls	Idaho Falls to DuBois	DuBois to Monida	Monida to Dillon	Dillon to Reeley	Reeley to Silver Bow	Silver Bow to Butte	Butte to Silver Bow	Silver Bow to Apex	Apex to Lima	Lima to Monida	Monida to Idaho Falls	Idaho Falls to Pocatello
C 57	22 / 30	560 to 622	3450	2500	620	4000	975	4000	1050	4000	625	1500	1225	3000	3500
MacA 57	23½ / 30	2000 to 2034	3800	2750	710	4000	1200	4000	1200	4000	725	1625	1275	3200	3700
MacA 63	26 / 28-30	2504 to 2532 2535 to 2564	4000	2950	750	4000	1275	4000	1300	4000	775	1850	1525	3400	3900
MS	23-23 / 30	3500 to 3564	7500	3500	1425	7000	2650	7000	2150	7000	1425	3500	2650	6000	7000
C-SA 69	22-22 / 32	3800 to 3839	7500	3450	1325	7000	2550	7000	2050	7000	1350	3400	2550	6000	7000
TTT 63	29½ / 30	5315 to 5318 5400 to 5414	5600	3250	1025	5000	1925	5000	1730	5000	1150	2450	2075	4100	5000
MT 73	29 / 28	7000 to 7039 7350 to 7869	4000	2750	750	4000	1275	4000	1300	4000	775	1850	1525	3400	3900
P 77	25 / 28	2860 to 2899													
	26 / 25	3218 to 3225	3390	2300	475	4000	750	4000	890	4000	570	1320	1150	2250	3000
	28	3226 to 3227													

TYPE	NUMBERS (Inclusive)	H.P.	NO. UNITS												
EMD	1400 Series F-3	1500	1	2100	2550	640	3000	1100	3000	1030	3000	830	1350	1065	2200	3000
EMD	1500 Series	1500	1	2550	2850	800	3500	1375	3500	1265	3500	1025	1750	1300	3200	3500
ALCO	1600 Series	1500	1	2350	2750	740	3500	1250	3500	1150	3500	930	1550	1175	3000	3500
EMD	1400 Series F-7	1500	1	2550	2850	800	3500	1375	3500	1265	3500	1025	1750	1300	3200	3500
EMD	1000 to 1095	1000	1	1780	2550	400	3000	680	3000	680	3000	460	890	770	1500	3000
ALCO	1100 to 1153	Yd Sw 1000	1	2000	2650	460	3000	830	3000	770	3000	530	1020	880	1750	3000
FM	1300 to 1304	1000	1	2760	2650	500	3000	1000	3000	950	3000	750	1500	1090	2100	3000
Baldwin	1200 to 1210	1000	1	2000	2600	485	3000	910	3000	845	3000	590	910	790	1550	3000
ALCO	1180 to 1195	Rd Sw 1500	1	2100	2650	670	3500	1320	3500	1140	3500	780	1220	1000	2100	3500
FM	1325 to 1329	Rd Sw 1600	1	2760	2650	500	3500	1200	3500	1130	3500	750	1100	1000	2100	3500
FM	1360 to 1370	Rd Sw 1500	1	2900	2750	640	3500	1200	3500	1130	3500	740	1150	1065	2200	3500

NOTE: Rating shown is for single unit. If more than one unit, rating of combined units will govern.

EXPLANATION

C Consolidation
P Pacific
MacA MacArthur
MT Mountain
TTT 2-10-2
C-SA Challenger
MS Mallet

EXAMPLE: Consolidation locomotive having 57-inch drivers, cylinders 22-inch diameter and 30-inch stroke and weighing 191,000 pounds on drivers:

$$C\ 57\ \frac{22}{30}\ 191$$

TOTAL LOADED WEIGHT ON DRIVERS

20,000 to 237,000 pounds	235,000 to 243,000 pounds
Nos. 1400 to 1477 1550 to 1563	Nos. 1600 to 1643

UNION PACIFIC RAILROAD COMPANY
Northwestern District

Idaho Division

Special Rules No. 12

Effective Saturday, August 1, 1953

Superseding Special Rules No. 11

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

E. H. BAILEY,
General Manager

A. McALLISTER,
General Superintendent

C. C. LARKIN,
Superintendent

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

Railroad Watches

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

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

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

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

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

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

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

Where Time Applies

5 (R). At East Kemmerer, Fossil, Dingle, Pescadero, Blaser and Reverse, time shown in time-table schedules and in train orders applies at the end of double track.

5 (S). At Bach, when the superiority of a westward train is restricted at that station by train order, it must not pass Bach station sign until the eastward train has passed Signal 1838, east end of Idaho Falls, or until the wait order has expired.

Signals

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

7 (S). When starting trains with Diesel-electric helper on rear end of train, trainmen will be stationed in a position to relay signals to start from head end to crew on helper engine.

When it is not possible to relay signals, the following method will be used:

When ready to move, engineer on head end will make a 15-pound automatic brake pipe reduction, return brake valve to running position and wait three minutes. Engineer on helper engine will start three minutes after his gauge shows brake pipe pressure being restored.

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

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

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

Reduce and Resume Speed Signs

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

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

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

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

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

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

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

Engine Whistle Signals

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

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

14 (V). At Pocatello, whistle signal 14(l) must be sounded for fire road crossing in Montana freight yard and engine bell must be ringing approaching and passing over this crossing.

Whistle signal 14(l) will not be sounded for fire road crossing at Sherman Street, Pocatello, but engine bell must be ringing approaching and passing over this crossing.

14 (W). At Glenns Ferry, when moving on main tracks, whistle signal 14(l) for Commercial Street crossing must be modulated as much as possible.

On tracks other than main tracks whistle signal 14(l) need not be sounded for this crossing except in emergency, bnt engine bell must be ringing.

14 (X). In addition to locations listed in Operating Rule 14(l), engine whistle must be sounded and bell rung approaching private crossings when view of crossing is obscured or when it can be seen that persons or vehicles are approaching or in the vicinity of the crossing.

Headlights

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

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

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

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

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

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

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

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

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

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

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

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

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

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

17 (V). At Orchard, eastward train holding main track to meet opposing westward train must immediately after stopping, display red headlight if so equipped, or white headlight burning bright and neither may be extinguished or dimmed until it can be seen siding or junction switch is lined for diverging route and approaching train dims its headlight.

Markers and Rear End Lights

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

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

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

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

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

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

Classification Signals

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

Indicators

24 (R). Referring to Operating Rule 24: Helper engines will display their engine number in indicators, except, when used on head end of train, train number will be displayed.

Going Under Engine At Lima

26 (R). At Lima, after a passenger train has made station stop, when necessary for employes to go under engine, incoming engineer will leave train brakes applied with a 20-pound brake pipe reduction, engine brakes applied in service position with 45-pound brake cylinder pressure, place reverse lever on center, open cylinder cocks, close throttle and place pin in throttle rest. Employes, before going under train, will display proper blue signals, open relief valve on steam chest and place chains under driver and under mate wheel on opposite side. Outgoing enginemen will fully comply with Air Brake Rules 1025 and 1025 (C) before departure.

Switch Lights

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

27 (S). Switch lights will not be used on branch lines except as follows:

Ketchum Branch;
Twin Falls Branch;
Yellowstone Branch—between Idaho Falls and Ashton;
Yellowstone Branch—between Ashton and West Yellowstone, from June 15 to Sept. 20, both inclusive.

Where switch lights are not used, trains and engines must approach facing point switches prepared to stop if switch is not in normal position.

Stopping Trains at Stations

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

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

28 (T). At Kemmerer, Trains 17 and 18 must make second stop when required to receive or discharge sleeping car passengers.

Stopping Train 300 Feet From Fouling Point

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

Train Registers

83 (R). At McCammon, information required by Operating Rule D-83 need not be received by westward first-class trains except westward first-class trains from Utah Division.

83 (S). Information required by Operating Rules S-83 and D-83 need not be obtained by Nos. 105 and 106 entering CTC territory.

Starting Passenger Trains—Pocatello

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

Clearing Trains—Rule 251 Operation

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

When instructed by train dispatcher to clear a train or trains, the following will govern:

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

Meeting of Trains

89 (R). At Enrose, when a westward train is to meet an opposing train and hold the main track, such westward train must not pass east switch Enrose until the eastward train has passed the home signals at east end of Notus.

89 (S). At Silver Bow, when an eastward train has been directed by train order to meet a westward train at that station, eastward train must take siding through cross-over at west end of siding and westward train will stop to clear this cross-over until opposing train has cleared main track.

Movements in Yards

93 (R). At Pocatello, westward trains using westward running track must not pass yard office without receiving proceed signal or verbal instructions from yardmaster and must receive proceed signal from switchtender at east end of receiving yard before passing switch from running track to receiving yard.

93 (S). At Nampa, between Cantilever Signals 4566 and 4572 first-class trains must move at restricted speed, expecting to find main tracks occupied.

All freight trains entering Nampa Yard from Boise line must stop at Signal B-4677 and then be governed by indication of signal.

