SOUTHERN PACIFIC COMPANY

SACRAMENTO DIVISION SPECIAL INSTRUCTIONS

No. 4

EFFECTIVE SUNDAY, JANUARY 11, 1953
AT 12:01 A. M.,
PACIFIC STANDARD TIME

SUPERSEDING SPECIAL INSTRUCTIONS No. 3

THESE INSTRUCTIONS CONSTITUTE A PART OF THE TIMETABLE CURRENTLY IN EFFECT

R. E. HALLAWELL,
General Manager.

E. D. MOODY,
W. D. LAMPRECHT,
Assistant General Managers.

C. H. GRANT,
General Superintendent of Transportation.

V. E. ANDERSON,
Superintendent of Transportation.

M. L. JENNINGS,
Superintendent.

RULE M. Employes are warned that it is dangerous to ride on top or side of cars while passing points where impaired clearance exists, and that they must protect themselves from injury. See list of impaired clearances on main track and siding.

There are numerous other structures with impaired clearance on yard and station tracks on the division, and employes must be familiar with their location and avoid personal injury.

RULE 7-A. Is revised to read:

"Yellow signals, and unattended red flags and red lights must be placed, and when practicable all signals by hand must be given, on the engineer's side. Other flag and lamp signals, fusees and torpedoes must be respected when received from or displayed on either side."

RULE 7-B. Yardmen must use green flag by day and green light by night in giving proceed signals for movement of trains at Sacramento, Roseville and Gerber, except that at Roseville proceed signal for movement to or from East Valley Subdivision yellow flag by day and yellow light by night must be used.

RULE 10-G. First paragraph is revised to read:

"When an unattended red flag or red light is displayed to the right of track in direction of approach, train, after stopping, must be preceded for a distance of three-fourths mile from point where signal is displayed by a flagman who must carefully examine track and structures."

RULE 10-J. Speed signs prescribing an increase in speed will not be installed on branches. Speed Restrictions tables will indicate permissible speeds between mile post locations named.

RULE 15. Each torpedo placed will be duplicated on opposite rail during snow storms, or when snow on rails.

RULE 26. When emergency work is to be done under streamlined passenger trains, chains must also be placed each side of a traction wheel, and 110-pound brake pipe pressure must be maintained until work completed.

RULE 99-C. Will apply on Placerville, Walnut Grove, Yuba City, Oroville, Stirling City, Kurand, Colusa and Knights Landing Branches.

RULE 104-C. First paragraph is revised to read:

"When a train or engine is clear of main track, to be met or passed by a train, employes must not unlock derails or switches, nor be between the fouling point and main track switch. They must not be within 150 feet of any main track switch until the approaching train has passed."

RULE 211. Form N train order may be issued to authorize lowering of train-order signal arm twice and its return to stop position as a calling-on signal, at stations where letter type indicator for display of letter "M" is not installed, and such operation of the signal will be an indication to an approaching train that orders are to be delivered which will authorize movement to the next station at least, against and ahead of, all superior trains. Engineer must acknowledge this calling-on signal by sounding signal 14(b), and will proceed on main track to receive orders.

If train is delayed between the time of acknowledging the calling-on signal and receipt of train orders, protection by flagman against any superior train must be provided.

Operation of the signal in above manner is prohibited unless operator has received Form N train order, and provided time limit named in the order has not expired.

RULE 283. Movements governed by semaphore type diverging route signals displaying "Proceed on Diverging Route", Figs. A and B, must be made with caution.

RULES 281 and 285. Movements against the current of traffic governed by semaphore type dwarf signals displaying "Proceed", Fig. E, Rule 281; or by light type dwarf signals displaying "Proceed not Exceeding Medium Speed", Fig. G, Rule 285, must be made with caution and position of switches observed.

RULE 306. Second paragraph is revised to read:

"When a signal with triangular plate protecting a spring switch displays stop indication, except when the switch is lined by hand for the movement, member of crew must open and close spring switch by hand, removing any obstruction."

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

PUSH BUTTONS

Where signal protection is provided for movements from an adjacent track to main track, push buttons and pilot lights are installed in box near each of the two signals, with time-release feature, to clear signals on one track when the control circuit on the other track is occupied.

Train on main track to let train on siding pass may clear signal on siding by pressing button bearing number of signal on siding. Train on siding to let train on main track pass should not pass Approach Circuit sign, but when necessary to do so, may clear signal on main track by pressing button bearing number of signal on main track.

Pilot light will appear after time-release has operated and signal has cleared.

Further instructions posted inside push button box.

ELECTRIC SWITCH LOCKS

Where electric switch locks are installed, lock box door must not be opened if movement is to be made into a track leading from main track until engine or car is standing within 150 feet of the switch; or if movement is to be made from such track, or through a crossover to a main track, until block indicator indicates block clear on opposite track.

After lock box door is opened lock lever cannot be moved to opposite position to release switch for hand throwing until indicator in lock box indicates "unlocked".

Lock lever must not be returned to locked position until all movements over the switch are completed, switch returned to normal position and locked. Lock-box door must then be closed and locked.

When block indicators indicate "block occupied," instructions posted inside lock box for operation of push button to start time-release must be complied with if movement is to be made to main track while approach circuit is occupied by another train, in addition to providing flag protection when necessary.

Emergency lock release to be used only in case of electrical or mechanical failure, as indicated by failure of time-release to function after several minutes. When necessary to break seal on emergency lock release, train dispatcher must be notified, and movement made only after flag protection is provided.