At Nampa, trains or engines using or crossing over main track must know that all overdue first-class trains have arrived or departed except as follows:

At 9th Avenue, trains or engines may accept proceed signal from herder as authority to cross over or use main track between Signals 4571 and 4572.

Westward trains using Kuna Line may accept signal from herder at Kuna Line Junction as authority to proceed on main track to passenger station where proper train orders must be secured. If proceed signal not received, trains must stop before passing Signal 4565 and not proceed unless permission received from yardmaster or dispatcher.

Herders at 9th Avenue and Kuna Line Junction must not give proceed signals unless it is known that all switches to be used are properly lined and all first-class trains have arrived or departed.

93 (T). At Ketchum, movements around balloon track will be made to the right, counter-clockwise.

Clearances

96 (R). Unless otherwise provided, all trains must receive clearance at:

Kemmerer	Ashton	Nampa
Montpelier	Lima	Twin Falls
Idaho Falls		

Trains are not required to receive clearance as per Operating Rule 96 at initial stations which are not train order offices.

When there is no operator on duty, trains are not required to receive clearance as per Operating Rule 96 at:

Richfield	Emmett	Marsing	Homedale
Oakley	Vale	Robinette	Victor

96 (S). A clearance received at Montpelier or Lima by the only section of a regular train will confer the same authority as when received at their initial station.

Flag Protection

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

Last paragraph of Operating Rule 99 is changed to read:

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

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

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

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

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

Cumberland
Grace
Aberdeen
Teton Valley
Mackay between Aberdeen Jct. and Mackay
East Belt
West Belt
Goshen
Yellowstone between Ashton and West Yellowstone
Raft River
Oakley
Wells
Hill City
Stoddard
Homedale
Brogan
Idaho Northern between Emmett and McCall
New Meadows
Oregon Eastern between Vale and Burns
Wilder
Ketchum between Richfield and Ketchum
Payette
Homestead
North Side

99 (U). On following branches, between 6 A.M. and 6 P.M. daily, a speed of 10 MPH must not be exceeded by all extra trains approaching and moving on curves and where view is obscured, looking out carefully at all points for track cars and men working on track without flag protection. Speed on curves must be such as to be able to stop within one-half the distance track is seen to be clear and whistle signal 14 (l) must be sounded frequently:

Grace
Mackay
Aberdeen
Goshen
East Belt
West Belt
Oakley
Raft River
Hill City
Stoddard
Homestead
Homedale
Payette
Wilder
Brogan

Dead Engines

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

Cars or Train Left Behind

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

Riding on Ends of Engines

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

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

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

Kemmerer—main track movements between cross-over opposite Snake lead and west yard limit sign;

Montpelier—main track movements;

Pocatello—main track movement between east and west yard limit signs and on eastward and westward running tracks, retarder yard.

Public Crossings

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

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

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

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

103 (W). At Pocatello, engines or cars must not be left standing on fire road crossings and they must not be blocked longer than necessary to make switching movements.

Flagman must precede movement of shop yard engine over fire road crossing at point where engine crosses pavement between roundhouse and backshop.

At Pocatello, on old Montana main track, all trains and engines must approach Oak Street at not to exceed 5 M.P.H. and be prepared to stop if crossing is occupied.

103 (X). At Shoshone, to avoid obstructing view of highway traffic, westward trains and engines using westward siding must, while standing, remain 200 feet east of Greenwood Street.

103 (Y). On Ketchum Branch, at M.P. 68.24, trains and engines must stop clear of Baldy Mountain Ski Lift crossing. If crossing is clear train may then proceed sounding whistle frequently and ringing bell. In stormy weather or when other conditions require, a flagman must be sent ahead to act as crossing watchman.

103 (Z). At McCall, before crossing Third Street (State Highway N-15), trains must come to a complete stop at a point not less than one foot or more than 20 feet from boundaries of this street.

At Burley, city ordinance prohibits any engines, cars or trains to stand on nny street crossing so as to interfere with street traffic for longer than five minutes.

Switches

104 (R). No. 14 turnouts are installed at all power operated switches in C.T.C. territory and at extreme east end of Pocatello yard, M.P. 211, and at Granger, except east switch of eastward siding.

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

104 (S). Switches will be set normally:

Soda Springs	*—Tail of wye switch on Conda Branch*	*—for east leg of wye;*
Pocatello	*—Switch to conditioning tracks west and PFE ice dock No. 2*	*—for ice dock No. 2;*
Minidoka	—Switch at coal chute at end of Twin Falls Branch main track	—for siding;
Bliss	—Switch at end of North Side Branch main track	—for siding;
Buhl	—Main track switch, east leg of wye	—for wye;
Nampa	—Junction switch	—for line via Boise;
Nampa	—Idaho Northern junction switch	—for Idaho Northern Branch;
Nyssa	—Homedale Branch switch	—for siding;
Malheur Jct.	—Oregon Eastern Branch switch	—for siding;
Jerome	—East end of team track	—for team track;
Kemmerer Branch	—M.P. 5.5—Derail on main track, in derailing position.	

104 (T). At Pocatello, eastward freight trains must not pass cross-over at Sherman Street unless proceed signal is received from switchtender.

At Pocatello, switches for movements over cross-over between main tracks at east and west end of passenger yard will be handled by yardman. Trains entering and leaving passenger yard must stop to clear cross-overs unless proceed signal is received from yardman.

104 (U). At Lima, spring switch derail is located in main track at west end of yard and must be locked in derailing position when not being used.

Sidings and Side Tracks

105 (R). At stations where eastward and westward sidings are shown, the eastward siding is east of the westward siding.

105 (S). At Cokeville, westward trains taking siding must use inside siding next to main track. Inside switch at east end of siding must be left lined for eastward siding. Eastward trains taking siding must use outside siding. Inside switch at west end of siding must be lined for westward siding.

105 (T). At American Falls, set-outs will not be made on No. 2 siding unless authorized by train dispatcher.

At Rupert, Track 2 will be used as siding; Track 1 will be used for making set-outs and storage of cars.

At Ontario, cars must not be set-out on south siding at any time.

105 (U). At Ontario, when necessary to clear main track, eastward trains will use north siding and westward trains will use south siding unless otherwise instructed by train dispatcher.

105 (V). Trainmen and enginemen must expect to find cars on the following tracks at all times:

Ucon	—siding;
St. Anthony	—West Belt siding;
Bach	—both sidings;
Minidoka	—branch track 2 (lead to branch yard);
Orchard	—south siding;
Sonna	—siding;
Beatty	—siding;
Perkins	—siding;
Payette	—No. 2 siding;
Summer Camp	—siding.

105 (W). At Minidoka, Twin Falls Branch ends to clear switch entering siding at coal chute.

At Ontario, Oregon Eastern Branch ends to clear switch entering siding at Malheur Jct.

At Bliss, North Side Branch ends to clear switch entering south siding.

105 (X). At Kemmerer, when visibility on siding is restricted by train or cars occupying westward main track, trains or engines, except helper engines, moving in either direction on siding must be preceded by a flagman on curves. In addition, while moving on curves on siding or yard tracks, trains and engines, including helper engines, must not exceed 5 MPH.

Brakemen and Firemen Stopping Trains

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

Movements at Stations

107 (R). At Pocatello, an employe must walk just ahead of engine or leading car to protect all switching and train movements on passenger yard tracks in front of passenger depot.

107 (S). At Montpelier, Lima and Glenns Ferry, when an engine or passenger train is being serviced on main track, movement must not be made on adjacent track past such train or engine unless protected by an employe walking just ahead of engine or leading car.

107 (T). At Shoshone, when an eastward passenger train is due, authority must be obtained from train dispatcher before a westward train may move by passenger depot.

At Minidoka, when an eastward or westward passenger train is due, authority must be obtained from train dispatcher before any movement may be made on siding immediately adjacent to depot.

Movements Against Current of Traffic

D-151 (R). At Montpelier, Pocatello, Shoshone and Glenns Ferry 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.

D-151 (S). At Reverse, dwarf signal located between main tracks, governs movement against current of traffic from eastward main track to single track over spring switch.

Dwarf signals located between main tracks, governing movements against current of traffic from double track to single track through spring switch are located as follows:

Signal 392—west of spring switch east end Kemmerer;
Signal 1084—west of spring switch Dingle;
Signal 1207—east of spring switch Pescadero;
Signal 1776—west of spring switch Blaser.

When stopped by one of these signals, a train or engine moving against current of traffic through spring switch to single track, must be governed by Operating Rules 99, 509 and 524. In addition, flag protection must be provided against movements on opposite main track.

Speed Restrictions

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

Train Order Signals

200 (R). On branches, except Twin Falls and Yellowstone Branches, lights will not be kept burning at night in train order signals. Trains must be governed by day indication of such signals.

221 (R). At Reverse, when train order signal indicates Stop, westward trains must stop before passing Signal 3931 unless proceed signal is received from operator.