MECHANICAL SWITCH LOCKS

Lock box door must not be opened unless block indicators indicate block clear in both directions.

After lock box door is opened lock lever may be moved upward against stop. After a time interval of from one to seven minutes indicator will show UNLOCKED and lever may be moved to reverse position "R". Switch may then be operated in usual manner.

Lock lever must not be returned to normal position "N" until all movements over the switch are completed and switch returned to normal position and locked.

Emergency lock release is to be used only in case of mechanical failure, as indicated by failure of time release to function after several minutes. When necessary to break seal on emergency release, train dispatcher must be notified immediately and movement made only after flag protection is provided.

RULE 535. SPRING SWITCHES

Maximum speed for trailing movement when the spring is to be actuated, and maximum speed for facing movement with switch points in normal position, as indicated in Speed Restrictions tables must not be exceeded.

RULE 536. First paragraph is revised to read:

"When a trailing movement is to be made over a spring switch equipped with a facing point lock, and the initial movement of the switch is not to be actuated by the engine, switch must be lined for the movement. Employe so lining the switch must again line it for normal position after movement has been completed, unless he has arranged for another employe to do so."

GENERAL REGULATIONS

RULE 821. Speed of equipment over inundated tracks must not exceed 3 MPH, and the depth of water above top of rail must not be more than the following:

Diesel engines	3 inches
Passenger cars and steam engines equipped with roller bearings	6 inches
Other passenger cars and steam engines	12 inches

RULE 822. Third paragraph is revised to read:

"When a movement is being made, except for uncoupling car from engine, employes must not stand or ride between engine and car, or between engines, either on pilot, footboard or footboards. They must not go between moving cars or between engine and car in motion, nor ride on pilot, leading footboard or footboards while passing over road crossings or operating on public streets. Not more than one employe is permitted to ride on pilot, leading footboard or footboards in direction of movement at any time."

RULE 824. On grades at any point, where engine or engines are to be detached for any reason, air brakes must be released and a sufficient number of hand brakes must be set to hold train.

RULE 825. Second paragraph is revised to read:

"Cars must be kept clear of any street or public crossing, and at least one hundred feet from the crossing when practicable."

RULE 827. When train handling logs (except in gondolas) takes siding to meet an opposing train or allow a following train to pass, such train must be thoroughly inspected to see that proper clearance exists to insure safe movement for the expected train, and no movement of train on siding attempted until expected train has passed.

RULE 834. Does not apply to trains consisting entirely of logs.

RULE 849. When temperature drops below freezing point (32 degrees) train-heat valve on rear car must be opened frequently and train-heat line blown out to avoid condensation in train-heat line.

Train-heat valves on Nos. 27 and 28 will not be opened at Sacramento, nor on eastward and westward passenger trains at Gerber unless it is known in advance that engine is to be changed or train is to be switched, in which case second paragraph of Rule 849 will be complied with. In the event it is necessary to detach engine or cars after arrival, precautions must be taken to see that no injury results from escaping steam in uncoupling steam connections.

AIR BRAKE RULES

FREIGHT TRAINS

RULE 25. When passenger equipment is handled on freight trains and a rear end test is made, considerable time must elapse before brake pipe pressure will build up sufficiently to release the brakes on passenger equipment.

Conductor will advise engineman when they have such passenger equipment on the rear of train so he may allow a sufficient length of time for brakes to release before attempting to start train.

PASSENGER TRAINS

RULE 38. Incoming engineer at Sacramento and Sparks on streamlined passenger trains will make electro-pneumatic brake application of not less than 60 pounds and leave brakes applied. Inspector will note that rear brakes of train apply, then signal for release. Outgoing engineer will release brakes and inspector will note that rear brakes release. In case electro-pneumatic brakes are inoperative, automatic brake valve will be used.

Before any helper engine is coupled to train, make automatic brake pipe reduction of not less than 20 pounds, close combination cut-out cock, then place both brake-valve handles in release position. Helper engineer will then make release in usual manner.

When steam engine is to be cut off train, the automatic brake should be applied and left applied until engine is detached. Engineman should then open the double heading cock and apply electro-pneumatic brake.

MISCELLANEOUS

4. Pushing trains out of yards:

(a) Engines must not be placed behind a wooden underframe caboose or other wooden underframe equipment.

(b) Engines weighing more than 330,000 lbs. on the drivers must not be placed behind steel underframe cabooses.

(c) Air must not be coupled through the pusher engine.

(d) Knuckle must not be removed, or closed, or cutting lever temporarily fastened in release position on a pusher engine, as means of preventing coupling being made.

5. Helper service:

(a) Helper engines must not be placed behind wooden underframe cars or wooden underframe cabooses.

(b) Engines weighing more than 330,000 lbs. on the drivers must not be placed behind steel underframe cabooses.

(c) Not more than one helper engine will be placed behind steel underframe cabooses.

One helper may be placed on head-end, except that not more than one AC class engine, nor more than two engines of other classes may be placed on head-end of any freight train. When additional helpers are required, they will be placed when practicable in rear of train four cars ahead of caboose and any cars of wooden frame construction, except that C class helpers may be placed ahead of caboose and cars of wooden frame construction and when practicable should be placed behind a loaded car.

DF-1 to 8 class engines, when used as helpers, will be placed eighteen cars ahead of caboose.

Helper or doubleheader engines must not be placed on head-end of freight trains powered by DF-1 to 8 class engines.

Air will be cut in on all helper engines, and engine must not be cut off when train is in motion.

When used as helpers in rear of train, AC or MM class engines must not be coupled together, nor may more than two F, Mt, or heavier class, or more than three smaller classes be coupled together. When coupled, larger engines must be placed ahead of smaller engines. If tonnage requires more power, additional helpers of not to exceed two coupled in each case, must be separated by at least four cars.

Helpers must not be operated backing except in emergency, and in such case engines should not push through a backing engine if it can be avoided.

Helper engines coupled in middle or rear of train must be cut off from forward portion before taking water. On grades road engine and helper must not be cut off from train at the same time without hand brakes being securely set.

20. Passenger equipment handled in freight trains must be placed between cars equipped with Carmer cutting lever.

Cars with inoperative couplers, containing perishables or live stock, may be chained in train and moved to nearest available repair point. Other cars with defective couplers will be switched to the rear of caboose using operative coupler by turning car. Car and caboose should be chained to prevent breaking away from train. Cars chained may be moved to nearest repair point in direction train is moving.

27. Should a passenger train, irrespective of the type of power being used, be stopped in a tunnel, air conditioned cars within the tunnel must immediately have the air conditioning systems, including ice engines and engine generators, shut off, fresh air intake shutters closed, and blower fans shut off.

Should a diesel-powered train be stopped with the engine in a tunnel and it is found that, in the case of a passenger train it cannot be moved within five minutes after stopping, and in case of a freight train it cannot be moved within a reasonable length of time, trainmen and enginemen must take necessary precautions to prevent movement. Independent brake and sufficient hand brakes must be immediately applied. Engine wheels must be secured by blocks and chains, and power plants and steam generators, if any, on diesel engine shut down.

SPEED RESTRICTIONS FOR ENGINES: Maximum speed shown below is subject to further restrictions applicable to certain territories as shown in Speed Restrictions for Trains:

NOMINAL CLASS	RUNNING FORWARD		RUNNING BACKWARD WITH TRAIN OR LIGHT
	WITH TRAIN	LIGHT	
AC	60	50	25
C	40	35	30
DF-1 to 8 (6138 to 6405)	55	55	30
DF-100 to 112, 114, 115	50	40	40
DF-200 to 204	40	40	40
DF-300 to 302	50	40	40
DP	79	70	30
DS-1 to 8, 100 to 111, 113 to 115	40	40	40
DS-200, 201	30	30	30
F	50	40	30
GS	75	55	30
M	50	35	25
Mk-2, 4	40	30	30
Mk-5, 6, 7, 8, 9	50	40	30
Mk-10, 11	35	30	30
MM	35	30	25
Mt	75	55	30
P-1, 3, 4, 5, 6	65	55	30
P-7, 8, 10, 12	75	55	30
S, SE	20	20	20
SP	55	35	30
T-1, 23, 28, 31	50	35	30
T-32, 37, 40	60	40	30
TW	40	30	30
Any engine not listed	35	35	25

Steam engines operated in backward motion, and DF and DP class engines operated with engineer in other than the lead unit in direction of movement, must not exceed 30 MPH on all curves and 20 MPH when approaching highway or street crossings at grade.

Steam engines coupled tender to tender must not exceed speed permitted same engines running light backward.

Maximum speed of engines under following conditions, running under own steam, or hauled in train:

When all weight has been removed from any one pair of drivers	20 MPH
When all weight has been removed from only one wheel of any pair of drivers	30 MPH
When engine truck is removed	20 MPH
When main rod only is removed	30 MPH
When side rod only is removed	30 MPH
When both main and side rods are removed	20 MPH

Dead or disabled engines, and equipment listed in timetable which requires movement at reduced speed must first be reported as ready to move to the chief train dispatcher, who will designate the train in which the engine or equipment is to be moved. Any such engine must not be handled in train until train-order designating maximum speed is issued.

Maximum speed of trains handling dead engines of S or SE class 20 MPH; other steam engines 40 MPH; and diesel engines the speed shown for same engine running forward light.

When a diesel locomotive is derailed, attempt to rerail it must not be made unless an officer or supervisor of the Mechanical Department (or in their absence other qualified officer) is present.

Dead locomotives, either steam or diesel, hauled in train and weighing 150,000 lbs. or more on the drivers should be placed not less than 8 cars behind road locomotive. If weight on drivers is less than 150,000 lbs., dead locomotive should be placed near rear of train. Dead road locomotives should be headed in direction of movement when possible.

Unless otherwise restricted, two dead road locomotives may be coupled together for movement. When necessary to separate them, or when an S or SE class and a road locomotive are moved dead in train, a steel underframe freight car must be placed between them, and S or SE class locomotive entrained with tender ahead.

Movement of foreign line engines, in service or dead in train, must not be authorized until provisions of current Line Clearance Circular have been complied with.

When train-order is received indicating that main track is out of service and that trains are to be detoured through a siding or other track, or over a shoofly, necessitating a reduction in normal train speed, signal 16(f) must be sounded on passenger trains one mile before reaching point where train must reduce speed, which must be acknowledged by whistle signal 14(g).

MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT	MPH MAIN TRACKS OTHER THAN BRANCHES	MPH MAIN TRACKS ON BRANCHES
Cars and loads with height, width or weight greater than maximum shown in Line Clearance Circular (when movement is authorized)	40	25
Twin or multiple loads	40	25
Scale test cars	40	30
Cars with arch bar trucks	40	30
Steel pile-drivers	40*	30*
Relief outfits with steam derrick, except (Relief outfits 7014 and 7025 must not be operated on any branch)	35*	25*
Power shovel on own wheels	35*	25*
Ditchers on own wheels, except SPMW-4044	35*	25*
	25*	25*
Car-top ditchers, if blocking and tie-down cables are removed	35*	25*
K&J, Western, and Oliver, pedestal or center-hinged air-dump cars	35*	25*
Locomotive cranes.		
With boom disconnected, heavy end forward	35*	25*
With boom disconnected, light end forward	20*	15
With boom in place, either end forward	25*	15
Rotary snow plows	25	15

*These speeds must not be exceeded, and on curves where authorized speed is more than 15 MPH speed must be reduced to 5 MPH less than shown in timetable and on speed signs.