Movement of Trains by Block Signals

251 (R). At Pocatello, between passenger station and end of CTC sign near M.P. 216.1, trains and engines will run with reference to other trains and engines in the same direction by block signals whose indications will supersede the superiority of trains. In making such movements, care must be exercised to avoid delay to first-class trains.

Centralized Traffic Control System

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

266 (S). At Pocatello, switchtender must not permit a westward freight train to occupy Second Subdivision main track without permission from dispatcher.

266 (T). At Glenns Ferry, in addition to receiving Clearance Form B, conductors of eastward Second Subdivision freight trains must obtain permission from dispatcher before occupying main track.

266 (U). At Pocatello, CTC Clearance From B or Form C need not be received by trains or engines entering CTC territory between M.P. 216.1 and M.P. 216.5 but movements must be governed by signal indications and instructions from dispatcher.

At Minidoka, Shoshone and Bliss, Clearance Form B need not be received by branch line trains or engines for movements at those stations but must be governed by signal indications and instructions from dispatcher.

At Bliss and Ticeska, Clearance Form B need not be received by light engine leaving those stations but such engines must be governed by signal indications and instructions from dispatcher.

267 (R). At Minidoka, when Signal 2724 or Signal 2731 displays Stop indication and at Huntington when Signal 3893 or Signal 3898 displays Stop indication, member of crew of train stopped by such signal must communicate with dispatcher for instructions.

If movement is authorized by dispatcher, train may proceed without receipt of Clearance Form C, but movement must be made at restricted speed and must be preceded by flagman to next signal.

Automatic Cab Signal System

464 (R). Automatic Cab Signal Rule 464 is changed to read as follows:

"After cab warning whistle sounds longer than six seconds, the fireman, or a trainman in the cab, must go to the engineer immediately and ascertain cause and when conditions require, must take immediate action to stop train."

Slide Detector Signals

509 (R). Between M.P. 255 and east end Humphrey siding, block signals are connected with rock slide protection fence.

Westward Signals 2547 and 2561 are equipped with a lower arm which is painted yellow and has a pointed end.

When lower arm is horizontal, or displays a yellow light at night, and upper arm indicates Proceed, trains may proceed without stopping, but must proceed at restricted speed, looking out for rocks on track.

Dual Control Switches

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

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

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

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

513 (S). At Pocatello, dual control switches and remote control signals are in service at east end of Departure Yard.

Westward freight trains arriving Pocatello receiving green-over-red or yellow-over-red indication at this location will proceed on main track to cross-over at M.P. 213.3 and enter yard at that point.

When movement is made against current of traffic, except on signal indication, movement must be preceded by a flagman to sign reading: "End of Block Eastbound" near M.P. 209.5 or sign reading: "End of Block Westbound" near M.P. 212.5.

When movement is authorized against current of traffic by signal indication, such authority applies only to sign reading "End of Block Eastbound" or "End of Block Westbound."

When Signal 2095 or Signal 2124 displays Stop indication, trains and engines governed by these signals must send flagman ahead and must wait ten minutes before proceeding at restricted speed to next signal.

Outfit Cars

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

Carbon Monoxide Fumes

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

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

Trains Stopped in Tunnels

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

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

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

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

Shutting Off Diesel Propulsion Engines

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

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

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

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

Power Transmission Wires

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

Diesel-Electric Locomotives

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

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

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

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

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

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

Cars Partly Loaded or Unloaded

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

Handling of Explosives and Inflammables

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

Placards on Cars

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

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

Switching Cars Containing Explosives or Poison Gas

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

Continued on opposite side.

802 (S). Continued.

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

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

Switching of Cars Containing Dangerous Articles

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

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

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

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

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

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

Position in Freight Train or Mixed Train of Cars Containing Explosives

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

(1) When the length of freight train or mixed train will nor permit it to be so placed, it shall be placed near the middle of the train.

(2) When transported in a freight train made up in "blocks" or classifications, a car placarded "Explosives" shall be placed near the middle of the "block" or classification in which moving, but not nearer than the sixth car from both the engine or occupied caboose.

(3) When transported in a freight train or a mixed train performing pickup and/or setoff service, it shall be placed not nearer than the second car from both the engine or occupied caboose, except as provided in paragraph (1) of this section.

Separating Cars Placarded "Explosives" From Other Cars in Train

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

1. Occupied passenger car, other than car occupied by gas handlers or military personnel accompanying shipments.
2. Occupied combination car, other than car occupied by gas handlers or military personnel accompanying shipments.
3. *Any car placarded "Dangerous" or "Dangerous—Class D Poison."*
4. Engine.
5. Any car placarded "Poison Gas."
6. Wooden underframe car (except on narrow gauge railroads).

Continued on opposite side.

802 (S). Continued.

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

Position In Train of Loaded Placarded Tank Car

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

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

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

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

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

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

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

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

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

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

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

Continued on page 8.

802 (S). Continued.

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

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

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

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

Position in Train of Cars Containing Class D Poison

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

Empty Tank Cars

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

Track Scales

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

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

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

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

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

Retarder Yard—Pocatello

802 (U). Switching movements handled by Car Retarder System are controlled by signal indications and verbal instructions over radio or loud speakers.

Hump signal, located at crest of the hump, governs eastward movements on hump lead. Hump signal repeaters repeat the same indications displayed by the hump signal. The indications of these signals are as follows:

Color	Indication
Red	—Stop.
Yellow	—Proceed not exceeding 3 MPH.
Green	—Proceed not exceeding 6 MPH.
Flashing Red	—Back up.

Trimmer signal, located at crest of the hump, controls westward movements from west end of classification yard. Trimmer signal repeater repeats the same indications displayed by the trimmer signal. The indications of these signals are as follows:

Color	Indication
Red	—Stop, and not proceed except on instructions from hump yardmaster.
Green	—Proceed.

Continued on opposite side.

802 (U). Continued.

Hump and trimmer signals are controlled by yardmaster, engine foreman or other designated employe.

An air whistle located on the compressor building will be controlled from hump yardmaster's office and Tower A. The following whistle signals will be used:

1 long blast	—Humping operations are about to start.
2 short blasts	—Call for maintainer.
3 short blasts	—Call for section foreman.

Ore Trains

802 (V). From Gay to M.P. 9, Gay Branch, ore trains must not exceed 65 cars when handled by steam locomotive or Diesel-electric locomotive with dynamic brake inoperative and must not exceed 90 cars when handled by two or three unit Diesel-electric locomotive with dynamic brake in operation.

Cars with Roller Bearings

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

Switching Cars With Air Brakes Cut In

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

804 (T). Air brakes must be cut in and operative on all cars handled by yard and train crews as follows:

Between Twin Falls and McMillan;
Between main track and city yard, Jerome.

Use of Hand Brakes

804 (U). At Kemmerer, at least six hand brakes must be set on east end of trains and cars left in yard.

At Montpelier, at least four hand brakes must be set on west end of cuts of cars left on any track in west yard.

At Glenns Ferry, at least six hand brakes must be set on cars left in west end of west yard and east end of east yard.

At Nampa, at least six hand brakes must be set on cars left on all ice house tracks, west yard.

804 (V). At Lima, cars switched into any track must have hand brakes set to secure them. This applies in all cases, whether cars are cut off in a switching movement or shoved into any track.

Trainmen of all freight trains arriving Lima, will set sufficient hand brakes to properly secure train but in no case must there be less than eight hand brakes set, number of cars permitting. All brakes other than power type must be set with club.

Train crews will be held responsible for properly securing cars in yard, especially when cars are coupled to other cars already standing. Sufficient hand brakes must be set on all cars standing to hold them if other cars are coupled to them. It is not permissible to kick or drop loads westward nor kick empties westward on a clear track unless there is a man at the brake, and in no case allow single cars except cabooses to run free in a clear track.

804 (W). At Pocatello, P.F.E. ice house and U.P. car cleaning yard tracks, P.F.E. shop yard tracks, drill tracks, stock yard tracks and main tracks west of Gould Street are on descending grade westward. At least ten hand brakes must be set on cars left on P.F.E. shop yard tracks. At least six hand brakes must be set on cars left on P.F.E. ice house and U.P. car cleaning yard tracks, drill tracks and main tracks west of Gould Street.

804 (X). At Gay, cars set out must have slack bunched and hand brake set on each car. Runaway switch at east end of Gay must be lined for runaway track at all times except when train is passing switch.

Pushing Streamline Trains

805 (R). Operating Rule 805 is cancelled.

Position of Cars in Trains

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

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

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

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

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

Derricks, Snow Plows, etc.

807 (V). Derricks 0305, 02003, 03035, 010002 and 0308 must not be handled with less than one tender and one car between machine and locomotive over Raft River, Ketchum, Boise, Stoddard, Wilder and Homestead Branches.

Derricks 0305, 02003 and 010002 must not be handled with less than one tender and one car between machine and locomotive over New Meadows Branch.

Derricks 03035 and 0308 must not be handled over New Meadows Branch.

Rotary Snow Plows 051, 052, 053 and 099 must not be handled with less than one tender and one car between machine and locomotive over Raft River, Ketchum and Wilder Branches, and must not be handled over Boise, Stoddard, Homestead and New Meadows Branches.

807 (W). Derrick 0305; Pile Driver 03113 and Snow Plows 051 and 099 must be separated from the locomotive and from each other, by at least 3 cars of not over 169,000 pounds gross weight over the Main Track between Lima and Silver Bow.

Derricks 0305, 02003, 03035 and 010002; Pile Drivers 02081, 02082 and 03113; Snow Plows 051 and 099, must be separated from the locomotive and from each other by at least 3 cars of not over 169,000 pounds gross weight over the Grace Branch, East Belt Branch and West Belt Branch.

807 (X). 150 ton Derrick 02006, and 300 ton Derrick 03043; Pile Drivers 03113 and 0321; Rotary Snow Plows 051, 052, 053 and 099; Freight Cars 210,000 lbs. or over gross weight, must be separated from the engine and each other by at least 3 cars of not over 169,000 pounds gross weight when passing over the following bridges:

Second Subdivision—Bridge 239.78.
Third Subdivision—Bridge 536.47.

Helper Engines

808 (R). Single helper engine may be used behind all steel cabooses as well as cabooses listed below, Fossil to Kemmerer, Glenns Ferry to Bliss and Glenns Ferry to Reverse, unless car or cars listed in Operating Rule 807 are in train:

2560	3156	3166	3344
2641	3157	3167	3348
2642	3158	3169	3353
2644	3159	3170	3359
2694	3160	3178	3387
3150	3161	3179	3402
3152	3162	3181	3409
3153	3164	3182	3416
3154	3165	3341	

Conductors will consider condition of authorized caboose in each instance and cut helper in where, in their judgment, there is any hazard indicated.

When Diesel-electric helper cannot be used behind caboose it will be placed on head end of train.

808 (S). Helper locomotive must not be doubleheaded except as follows:

When Diesel-electric helper locomotive cannot be used behind caboose under provisions of Special Rule 808 (R);

Westward Dubois to Monida; eastward Lima to Humphrey and between Navy and Apex when tonnage of train does not exceed 65 percent of the combined tonnage rating of road and helper locomotives;

Between Dillon and Silver Bow, King Hill and Ticeska and Hammett and Reverse when tonnage of train does not exceed 75 percent of the combined tonnage rating of road and helper locomotives.

Not more than two locomotives may be on head end of train.

At Silver Bow, when trains are doubleheaded, helper engine must be cut off while cars are being set out or picked up.

Running Locomotives Backward

808 (T). Operating Rule 808 (A) is changed to read:
"Steam locomotives and Diesel-electric locomotives other than Diesel road-switch and switch locomotives must not be run backward in road service where wye tracks or turntables are available, except in an emergency. When back-up movement is necessary, engineer must secure authority from train dispatcher."

Inspection of Trains

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

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

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

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

811 (U). In addition to making inspection of train as often as practicable as per Operating Rule 811, freight trains (both steam and Diesel power) must stop and be inspected at the following points:

Bancroft	—Eastward and westward;
Minidoka	*—Westward;*
Dubois	*—Eastward;*
Dillon	—Eastward and westward;
Ashton	—Eastward and westward;
Gerrit	—Eastward;
Reas Pass	—Eastward;
Arco	*—Eastward and westward;*
Henry	*—Eastward and westward;*
Jerome	*—Eastward and westward;*
Juntura	*—Eastward and westward.*

At these points walking inspection must start from rear and proceed until entire train is inspected and trainman must be at head end of train to make careful roll-by inspection.

On freight trains when visibility is such that trains cannot be inspected while running, train must stop for inspection at least once in each 35 miles.

Log trains must use retaining valves in 20-pound position Tamarack to Glendale and in 10-pound position Glendale to Council and such trains must stop and be inspected at Tamarack and Glendale.

All eastward freight and mixed trains will stop and remain standing for at least 10 minutes at Big Eddy and Banks for inspection of train and to permit wheels to cool.

811 (V). In addition to inspection required by other rules, streamline trains must be given close running inspection by rear trainman and engineman on the following curves:

Second Subdivision—	
M.P. 240.25 and 240.50	—reverse curves;
M.P. 317, westward	—single curve;
M.P. 315 and M.P. 316, eastward	—reverse curves;
M.P. 342.50 and M.P. 343	—single curve.
Third Subdivision—	
M.P. 405.50	—single curve;
M.P. B-440	—reverse curves;
M.P. 516	—single curve.

After rear trainman has completed inspection on the above curves, if everything is all right, he must give engine crew hand signal to proceed; this signal must be acknowledged by two long sounds of engine whistle.

If anything unusual is detected, train must be stopped and walking inspection of train must be made before proceeding.

Hot Boxes

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

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

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

Closing Doors on Freight Cars

855 (R). Referring to Operating Rule 855:

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

Duties of Engine Men

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

Rule 816;

Rule 869, first paragraph;

Rule 869 (A), first paragraph;

Rule 884, first sentence;

Rule 885, first sentence.

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

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

869 (S). Engines will take only enough water at Granger to make Kemmerer.

Engines will take water at Blaser only in emergency.

Eastward engines will not take water at Hammett unless unable to make Glenns Ferry without additional water.

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

Movement of Diesel Locomotives

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

Duties of Employes on Diesel Locomotives

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

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

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

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

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

This applies to the following trains:

Nos.	Between
11– 12	Granger and Huntington
17– 18	Granger and Huntington
105-106	Granger and Huntington

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

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

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

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

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

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

Oil-Burning Engines

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

Leaving Locomotives Unattended

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

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

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

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

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

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

Fireman Handling Locomotive

876 (R). Operating Rule 876 is cancelled.

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

Use of Blow-Off Cocks and Sludge Removers

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

Diesel Motors Cut Out

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

Speedometers

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

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

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

Inspecting Locomotives

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

Diesel Equipment and Control Locker Seals

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

800 Class Locomotives

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

Movements Around Fueling Stations, etc.

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

Rules for Hostlers

894 (R).

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

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

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

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

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

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

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

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

Track Restrictions

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

Exceptions: Tracks which may be used by 0-6-0 or heavier engines may be used by Diesel switch engines.

Tracks which may be used by heavy MacArthur engines may also be used by 3500, 3800 and 3900 class engines.

Tracks which may be used by 2-10-2 engines may also be used by 800 class engines.

Location	Track	Heaviest engine permitted
Granger	Spur north side of yard tracks opposite depot	Heavy MacArthur.
Kemmerer	Yard track 2 west of snake lead	Heavy MacArthur.
	Repair tracks	Heavy MacArthur.
	Frontier Supply Company's track	Heavy MacArthur.
	Town track south of water softener	Heavy MacArthur.
	North enginehouse lead and enginehouse tracks 5 and 6	Heavy MacArthur.
	Engine storage tracks	Heavy MacArthur.
	Spur to Frontier Supply Company power house	Heavy MacArthur.
	Coal chute spur	Heavy MacArthur.
	West cross-over of ladder track between eastward and westward main tracks at M.P. 40.25	2-10-2.
	Diamondville spur	Heavy MacArthur.
Kemmerer Branch	All tracks	Consolidation.
Cumberland Branch	All tracks	Mallet.
Glencoe Branch	All tracks	Consolidation.
Elkol Branch	All tracks	Mallet.
Blazon Branch	All tracks	Mallet.
Moyer Jct.	*Wye*	*Mallet*
Leefe Spur	*Box car loading track*	*None permitted in front of mill account close clearance.*
Montpelier	Depressed portion of cinder pit track	None permitted
	Town track	Consolidation.
	Repair tracks	Heavy MacArthur.
	Spur west of repair track storehouse	Heavy MacArthur.
	Track in all stalls	Heavy MacArthur.
	Coal chute tracks	Heavy MacArthur.
	Spur to power house	Heavy MacArthur.
	Both team tracks	Heavy MacArthur.
	Wye	Heavy MacArthur.
Cavanaugh	Team track west end	Heavy MacArthur.
Manson	Team track west end	Heavy MacArthur.
Conda Branch	All tracks	Heavy MacArthur.
Monsanto Spur	*Furnace room track*	*None permitted beyond end of ballasted track.*
Soda Springs	Team track	Heavy MacArthur.
Alexander	Stock track from west switch to stockyard	Heavy MacArthur.
Grace Branch	All tracks	Heavy MacArthur.

Continued on page 12.