OTHER MAXIMUM SPEEDS	MPH PASSENGER TRAINS	MPH FREIGHT AND MIXED TRAINS
Foreign steel-wheel cars not equipped with high speed trucks	60	55
Trains of deadhead equipment, with caboose	55	..
Passenger trains, with caboose	55	..
Engine and caboose only, except must not exceed speed for same engine running forward light.	..	55
Engine, flanger and caboose only, except	..	40
On curves	..	30
Logs loaded on flat or logging cars, except	..	25
On curves	..	20
Through truss bridges, tunnels, and passing stations	..	15

All cars handled in passenger trains must be equipped with steel-tired or all-steel wheels. Cars not so equipped must move in freight trains, passengers if any, to move on passenger trains.

Passenger carrying cars, baggage, express and other head-end cars, unless equipped with steel center sills and steel platforms must not be handled in passenger trains except on authority of Superintendent.

When foreign steel-tired or all-steel wheel cars are picked up at points where no car inspectors are on duty, conductor must contact train dispatcher to determine applicable speed restriction for the movement.

Freight cars must not be handled behind occupied passenger carrying cars, except in mixed trains in military or naval movements.

Baggage, express, mail, refrigerator or other head-end cars must not be handled on rear of passenger trains unless trainmen can pass through them.

Where mail, papers, or ice are to be dispatched from passenger trains at points where train does not stop, slow down sufficiently to permit safe dispatch without hazard, and stop at such stations for this purpose if train is moving on adjoining track between passenger train and point of exchange.

When moving against current of traffic, or when movement is not protected by block signals, speed of passenger trains must not exceed 50 MPH, and speed of freight trains and light engines must not exceed 40 MPH, nor may speed exceed that applying to normal operation. Unless proceed signal received, or it is known that warning devices are operating, such trains and engines must stop approaching road corssings where automatic warning devices are installed, and may proceed after member of crew protects crossing.

RULE 10-J. Round yellow speed signs indicate the speed restrictions applying to passenger trains with electro-pneumatic brakes on all cars, and with diesel passenger engine.

Speed signs placed on the right of track in current of traffic direction but with one track intervening:

Eastward at MP 89.50 Sacramento bears figure 15,
Eastward at MP 132.58 Brighton bears figure 25,
Westward at MP 91.70 Sacramento bears figures 35-15,
Westward at MP 90.75 Sacramento bears figure 15,
Westward at MP 90.25 Sacramento bears figure 10.

RULE 14(e). As specified below, — — — — — — will be indication that flagman may return from east:

Roseville on East Valley Subdivision,
Brighton on Placerville Branch.

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following stations:

West MP		East MP
85.51	Sacramento	95.35
	" (Walnut Grove Branch)	93.09
	" (Placerville Branch)	94.93
131.60	" (Stockton line)	136.33
101.66	Roseville (Eastward and No. 2 Track)	110.87
101.66	" (No. 1 and Westward Track)	110.87
	" (Tehama line)	107.59
103.80	Citrus	105.26
	" (Fair Oaks line)	106.48
	Folsom	112.05
110.57	" (Placerville Branch)	111.38
144.31	Diamond Springs	145.74
148.19	Placerville	149.66
110.64	Walnut Grove	113.90
121.05	Isleton	122.32

Sacramento: Westward trains on station tracks must not pass fouling point of adjoining tracks unless proceed signal received from yardman at Second St.

Westward trains on main track must not pass Seventh St. shanty (just west of Signal 891) unless proceed signal received from yardman.

Movement against current of traffic on eastward track Sixth St. to Front St., may be made when proceed signal received from yardman at Sixth St., passing Signal 891 in stop position without stopping, and yardman will be responsible for protection of the movement.

Eastward trains on main track must not pass fouling point of crossover between main tracks, 400 feet east of Sacramento River Drawbridge unless proceed signal received from yardman at Second St., and must not pass first switch of crossover between main tracks west of Sixth St. shanty (1500 feet east of Sacramento River Drawbridge) unless proceed signal received from yardman at Sixth St.

Eastward trains and yard engines on station tracks must not pass fouling point of adjoining tracks unless proceed signal received from yardman at Sixth St., and again at Seventh St.

The two center tracks, for entering and leaving station tracks are equipped with automatic block signals between Sixth St. and Seventh St. Signal 889 will display green aspect when route lined for direct movement to Sixth St., and yellow aspect when route lined for crossover movement to Sixth St. Signal 886 governs movements from station tracks 2, 3, 4 and 5 but does not indicate position of switch 20 feet east of the signal.

Roseville: End of double track at MP 103.14 Antelope, and at MP 106.16 Roseville. Single track between MP 103.14 and MP 106.16 is within interlocking limits.

Westward freight trains from Mountain Subdivision must not pass Signal 1065 unless proceed signal received from yardman; and westward freight trains from East Valley Subdivision must not pass Signal 1063 unless proceed signal received from yardman.