Location	Track	Heaviest engine permitted
Bancroft	Mill spur south of main track	Heavy MacArthur.
	Wye tracks	Heavy MacArthur.
Topaz	Team track	Heavy MacArthur.
McCammon	Elevator track west end of yard	Heavy MacArthur.
Inkom	Team track, east end	Heavy MacArthur.
	Cement spur, to bridge only	2-10-2.
	Ballast quarry spur	*See Note below.*
Idaho Falls to Silver Bow	Main track	800, 4000, 5090 to 5099 and 9000 class engines must not be operated.
Gibson	Team track	Light MacArthur.
Blackfoot	Rip track	Light MacArthur.
	Asylum track from Idaho Potato Growers warehouse west	Heavy MacArthur.
	Storage tracks between wye switches	Heavy MacArthur.
	Enginehouse tracks	Heavy MacArthur.
	Roundhouse tracks	Consolidation.
	Farmers spur	Light MacArthur.
	Keefers spur	Light MacArthur.
	Dusty spur	Light MacArthur.
	Elevator spur	Light MacArthur.
	Sugar factory coal trestle	None permitted.
	Anderson spur	See Note below.
Mackay Branch	All tracks outside of Blackfoot yard limits	Consolidation.
Thomas Branch	All tracks	Consolidation.
Aberdeen Branch	All tracks	Consolidation.
Scoville	Power house spur at Navy Proving Grounds, and track leading to gun emplacements beyond point 300 feet north of south switch to this track	None permitted.
Mackay	That part of lowline spur by smelter building	None permitted.
Wapello	Spur track	Heavy MacArthur.
Firth	Team track	2-10-2.
	Industry track	2-10-2.
Goshen Jct.	Wye tracks	Heavy MacArthur.
Goshen Branch	All tracks	Light MacArthur.
Shelley	All sugar factory tracks (track next to sugar house may be used by heavy MacArthur)	Consolidation.
	Team track	2-10-2.
	Elevator spur	Heavy MacArthur.
	Seed house spur	Heavy MacArthur.
Cotton	Industry track	2-10-2.

Note.—*At Inkom, on ballast quarry spur, engines must stop before passing loading conveyor and know that chute is raised and will properly clear engine.*

At Blackfoot, MacArthur type engines must not go on Anderson spur unless equipped with three-point trucks.

Continued on opposite side.

Location	Track	Heaviest engine permitted
Bach	Treating plant spur	Heavy MacArthur.
Idaho Falls	Brewery spur	Consolidation.
	Old Butte main line	Heavy MacArthur.
	Team spurs 1, 2 and 3	Light MacArthur.
	Scale pocket track	Light MacArthur.
	House tracks 2 and 3	Light MacArthur.
	Rogers Brothers spur	Light MacArthur.
	Old rip track	Light MacArthur.
	Honey spur	Light MacArthur.
	Gas spur	Light MacArthur.
	Coal storage tracks	Light MacArthur.
	Depressed track	Light MacArthur.
	Rip tracks	Light MacArthur.
	Muir spur	Light MacArthur.
	East Side Lumber Co. spur	Heavy MacArthur.
	Trestle on Agren coal spur	None permitted.
	Coach track	Heavy MacArthur.
	Bonded warehouse track	Heavy MacArthur.
	Stock track	Heavy MacArthur.
	Agren Coal spur	Light MacArthur.
Gay Spur	All tracks	All except 800, 3900, 4000, 5000 and 9000 class may be operated.
Yellowstone Branch	All tracks Idaho Falls to Ashton, except main track at Idaho Falls.	Heavy MacArthur.
	All tracks Ashton to West Yellowstone outside yard limits Ashton (Engines 3134 to 3138 may be operated)	*Heavy MacArthur.*
East Belt Branch	Orvin to Lincoln Jct.	Light MacArthur.
	All other tracks	Consolidation.
West Belt Branch	All tracks	Consolidation.
Annis Branch	All tracks	Consolidation.
Teton Valley Branch	All tracks (Engines 3134 to 3138 may be operated)	Consolidation.
Dubois	Storage track	Light MacArthur.
Lima	Repair track	Heavy MacArthur.
	Steam derrick tracks	Heavy MacArthur.
	Depressed track	Heavy MacArthur.
	Machine shop spur	Heavy MacArthur.
Dell	Team track	Heavy MacArthur.
Barratts	Team track	Heavy MacArthur.
Dillon	Stock track between wool warehouse and stockyard	Heavy MacArthur.
	Set out track	Heavy MacArthur.
Bond	Team track	Heavy MacArthur.
Melrose	Team track	Heavy MacArthur.
Divide	Coal trestle	None permitted.
Silver Bow	N. P. outfit spur	Heavy MacArthur.
Butte	Enginehouse track 4	Heavy MacArthur.
	Cinder pit track	Heavy MacArthur.

Continued on page 13.

Location	Track	Heaviest engine permitted
Pocatello	Over cross-over between paint shop and coach shop	None permitted.
	Naval Ordnance Plant tracks	No engines permitted except 500 class and MacArthur type equipped with three-point suspension engine trucks.
	Material yard tracks	Heavy MacArthur.
	Storehouse tracks	Heavy MacArthur.
	Repair tracks	Heavy MacArthur.
	Freight house tracks	Heavy MacArthur.
	Power house tracks	Heavy MacArthur.
	Bin tracks	Heavy MacArthur.
	Academy track	Heavy MacArthur.
	Ice House tracks 3, 4, 5 and 6	Heavy MacArthur.
	Timber Treating Plant track	Heavy MacArthur.
	Texaco Oil Spur	Heavy MacArthur.
	City Gas Plant spur	Heavy MacArthur.
	Two spur tracks near brick plant north of Pocatello	Heavy MacArthur.
	New industrial track between Harrison and Main Streets	Heavy MacArthur.
	All tracks west end of Hold Yard	Heavy MacArthur.
Michaud	Airport tracks	Consolidation.
American Falls	Uptown tracks 4, 5, 6, 7 and 8	2-10-2.
Minidoka	West leg of wye	2-10-2.
	Enginehouse track 3	Heavy MacArthur.
Twin Falls Branch	All tracks	3800 class.
Rupert	West leg of wye	Heavy MacArthur.
	All industry spurs except freight house spur	*Mallet.*
North Side Branch	All tracks (5000 and 7000 class engines may turn on wye at Bliss)	Light MacArthur.
Heyburn	*Industry spurs*	*Mallet.*
Burley	*Wye, sugar factory tracks, all industry spurs and freight house spurs*	*Mallet.*
Raft River Branch	All tracks	Light MacArthur.
Oakley Branch	All tracks	Light MacArthur.
Murtaugh	*All industry tracks*	*Mallet.*
Hansen	*Industry spurs*	*Mallet.*
Kimberly	*All spur tracks*	*Mallet.*
McMillan	All sugar factory tracks	Heavy MacArthur, except 3800 class may use to main road crossing.
Twin Falls	All industry tracks	Heavy MacArthur.
	Elevator track beyond east line Second Street South	None permitted.
Wells Branch	All tracks	Heavy MacArthur.
Jer	All industry tracks	Heavy MacArthur.

Continued on opposite side.

Location	Track	Heaviest engine permitted
Buhl	Wye and all industry tracks	Heavy MacArthur.
Shoshone	Industry tracks south side of old enginehouse tracks	Heavy MacArthur.
Ketchum Branch	All tracks outside yard limits at Shoshone	Heavy MacArthur.
Hill City Branch	*All tracks*	*Heavy MacArthur.*
Sand Bank	Pit track beyond loading track switch	Heavy MacArthur.
	Sand loading spur	Consolidation.
Glenns Ferry	Clam shell spur south of coal chute	None permitted.
	Tracks 13, 14, 18, 19, 22, 25, 29, 32, 36, 37, 44, 62 and 63	Heavy MacArthur.
	Wye tracks and track 30	2-10-2.
Reverse	Wye tracks	2-10-2.
Mountain Home	West end of pocket track	2-10-2.
Orchard	Wye track	2-10-2.
Boise (Gowen Field)	Wye track	None permitted.
	Spur track located 1000 feet east of east wye track switch	None permitted.
Boise Branch	All tracks	Consolidation.
Meridian	Industry tracks 2, 3, 4 and 6	Consolidation.
	Creamery spur from house track	Consolidation.
Nampa	Dawson Coal Co. dock on west end of industrial spur	None permitted.
	Elevator spur	Light MacArthur.
	West team track	Light MacArthur.
	Oil spur	Light MacArthur.
	Condensary spur	Light MacArthur.
	Stub house track	Light MacArthur.
	Sugar Hill tracks	Light MacArthur.
	Outgoing enginehouse lead into sand bin	9000 class.
Nampa Middle Yard	Coach tracks	Heavy MacArthur.
	North team tracks	Heavy MacArthur.
	East house track	Heavy MacArthur.
	Dewey main line	Heavy MacArthur.
	Dewey spur	Heavy MacArthur.
	Motor spur	Heavy MacArthur.
	Rip tracks 1, 2 and 3	Heavy MacArthur.
Nampa Short Yard	Mill track	Heavy MacArthur.
	Brewery spur	Heavy MacArthur.
	New industrial tracks	Heavy MacArthur.
Stoddard Branch	All tracks	Light MacArthur.
Idaho Northern Branch	All tracks (Light MacArthur type engines may be used between Nampa and Middleton)	Consolidation.
Emmett	Mill pond track, beyond east end of mill pond	None permitted.

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896 (R).—Continued.