Westward first class trains from Mountain Subdivision, when engines are to be changed, must stop clear of point where East Valley Subdivision lead to yard tracks crosses No. 1 Track near MP 106.65.

Westward freight trains using running track must not pass fouling point at west end in vicinity of Dry Creek unless proceed signal received from yardman.

Eastward trains entering yard track must not pass Antelope train-order office unless proceed signal received from yardman.

Movement of trains in both directions between MP 106.64 and MP 106.78 on Mountain Subdivision, and between junction switch at MP 106.66 and MP 106.75 on East Valley Subdivision will be governed by signal indication which will supersede the superiority of trains, but movements must be made with caution, and only after block signal indicating proceed is displayed as prescribed below:

For eastward movement on No. 1 Track, top unit on Signal 1064 governs movement to No. 1 Track; bottom unit governs movement to East Valley Subdivision.

Eastward movement on No. 2 Track is governed by Signal 1060.

For westward movement on No. 1 Track, top unit on Signal 1065 governs movement to No. 1 Track; bottom unit governs movement through crossover to No. 2 Track.

For westward movement on East Valley Subdivision, top unit on Signal 1063 governs movement to junction switch leading to No. 1 Track; bottom unit governs movement across No. 1 Track and No. 2 Track of Mountain Subdivision to yard tracks.

Signal 1062 on east drill track governs movement to East Valley Subdivision only.

Trains stopped by Signals 1060, 1062, 1063, 1064, 1065 or 1067 must not proceed until signal displays proceed indication, but may proceed after stopping if proceed signal received from yardman, movement to be made with caution.

Switch position indicator located at:

Roseville.....Jennings Unit, switch in westward running track.

Indicator does not indicate track occupancy but when displaying red, yellow or green aspects following will govern:

Red aspect...Inoperative.
Yellow aspect.Switch lined for yard receiving unit.
Green aspect.Switch lined for running track Antelope.

RULE 98. Railroad crossings at grade not interlocked:

Sacramento: WPRR at Front and R Sts.—Trains and engines must approach with caution expecting to find crossing occupied.

Switching and industry tracks in vicinity of Front and R Sts.—Ascertain that each crossing is clear before using.

SNRy at Front and R Sts.—Stop within 200 feet of crossing.

Electric line at Front and M Sts.—Stop and not proceed unless hand signal received from flagman on ground (green flag by day, green light by night).

SNRy at 31st and R Sts.—Stop before crossing.

Roseville: Lead from yard to East Valley Subdivision main track crosses No. 2 Track and No. 1 Track of Mountain Subdivision near passenger station. Eastward freight trains from yard to East Valley Subdivision will be governed by Signal 1062, and westward freight trains from East Valley Subdivision to enter yard will be governed by bottom unit of Signal 1063 before fouling or moving over No. 2 Track and No. 1 Track.

RULE 103-A. Trains and engines must stop and be preceded by flagman before crossing highways at:

Isleton, on wharf spur.

RULE 104. The normal position of rigid switches at junctions:

Citrus—Fair Oaks Branch, for Placerville Branch,
Folsom Jct.—Folsom Branch, for Placerville Branch.

RULE 306. The following block signals, equipped with triangular plate displaying the letter "P", have included in their control limits some special protective device. Interlocking signals are listed as "P-I".

Eastward Signal	Protection	Westward Signal
P-I P-I	Spring switch, end double track, MP 103.14, Antelope	P-I

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Sacramento: Eastward main track from a point 350 feet east of Sacramento River Drawbridge to Signal 890 at Seventh St., is not protected by block signals. All trains must proceed with caution between these points.

Sacramento: Movements over crossings at Front St. just east of Sacramento River Drawbridge governed by signals and derails operated by switchtender at Front St. (except derail on westward main track, which is operated by signal operator on bridge), and do not indicate position of switches or occupancy of track between signals and crossing. Trains and engines moving on proceed indication of signals must see that switches are properly lined for them and that track is not obstructed by other cars or engines. Locations are as follows:

Westward main track—350 feet east of crossing,
Eastward main track—For movement against current of traffic, 350 feet from crossing,
Station tracks—350 feet from crossing. Green aspect for movement to westward main track; yellow aspect for movement through crossover to eastward main track,
Front St. track—100 feet from crossing of main tracks,
Pioneer Mill track—also governs movement to store lead,
No. 4 track—also governs movement to No. 5 track,
No. 6 track—also governs movement to No. 7 track.

If signal 350 feet east of Front St. crossing governing movement on westward main track or from station tracks does not indicate proceed, trains or engines after stopping may proceed on signal from switchtender to clearance point of Front St. crossing, yellow flag by day, yellow light by night.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location	Normal Position
Antelope...End of double track (MP 103.14)	Westward main track

Switch position indicator located at:

Roseville.....Spring switch No. 2 Track, east end drill track.

Indicator does not indicate track occupancy but governs movements against current of traffic No. 2 Track. See Rule D-539.

RULE 605. INTERLOCKING

Sacramento River Drawbridge: Eastward trains failing to receive green aspect in approach Signal 878 must stop west of road crossing, 1030 feet east of Signal 878, unless semi-automatic signal at MP 88.4 indicates "proceed".

Nineteenth Street, Sacramento: At crossing of R Street track with WPRR.

Yard engines using industry spurs will give following signal from push button located on home signal 400 feet west of crossing:

To Valley Grocery spur, o — —,
To Bekins spur, — o —.

Elvas: Limits extend on Sacramento-Roseville line from interlocking signal 1,400 feet west of tower to interlocking signal 1,200 feet east of tower, and on Elvas-Polk line to interlocking signal at west switch Polk; and on Placerville Branch to interlocking signal 600 feet east of junction switch.