Location	Track	Heaviest engine permitted
Caldwell	Over scale on Holt spur	None permitted.
	Over scale north and south mill spurs	None permitted.
	Holt spur	Consolidation.
	Alley track	Heavy MacArthur.
	Team track	Heavy MacArthur.
	Oil spur	Heavy MacArthur.
	Holt seed spur	Heavy MacArthur.
	Caldwell Produce track	Heavy MacArthur.
	North mill track	Heavy MacArthur.
	South mill track	Heavy MacArthur.
	From west switch of short house to east end of freight house platform	Heavy MacArthur.
	Long house spur	Heavy MacArthur.
	Vassar spur	Heavy MacArthur.
Wilder Branch	*All tracks*	*Heavy MacArthur.*
Parma	House track	2-10-2.
	Team track and stock track between depot and east switch may be used running slowly and carefully.	9000 class.
Nyssa	East leg of wye	Heavy MacArthur.
	Homedale Branch main track and stock track Nyssa yard limits	9000 class.
	Beyond stock chute on Sugar Factory tracks 2 and 3 and beet dump track 3	None permitted.
	Coal silo trestle, sugar factory	None permitted.
Homedale Branch	*All tracks outside yard limits Nyssa*	*Heavy MacArthur.*
Ontario	East team and east warehouse tracks	9000 class engines running slowly and carefully.
Oregon Eastern Branch	All tracks outside yard limits Ontario	Light MacArthur.
Brogan Branch	All tracks	Consolidation.
Washoe	Spur tracks	2-10-2.
Payette	Cannery spur	2-10-2.
	Mill spur and Palumbo Packing House track	Heavy MacArthur.
Payette Branch	All tracks	Consolidation.
Crystal	Team track	2-10-2.
Weiser	Day spur	2-10-2.
	Mill track	Heavy MacArthur.
	All tracks in branch yard except main track and scale track west to west switch and house track to west end of old P. & I. N. depot and wye track	Heavy MacArthur.
New Meadows Branch	Weiser to M.P. 10	Heavy MacArthur.
	M.P. 10 to New Meadows	Consolidation.
Rubicon	On new logging spur beyond end of heavy rail 1600 feet from switch	None permitted.
New Meadows	*Boise-Payette trackage, west of No. 1 receiving track, west switch*	*None permitted.*
Homestead Branch	All tracks	Light Consolidation.

896 (S). MacArthur type or heavier engines must not go on any beet trestle or industrial trestle.

At Lincoln, cross-over between tracks 6 and 7 is for use of sugar company only, and must not be used by other engines or cars.

896 (T). Engines heavier than listed below must not be operated over bridges named: (This does not modify Special Rule 896-R.)

Location	Bridge	Maximum Permitted Doublehead	Of Engines permitted over bridges, following are further restricted account track.
Grace Branch	5.33	None	4200, 4400, 4600, 4700 and 4900 class not permitted to operate.
Lima to Silver Bow	310.68 319.13 351.28	Heavy MacArthur	800, 3900, 5090, 4000 and 9000 class not permitted to operate.
East Belt Branch	19.10 19.45 40.56	None	Engines 3134 to 3138, 4200, 4400, 4600, 4700 and 4900 class not permitted to operate.
West Belt Branch	12.84 36.05		

Location	Bridge	Maximum Permitted Doublehead	Maximum Permitted Single
Second Subdivision	239.78	5300 to 5318	3930 to 3999
Third Subdivision	536.47	5300 to 5318	3930 to 3999
Twin Falls Branch	20.10	5300 to 5318	*$800*
Ketchum Branch	62.84	3100 to 3113	2305 to 2564

Close Clearances

900 (R). There are close clearances above and at the side of main tracks as shown below, and in addition thereto, at platforms and other structures above and at the side of industry, stock and other tracks:

Snow plows, Jordan spreaders and other roadway machines must not be moved over any track until it has been definitely determined that there is adequate clearance at guard-rails, switches, bridges, buildings and other structures.

Location	Structure or obstruction	Clearance of engine or car is close at—
Granger	Westward interlocking signal	Side on westward track.
First Subdivision		
M.P. 11.35	Bridge	Side.
M.P. 21.94	Bridge	Side.
M.P. 26.81	Bridge	Side.
M.P. 28.81	Bridge	Side.
Waterfall	Water tank spout	Side and top.
M.P. 37.78	Bridge	Side.
M.P. 37.94	Bridge	Side.
M.P. 38.95	Bridge	Side.
Kemmerer	Coal chute	Side and top.
Kemmerer	Standpipe—eastward main track.	Side.
Fossil	Standpipe—eastward main track.	Side.
Cokeville	Water tank spout	Side and top.
M.P. 84.04	Bridge	Side.
M.P. 84.24	Bridge	Side.
M.P. 91.03	Bridge	Side.

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900 (R).—Continued.

Location	Structure or obstruction	Clearance of engine or car is close at—
First Subdivision (Cont.)		
M.P. 95.94	Bridge	Side.
M.P. 96.97	Bridge	Side.
Pegram	Standpipe	Side.
M.P. 98.66	Bridge	Side.
M.P. 101.08	Bridge	Side.
M.P. 106.32	Bridge	Side.
M.P. 107.29	Bridge	Side.
M.P. 119.86	Bridge	Side.
M.P. 126.40	Bridge	Side.
Georgetown	Standpipe	Side.
M.P. 128.11	Bridge	Side.
M.P. 128.80	Bridge	Side.
M.P. 129.92	Bridge	Side.
M.P. 131.44	Bridge	Side.
M.P. 133.65	Bridge	Side.
M.P. 136.97	Bridge	Side.
M.P. 138.64	Bridge	Side.
M.P. 139.96	Bridge	Side.
Soda Springs	Water tank spout	Side and top.
Alexander	Standpipe	Side.
Bancroft	Standpipes	Side.
Bancroft	Sandhouse	Side.
Bancroft coal chute	Enginehouse	Side.
Bancroft	Coal chute	Side and top.
Blaser	Standpipe	Side.
M.P. 178.61	Bridge	Side.
M.P. 184.83	Bridge	Side.
M.P. 186.58	Bridge	Side.
McCammon	Standpipes	Side.
M.P. 198.65	Bridge	Side.
Inkom	Standpipes	Side.
M.P. 202.34	Bridge	Side.
M.P. 203.02	Bridge	Side.
Kemmerer Branch		
North Kemmerer Mine No. 1	Coal company car house	Side.
All coal mines	Coal tipples	Side and top.
Elkol and Cumberland Branch		
All coal mines	Coal tipples	Side and top.
Grace Branch		
M.P. 5.33	Bridge	Side and top.
Conda Branch		
M.P. 7.41	Mine trestle	Side.
Fourth Subdivision		
Fort Hall	Standpipe	Side.
M.P. 156.96	Bridge	Side.
Blackfoot	Standpipe	Side.
M.P. 166.97	Bridge	Side.
Firth	*Standpipe*	*Side.*
Idaho Falls	Coal chute	Side and top.
Idaho Falls	Standpipe	Side.
M.P. 192.35	Bridge	Side.
Roberts	Water tank spout	Side and top.
M.P. 202.73	Bridge	Side.
Dubois	Water tank spout	Side and top.
Dubois	Standpipe	Side.
Spencer	Water tank spout	Side and top.
Humphrey	Water tank spout	Side and top.
Lima	Standpipe	Side.
Red Rock	Water tank spout	Side and top.

Continued on opposite side.

900 (R).—Continued.

Location	Structure or obstruction	Clearance of engine or car is close at—
Fourth Subdivision (Cont.)		
M.P. 308.75	Bridge	Side.
M.P. 310.68	Bridge	Side and top.
M.P. 319.13	Bridge	Side and top.
M.P. 324.51	Bridge	Side.
Dillon	Coal chute	Side and top.
Dillon	Standpipe	Side.
Dillon	Ore loading docks	Side.
M.P. 351.28	Bridge	Side and top.
Melrose	Coal chute	Side and top.
Melrose	Standpipe	Side.
Melrose	Water tank spout	Side and top.
M.P. 383.71	Bridge	Side.
M.P. 384.61	Bridge	Side.
Silver Bow	Water tank spout	Side and top.
Silver Bow	B. A. & P. and C. M. St. P. & P. overhead trolley wires. Do not touch. Look out for broken wires.	Side and top.
Between Silver Bow and Butte, M.P. 1.3, N. P.	C. M. St. P. & P. overhead trestle	Top.
Mackay Branch		
M.P. 1.6	Bridge	Side and top.
Taber	Water tank spout	Side and top.
Arco	Water tank spout	Side and top.
Mackay	Water tank spout	Side and top.
Mackay (Smelter Yards)	Overhead tramway	Side and top.
Yellowstone Branch		
Ucon	Standpipe	Side.
Lorenzo	Water tank spout	Side and top.
M.P. 18.44	Bridge	Side and top.
M.P. 19.55	Bridge	Side.
St. Anthony	Water tank spout	Side and top.
M.P. 44.40	Bridge	Side.
Ashton	Standpipe	Side.
M.P. 62.76	Tunnel	Side and top.
Big Springs	Water tank spout	Side and top.
West Yellowstone	Standpipe	Side.
East Belt Branch		
Ririe	Water tank spout	Side and top.
M.P. 19.10	Bridge	Side and top.
M.P. 19.44	Bridge	Side and top.
M.P. 40.56	Bridge	Side and top.
West Belt Branch		
M.P. 12.84	Bridge	Side and top.
Plano	Water tank spout	Side and top.
M.P. 36.05	Bridge	Side and top.
Teton Valley Branch		
Drummond	Water tank spout	Side and top.
Tetonia	Water tank spout	Side and top.
Victor	Water tank spout	Side and top.
Second Subdivision		
American Falls	Standpipe east of depot	Side.
Wapi	Standpipe	Side.
Minidoka	Standpipes	Side.
Minidoka	Coal chute	Side and top.
Kimama	Standpipe	Side.
Shoshone	Standpipes	Side.
Shoshone	Coal chute	Side and top.
M.P. 331.27	Bridge	Side.
M.P. 333.39	Bridge	Side.
Gooding	Water tank spout	Side and top.
M.P. 339.80	Bridge	Side.
King Hill	Standpipe	Side.

Continued on Page 16.

900 (R).—Continued.

Location	Structure or Obstruction	Clearance of engine or car is close at—
Twin Falls Branch		
Rupert	Standpipe	Side.
M.P. 20.10	Bridge	Side and top.
Burley	Water tank spout	Side and top.
Murtaugh	Water tank spout	Side and top.
Twin Falls	Coal chute	Side and top.
Twin Falls	Standpipe	Side.
Buhl	Water tank spout	Side and top.
North Side Branch		
M.P. 18.40	Bridge	Side.
M.P. 21.39	Bridge	Side.
Eden	Water tank spout	Side and top.
Jerome	Water tank spout	Side and top.
Wells Branch		
Rogerson	Water tank spout	Side and top.
Delaplain	Water tank spout	Side and top.
Henry	Water tank spout	Side and top.
Henry	Coal chute	Side and top.
Wilkins	Water tank spout	Side and top.
Wells	Water tank spout	Side and top.
Ketchum Branch		
Richfield	Water tank spout	Side and top.
Picabo	Water tank spout	Side and top.
Hailey	Water tank spout	Side and top.
M.P. 62.84	Bridge	Side and top.
M.P. 66.81	Bridge	Side and top.
Ketchum	Water tank spout	Side and top.
Triumph and Gimlet	Ore loading docks	Side and top.
	Engines must not move under tipple account impaired clearance.	
Hill City Branch		
Fairfield	Water tank spout	Side and top.
Hill City	Standpipe	Side.
Third Subdivision and Kuna Line		
Glenns Ferry	Standpipes	Side.
Hammett	Standpipe	Side.
Mountain Home	Water tank spout and standpipe	Side and top.
Orchard	Standpipes	Side.
Boise	Standpipes	Side.
Owyhee	Standpipe	Side.
M.P. 447.74	Bridge	Side.
M.P. 448.07	Bridge	Side.
M.P. 465.01	Bridge	Side.
Caldwell	Standpipe	Side.
M.P. 466.74	Bridge	Side.
Nyssa	Standpipe	Side.
M.P. 486.83	Bridge	Side.
M.P. 487.70	Bridge	Side.
M.P. 494.51	Bridge	Side.
Ontario	Coal chute	Top.
Ontario	Sand bin west of coal chute	Side.
M.P. 499.82	Bridge	Side.
M.P. 500.17	Bridge	Side.
Payette	Standpipe	Side.
Weiser	Standpipe	Side.
Boise Branch		
Boise	Standpipe	Side.

Continued on opposite side.

900 (R).—Continued.

Location	Structure or obstruction	Clearance of engine or car is close at—
Idaho Northern Branch		
Emmett	Water tank spout	Side and top.
M.P. 33.32	Tunnel	Side and top.
M.P. 38.61	Tunnel	Side and top.
M.P. 49.23	Bridge	Side and top.
M.P. 49.39	Bridge	Side and top.
Banks	Water tank spout	Side and top.
Big Eddy	Water tank spout	Side and top.
M.P. 77.39	Tunnel	Side and top.
M.P. 80.34	Water tank spout	Side and top.
Smiths Ferry	Stockyard platform	Side.
M.P. 83.78	Tunnel	Side and top.
M.P. 89.59	Bridge	Side and top.
Belvidere	Water tank spout	Side and top.
Donnelly	Water tank spout	Side and top.
Homedale Branch		
Homedale	Water tank spout	Side and top.
Oregon Eastern Branch		
Ontario	Coal chute	Side and top.
Ontario	Sand bin west of coal chute	Side.
M.P. 11.47	Bridge	Side.
Vale	Standpipe	Side.
M.P. 29.27	Bridge	Side.
M.P. 53.71	Tunnel	Top.
Jonesboro	Stockyard platform	Side.
M.P. 71.16	Tunnel	Top.
M.P. 72.35	Bridge	Side.
Juntura	Water tank spout	Side and top.
M.P. 84.58	Bridge	Side.
M.P. 84.99	Bridge	Side.
Riverside	Water tank spout	Side and top.
M.P. 95.32	Bridge	Side.
Venator	Water tank spout	Side and top.
Crane	Stockyard platform	Side.
Crane	Water tank spout	Side and top.
Burns	Standpipe	Side.
Brogan Branch		
Brogan	Water tank spout	Side and top.
Brogan	Stockyard platform	Side.
New Meadows Branch		
Diamond	Water tank spout	Side and top.
Goodrich	Water tank spout	Side and top.
New Meadows	Water tank spout	Side and top.
Homestead Branch		
M.P. 3.99	Tunnel	Side and top.
M.P. 32.06	Tunnel	Side and top.

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

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

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

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

Continued on page 17.

900 (S).—Continued.

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

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

Air Brake Rules

1006 (R). Standard brake pipe pressure for freight and mixed train service is 90 pounds.

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

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

1035 (R). On passenger trains, running test as required by Air Brake Rule 1035 must be made at following points:

M.P. 43.7, west of Moyer Jct.	—Westward;
Humphrey	—Eastward;
Monida	—Westward;
Apex	—Westward;
Feely	—Westward;
Gerrit	—Eastward;
Reas Pass	—Eastward;
Ticeska	—Westward;
Reverse	—Eastward.

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

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

1041 (R). On freight and mixed trains, air brake test as required by Air Brake Rule 1041 must be made at following points:

Kemmerer or Moyer Jct.	—Westward;
Gerrit	—Eastward;
Reas Pass	—Eastward;
Tamarack	—Eastward;
M.P. 84.5, New Meadows Branch	—Westward;
Summer Camp	—Westward and eastward;
Jenness	—Westward;
Smiths Ferry	—Eastward.

Continued on opposite side.

1041 (R). Continued.

This test must also be made at intermediate points on these grades by single engine trains and trains with helper engine on head end, ascending the grade, and by all trains descending grade, whenever engine is changed, cars picked up or set out, air hose parted, angle cock turned, or when train has been standing for 30 minutes or more.

1042 (R). Retaining valves must be used on freight and mixed trains as per Air Brake Rule 1042 (B) as follows:

Kemmerer to Fossil;	Ticeska to King Hill;
Humphrey to Highbridge;	Reverse to Hammett;
Monida to Lima;	Summer Camp to Melandco;
Apex to Glen;	Summer Camp to Herrell;
Feely to Buxton;	Jenness to M.P. 23;
Gerrit to Warm River;	Smiths Ferry to Banks;
Reas Pass to Big Springs;	Tamarack to Glendale.
	Rubicon to New Meadows.

All retaining valves must be used M.P. 80 to M.P. 64, Idaho Northern Branch.

All retaining valves must be used Rubicon to New Meadows and Tamarack to Glendale, except trains of empty log cars.

On passenger trains, all retaining valves must be used as follows:

Gerrit to Warm River;	Reas Pass to Big Springs.

Exceptions: Freight and mixed trains, when handled by engines equipped with two air compressors which are operative may be handled without use of retaining valves as follows:

Trains averaging not to exceed sixty gross tons per operative brake:

Apex to Glen;	Summer Camp to Melandco;
Monida to Lima;	Summer Camp to Herrell;
Feely to Buxton;	Jenness to M.P. 23;
	Rubicon to New Meadows.

Trains averaging not to exceed sixty-five gross tons per operative brake:

Kemmerer to Fossil;	Ticeska to King Hill;
Humphrey to Highbridge;	Reverse to Hammett.

On westward trains, after sounding station whistle for Apex and Feely, if air gauge in caboose indicates maximum pressure, trainman will give a proceed signal which must be answered as per Operating Rule 14(b). If this signal is not received, train must be stopped and air brakes tested as per Air Brake Rule 1041 (A), and not proceed until brake pipe pressure is fully restored.