Hand signals as required by Rule 628 may be given from the tower instead of from the ground.

Following switches and derails within interlocking limits are hand operated and must not be thrown until permission has been obtained from signal operator:

Middle siding	Crossover to eastward and westward tracks, Elvas-Polk line.
"	West switch and derail.
Hopfen spur	Switch and derail.
R Street industrial track (Brighton)	Switch and derail.
American Can Co. spur	Switch and derail.
Meisters spur	Switch and derail.

Permission must be obtained for each movement into or out of American Can Co. and Meisters spurs.

Whistle signals governing routes as follows:

To Roseville, — o o o o,
To Sacramento, — — — o,
To Polk, — — o o o,
To Elvas siding, o o o — —,
To Third track, o o — —,
To American Can spur, — o —,
To Meister's spur, o — —.

Westward trains will repeat signal approaching Elvas if route not lined.

Roseville: Limits as follows:

On main tracks between MP 102.50 and MP 106.64.

Eastward signal at MP 102.50 governs movements as follows:

Top unit to eastward main track,
Middle unit to receiving track through first switch,
Bottom unit to receiving track through second switch.

Eastward signal at MP 106.16 governs movement as follows:

Top unit to No. 2 Track,
Bottom unit to No. 1 Track.

Telephones to signal operator are located at main track signals. Instructions for operation of dual control switch machines are posted in telephone booths.

Georgiana Slough Drawbridge: At MP 119.53 on Walnut Grove Branch.

GENERAL REGULATIONS

RULE 825. Benali: Kathleen Ave. crossing must not be blocked unnecessarily. No cars may be spotted within 300 feet of this crossing on any yard track, except team track.

RULE 827. Except when handled by DF class engine equipped with operative dynamic brake, westward freight trains will stop 10 mins. at MP 123.00, Placerville Branch, for heat radiation, at which time train inspection will be made, and enginemen will inspect engines.

RULE 873. Blow-off cocks, sanders or sprinkler valves must not be operated, and boosters or injectors must not be started, while engine is standing on, or passing over, slip switch, Sacramento.

AIR BRAKE RULES

RULE 17. Retainers must be used on freight and mixed trains on descending grades as follows:

On Placerville Branch:

MP 131.70 to MP 123.00. One retainer for each 70 tons in train, except when handled by DF-103 to 108, 110 class engines with dynamic brake in operation handling over 1750 tons, one retainer for each 125 tons in train.

FREIGHT TRAINS

RULE 22. Hand brakes on outgoing trains at Roseville must not be released until engine is coupled to train or yard air is through train.

RULE 25. Rear end test must be made immediately prior to leaving Placerville on westward trains.

RULE 33. Gross tonnage of any freight train must not exceed the tons per operative brake between the stations shown below:

Placerville to Folsom Jct.—50 tons.

TRAIN HANDLING

RULE 60. On freight trains handled by diesel engines and using dynamic brakes, before entering siding, turnout, or crossover on descending grade between Placerville and Folsom, dynamic braking force must be reduced by one-half of the maximum and automatic brake applied sufficiently so that speed of 15 MPH will not be exceeded while engine is moving between points 500 feet before reaching and 1500 feet after passing turnout or crossover.

PASSENGER TRAINS

RULE 36. Roseville: Engineer on incoming train will leave brakes applied when train stops, and if continuity of brake pipe is not disturbed car inspector will note that rear brakes on train apply, then will signal outgoing engineer to release brakes, noting that rear brakes of train release. Running test in accordance with Rule 39 must be made as soon as speed permits after leaving Roseville.

MISCELLANEOUS

1. Take water only in emergency at Shingle Springs.

Sacramento: Stationmaster will inform conductor or member of crew when passenger train is ready to depart, and trainmen must be so distributed as to give proceed signal by hand or lamp. The use of communicating signal to start trains is not permitted, except on streamlined passenger trains.

10. Engines listed must not operate on tracks shown below:

Class of Engine	Restricted Tracks
AC, Mt-2	Sacramento...Umbrella sheds at passenger station
DF-101	Folsom.....East of east yard limit sign.

Load limit (car and contents):

Sacramento-Roseville	251,000 pounds
Brighton-Elvas	251,000 pounds
Sacramento-Isleton	210,000 pounds
Sacramento-Brighton via R St.	240,000 pounds
Brighton-Placerville	210,000 pounds
Folsom Jct.-Folsom	210,000 pounds
Citrus-Fair Oaks	210,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP	Location	Description	
88.54	Sacramento	Sacramento River bridge	Side
92.15	Elvas	American River bridge	Side
		(Placerville Branch)	
122.3	East of White Rock	Rock cut	Side
126.4	Latrobe	Rock cut	Side
126.5	East of Latrobe	Rock Cut	Side
128.6	East of Latrobe	Rock cut	Side
		(Walnut Grove Branch)	
92.41	East of Baths	Bridge	Side
111.42	Snodgrass Slough	Bridge	Side

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, wyes, balloon tracks, crossovers and turnouts, except:	15
Through slip switches	10
Through turnouts on other than sidings	10
On branches	10
Through all sidings, yard tracks and other tracks with engine running backward	10
On "R" St. Sacramento, between Front St. and Brighton	10
On Mather Field spur	10
On back tracks or engine leads to Roundhouse, Sacramento	8
On American Can Company tracks, Elvas	8
On tracks serving McClellan Field (Planehaven)	10
On spur to Government lumber yard and Camp Kohler, Walerga	10

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on page 4, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on page 5 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY, REGARDLESS OF TIME.

TERRITORY	*Streamlined Passenger Trains	Other Passenger Trains	Freight and Mixed	Light Engines: Running Forward	Light Engines: Running Backward
Column:	A	1	2	3	4
EASTWARD, SACRAMENTO TO ROSEVILLE:					
MP MP					
88.54 to 89.50	10	10	10	10	10
89.50 to 90.00	15	15	15	15	15
90.00 to 91.70	35	35	15	15	15
91.70 to 92.56 (Interlocking and bridge)	25	25	15	15	15
92.56 to 95.00 (Benali)	50	50	30	30	30
95.00 to 102.50	79	70	55	50	30
102.50 to 106.08	35	35	35	35	35
106.08 to 106.91	15	15	15	15	15
EASTWARD, BRIGHTON TO ELVAS:					
133.20 to 133.33	..	65	50	50	30
133.33 to 133.35 (end double track)	..	25	25	25	20
133.35 to 136.00	..	40	35	35	30
136.00 to 136.31 (91.70) (Wye to Sacramento)	..	25	15	15	15
136.00 to 136.33 (92.00) (Wye to Roseville)	..	25	15	15	15
EASTWARD, BRIGHTON TO PLACERVILLE:					
94.67 to 111.10	..	30	30	30	20
111.10 to 139.00	..	20	20	20	15
139.00 to 139.30	..	10	10	10	10
139.30 to 148.70	..	20	20	20	15
EASTWARD, FOLSOM JCT. TO FOLSOM:	..	20	20	20	15
EASTWARD, CITRUS TO FAIR OAKS:	..	20	20	20	15
EASTWARD, SACRAMENTO TO ISLETON:					
89.59 to 114.50	..	20	20	20	15
114.50 to 121.90	..	15	15	15	15

TERRITORY	*Streamlined Passenger Trains	Other Passenger Trains	Freight and Mixed	Light Engines: Running Forward	Light Engines: Running Backward
Column:	A	1	2	3	4
WESTWARD, ROSEVILLE TO SACRAMENTO:					
MP MP					
106.91 to 106.08	15	15	15	15	15
106.08 to 102.50	35	35	35	35	35
102.50 to 95.00 (Benali)	79	70	55	50	30
95.00 to 92.56	50	50	30	30	30
92.56 to 91.70 (Bridge and interlocking)	25	25	15	15	15
91.70 to 90.00	35	35	15	15	15
90.00 to 89.50	15	15	15	15	15
89.50 to 88.54	10	10	10	10	10
WESTWARD, ELVAS TO BRIGHTON:					
136.33 to 135.24 (Wye from Roseville)	..	25	15	15	15
136.31 to 135.99 (Wye from Sacramento)	..	20	15	15	15
135.24 to 133.33	..	40	35	35	30
133.33 to 133.20	..	70	50	50	30
WESTWARD, PLACERVILLE TO BRIGHTON:					
148.70 to 139.30	..	20	20	20	15
139.30 to 139.00	..	10	10	10	10
139.00 to 111.10	..	20	20	20	15
111.10 to 94.67 (133.27)	..	30	30	30	20
WESTWARD, FOLSOM TO FOLSOM JCT.:	..	20	20	20	15
WESTWARD, FAIR OAKS TO CITRUS:	..	20	20	20	15
WESTWARD, ISLETON TO SACRAMENTO:					
121.90 to 114.00	..	15	15	15	15
114.00 to 89.59	..	20	20	20	15

*Streamlined passenger trains are those having electro-pneumatic brakes on all cars, and with diesel passenger engine.