If tonnage per operative brake is exceeded, at least 50 percent of retaining valves must be used.

Where retaining valves are used on freight or mixed trains, a speed of 20 MPH must not be exceeded.

1042 (S). Before departure from Gay, test of brakes will be made in accordance with Air Brake Rule 1040 (D). Retaining valves must be used on all trains as required by Air Brake Rule 1042, from Gay to M.P. 9.25. Duplex retaining valves must be placed in full retaining position on all loads. All trains must stop at M.P. 9.25 and will remain standing not less than ten minutes to cool wheels and turn down retaining valves.

RATING OF DIESEL-ELECTRIC AND STEAM LOCOMOTIVES IN FREIGHT SERVICE IN TONS OF 2000 POUNDS

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

TYPE OF LOCOMOTIVE			NUMBERS (Inclusive)	Pocatello to Minidoka	Minidoka to Shoshone	Shoshone to Glenns Ferry	Glenns Ferry to Reverse	Reverse to Orchard	Orchard to Huntington	Huntington to Nampa	Nampa to Orchard	Orchard to Glenns Ferry	Glenns Ferry to Ticeska	Ticeska to Shoshone	Shoshone to Minidoka	Minidoka to Pocatello
C 57	22/30	191	560 to 622	1900	1900	4000	800	2400	3240	2900	2150	3380	890	1880	2460	2300
MacA 57	23¾/30	208	2000 to 2034	2150	2150	4500	1000	2700	3700	2900	2450	3800	1000	2175	2750	2700
		210														
MacA 63	26/28	214	2504 to 2532	2300	2300	4800	1100	3000	4010	3600	2650	4100	1100	2275	3100	2900
		216														
MS 59	23-23/30	472	3500 to 3564	4400	4400	5000	2350	5000	5000	5000	5000	5000	2350	4300	5000	5000
C-SA 69	22-22/32	400	3800 to 3839	4400	4400	5000	2100	5000	5000	5000	5000	5000	2100	4100	5000	5000
	21-21/32	406	3930 to 3999													
TTT 63	29½/30	292	5315 to 5318 5400 to 5414	3100	3100	5000	1500	4060	5000	4700	3600	5000	1500	3000	4000	3740
MT 73	29/28	230	7000 to 7039 7850 to 7869	2300	2300	4800	1100	3000	4010	3600	2650	4100	1100	2275	3100	2900
P 77	25/28	167	2860 to 2899 3218 to 3225	1900	1900	4000	760	2400	2910	2080	1810	2580	760	1600	1820	1580
	25/28	178	3226 to 3227													
FEF 77	24½/32	266	800 to 819	2760	2760	5000	1450	3900	5000	4390	3520	5000	1400	2800	3860	3350
FEF 80	25/32	266	820 to 844													
1 4-8-8-4-2 68	23¾-23¾/32	540 545	4000 to 4019 4020 to 4024	6200	6200	8000	3350	8000	6000	8000	8000	8000	3250	6500	8000	7400

TYPE	NUMBERS (Inclusive)	H.P.	NO. UNITS													
EMD	1400 Series F-3	1500	1	2000	2400	4000	1000	2500	3000	3000	2000	3750	950	1650	2750	2500
EMD	1500 Series	1500	1	2350	2600	4900	1250	3100	4000	3650	2500	4000	1250	2200	3200	3000
ALCO	1600 Series	1500	1	2200	2400	4500	1050	2750	3300	3350	2200	4000	1050	1925	3000	2750
EMD	1400 Series F-7	1500	1	2350	2600	4900	1250	3100	4000	3650	2500	4000	1250	2200	3200	3000
EMD	1000 to 1095	1000	1	1750	1950	3300	600	1800	2500	1850	1400	2100	600	1200	1400	1150
ALCO	1100 to 1153	Yd Sw 1000	1	1900	2100	4000	700	2000	2600	1900	1700	2300	700	1350	1550	1200
FM	1300 to 1304	1000	1	1900	2100	4000	750	2300	2850	2000	1750	2450	750	1450	1850	1350
Baldwin	1200 to 1210	1000	1	1900	2100	4000	700	2000	2600	1900	1700	2300	700	1350	1550	1200
ALCO	1180 to 1195	Rd Sw 1500	1	2000	2400	4000	1000	2500	3000	3000	2000	3750	950	1650	2750	2500
FM	1325 to 1329	Rd Sw 1500	1	2000	2400	4000	1000	2500	3000	3000	2000	3750	950	1650	2750	2500
FM	1360 to 1370	Rd Sw 2000	1	2350	2600	4800	1250	3100	4000	3650	2500	4000	1250	2200	3200	3000

Wells Branch Herrell and Melandco
1025
1025
1175

NOTE: Rating shown is for single unit. If more than one unit, rating of combined units will govern.

EXPLANATION

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

EXAMPLE: Consolidation locomotive having 57-inch drivers, cylinders 22-inch diameter and 30-inch stroke and weighing 191,000 pounds on drivers:

C 57 $\frac{22}{30}$ 191

TOTAL LOADED WEIGHT ON DRIVERS

20,000 to 237,000 pounds
Nos. 1400 to 1477
1550 to 1563

235,000 to 243,000 pounds
Nos. 1600 to 1643

RATING OF DIESEL-ELECTRIC AND STEAM LOCOMOTIVES IN FREIGHT SERVICE IN TONS OF 2000 POUNDS

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

TYPE OF LOCOMOTIVE			NUMBERS (Inclusive)	Granger to Kemmerer	Kemmerer to Moyer Jct.	Moyer Jct. to Montpelier	Montpelier to Pocatello	Pocatello to McCammon	McCammon to Montpelier	Montpelier to Fossil	Fossil to Moyer Jct.	Moyer Jct. to Granger
C 57	22/30	191	560 to 622	2060	1900	3350	2850	2060	1500	2100	900	3100
MacA 57	23¾/30	208	2000 to 2034	2400	2350	3800	3250	2400	1700	2400	1200	3525
		210										
MacA 63	26/28	214	2504 to 2532	2500	2400	4050	3450	2525	1800	2500	1250	3750
		216										
MS 59	23-23/30	472	3500 to 3564	4600	4400	5000	5000	4600	3700	4600	2300	5000
C-SA 69	22-22/32	400	3800 to 3839	4600	4400	5000	5000	4600	3700	4600	2300	5000
	21-21/32	406	3930 to 3999									
TTT 63	29½/30	292	5315 to 5318 5400 to 5414	3350	3100	5000	4750	3350	2600	3600	1800	5000
MT 73	29/28	230	7000 to 7039 7850 to 7869	2650	2350	4250	3625	2650	1950	2650	1250	4000
P 77	25/28	167	2860 to 2899 3218 to 3225	2060	1900	3350	2850	2060	1500	2100	800	3100
	25/28	178	3226 to 3227									
FEF 77	24½/32	266	800 to 819	3300	2760	5000	4540	2950	2130	3050	1450	5000
FEF 80	25/32	266	820 to 844									
1 4-8-8-4-2 68	23¾-23¾/32	540 545	4000 to 4019 4020 to 4024	8000	6200	8000	8000	6500	4800	6800	3400	8000

TYPE	NUMBERS (Inclusive)	H.P.	NO. UNITS									
EMD	1400 Series F-3	1500	1	2060	1950	2500	2500	1650	1650	1650	1000	2100
EMD	1500 Series	1500	1	2530	2530	3000	3000	2500	1900	1900	1300	2550
ALCO	1600 Series	1500	1	2300	2300	2750	2750	2250	1750	1825	1150	2350
EMD	1400 Series F-7	1500	1	2530	2530	3000	3000	2500	1900	1900	1300	2550
EMD	1000 to 1095	1000	1	1400	1050	1570	1570	1150	890	950	680	2000
ALCO	1100 to 1153	Yd Sw 1000	1	1570	1200	1750	1750	1350	1020	1100	770	2000
FM	1300 to 1304	1000	1	2030	1580	2000	2000	1580	1180	1200	870	2000
Baldwin	1200 to 1210	1000	1	1910	1390	2000	2000	1550	1150	1200	845	2000
ALCO	1180 to 1195	Rd Sw 1500	1	2710	1880	2100	2100	2100	1580	1700	1140	2100
FM	1325 to 1329	Rd Sw 1500	1	2030	1580	2000	2000	1580	1180	1200	870	2000
FM	1360 to 1370	Rd Sw 2000	1	2530	1850	2900	2900	2000	1510	1650	1110	2900

NOTE: Rating shown is for single unit. If more than one unit, rating of combined units will govern.

EXPLANATION

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

EXAMPLE: Consolidation locomotive having 57-inch drivers, cylinders 22-inch diameter and 30-inch stroke and weighing 191,000 pounds on drivers:

C 57 $\frac{22}{30}$ 191

TOTAL LOADED WEIGHT ON DRIVERS

220,000 to 237,000 pounds
Nos. 1400 to 1477
1550 to 1563

235,000 to 243,000 pounds
Nos. 1600 to 1643