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Brighton and Roseville Sacramento and Roseville	Placerville to Folsom	Folsom to Placerville	Folsom to Brighton	Brighton to Folsom	Sacramento and Isleton
DP-3	6017	3750	....	....	....	....	....
DP-4, 7	6000 to 6004, 6018	3750	....	....	....	....	....
DP-5, 6	6005 to 6016	6850	....	....	....	....	....
DP-8, 9	6019 to 6027	9250	....	....	....	....	....
DF-1, 2	6138 to 6179	16575	....	....	....	....	....
DF-3 to 8	6180 to 6405	17850	....	....	....	....	....
DF-100	5200 to 5202	....	....	....	....	....	....
DF-101 to 108, 112	5203 to 5249, 5253 to 5278	5000	1825	975	5000	4125	....
DF-109, 111	5250 to 5252, 5503 to 5505	5000	....	....	....	....	....
DF-200 to 204	5100 to 5118	....	....	....	....	....	....
DF-300, 301	4600 to 4603, 4700 to 4703	6300	....	....	....	....	....
DS-1 to 8	1000 to 1032	1600	400	280	1150	725	1200
DS-100 to 109, 111	1300 to 1441, 1464 to 1485	2400	700	490	1925	1250	2000
DS-110	1442 to 1463	3100	1250	590	3825	2425	2375
DS-200, 201	1900 to 1903	775	230	155	675	475	620
M-4	1617 to 1713	2300	625	390	1875	1150	1700
M-6, 8	1721 to 1803, 1824, 1825	2700	775	495	2300	1425	2075
M-9	1804 to 1822, 1826 to 1830	2825	825	525	2425	1500	2200
M-11	1832 to 1835	2950	825	525	2425	1500	2200
T-1	2248, 2252	1950	550	350	1675	1050	1550
T-23	2302 to 2310	2825	825	525	2425	1500	2200
T-28, 31	2312 to 2362	3100	900	575	2650	1625	2400
T-32	2363 to 2370, 2372 to 2384	3100	900	575	2700	1725	2525
T-40	2371	3100	....	....	....	....	....
T-37	2105	2750	825	525	2400	1475	2125
P-1, 3, 5	2411, 2431, 2443, 2449	2500	675	405	2150	1275	1900
P-4	2402, 2410, 2414	2725	750	450	2375	1400	2075
P-6	2453, 2454, 2458	3075	900	550	2675	1650	2375
P-7	2476, 2477	3275	975	600	2850	1750	2525
P-8, 10	2461 to 2474, 2478 to 2483	3650	....	....	....	....	....
P-8, 10	2475, 2484 to 2491	3650	....	....	....	....	....
P-12	3122, 3123	3600	....	....	....	....	....
C-5, 8, 9, 10	2513 to 2598, 2625 to 2860	3425	1000	650	2900	1775	2600
C-18	3400 to 3409	3150	925	600	2675	1650	2375
C-19	3410 to 3426	3300	950	625	2775	1725	2475
TW-3	2937	2125	600	390	1775	1100	1600
TW-8	2914, 2918, 2923	2975	850	555	2525	1550	2300
Mk-2, 4	3201 to 3240	3875	....	....	....	....	....
Mk-5, 6	3242 to 3277	4350	....	....	....	....	....
Mk-7, 8, 9	3301 to 3324	4825	....	....	....	....	....
Mk-10	3295	3725	....	....	....	....	....
Mk-11	3297, 3298	3400	....	....	....	....	....
F-1	3611 to 3652	4975	....	....	....	....	....
F-3, 4, 5	3653 to 3769	5725	....	....	....	....	....
MM-3	3930	6500	....	....	....	....	....
AC-4, 5	4100 to 4125	9000	....	....	....	....	....
AC-6 to 12	3800 to 3811, 4126 to 4294	9550	....	....	....	....	....
Mt-1, 3, 4, 5	4300 to 4376	4600	....	....	....	....	....
Mt-2	4387, 4389	4950	....	....	....	....	....
GS-1, 2	4401 to 4415	4950	....	....	....	....	....
GS-3, 4, 5, 6	4416 to 4469	5150	....	....	....	....	....
SP-1, 2, 3	5000 to 5048	6725	....	....	....	....	....

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

RULES 7-A and 10-G. Yellow signals and unattended red flags and red lights will be placed to the left of track between mile posts:

119.40 and 120.10
129.00 and 129.80
130.20 and 130.70
131.70 and 132.30
197.20 and 220.60
221.00 and 222.00
225.30 and 232.60
236.10 and 238.80

Mile post locations above are those shown for No. 2 Track.

RULE 10-J. Round yellow speed signs indicate the speed restrictions applying to passenger trains with electro-pneumatic brakes on all cars, and with diesel passenger engine.

Speed signs placed to the right of track in current of traffic direction but with two tracks intervening:

Eastward at MP 106.94 Roseville bears figure 40-35-25.

Speed signs on No. 1 Track and on No. 2 Track between MP 111.00 and MP 133.00 are to the right of track for current of traffic movement.

RULE 11. Between Gold Run and Truckee from Nov. 1st to May 1st, train finding a fusee burning along or near track must stop, and then proceed with caution not exceeding 15 MPH for a distance of three-fourths mile.

RULE 14(e). As specified below, — — — — — — will be indication that flagman may return from east:

Roseville on East Valley Subdivision.

RULE 14(l). Westward trains will sound crossing whistle signal immediately after emerging from west portal of Tunnel No. 6, west of Eder.

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following stations:

West MP			East MP
101.66	Roseville	(Eastward and No. 2 Track)	110.87
101.66	"	(No. 1 and Westward Track)	110.87
	"	(Tehama line)	107.59
119.34	Newcastle	(No. 2 Track)	120.82
118.74	"	(No. 1 Track)	120.15
140.03	Colfax		142.94
169.94	Emigrant Gap		172.12
207.28	Truckee		209.09
241.63	Sparks		247.60

Yard limit signs located to left of track:

Approaching Truckee in both directions.

Roseville: End of double track at MP 103.14 Antelope, and at MP 106.16 Roseville. Single track between MP 103.14 and MP 106.16 is within interlocking limits.

Westward freight trains from Mountain Subdivision must not pass Yosemite St. (MP 106.91) unless flashing yellow light is displayed in high special signal just east of passenger station.

Westward freight trains from Mountain Subdivision must not pass Signal 1065 unless proceed signal received from yardman; and westward freight trains from East Valley Subdivision must not pass Signal 1063 unless proceed signal received from yardman.

Westward first-class trains and trains of passenger equipment from Mountain Subdivision, when engines are to be changed, must stop clear of point where East Valley Subdivision lead to yard tracks crosses No. 1 Track near MP 106.65.

Westward freight trains using running track must not pass fouling point at west end in vicinity of Dry Creek unless proceed signal received from yardman.

Movement of trains in both directions between MP 106.64 and MP 106.78 on Mountain Subdivision, and between junction switch at MP 106.66 and MP 106.75 on East Valley Subdivision will be governed by signal indication which will supersede the superiority of trains, but movements must be made with caution, and only after block signal indicating proceed is displayed as prescribed below:

For eastward movement on No. 1 Track, top unit on Signal 1064 governs movement on No. 1 Track; bottom unit governs movement to East Valley Subdivision.

Eastward movement on No. 2 Track is governed by Signal 1060.

For westward movement on No. 1 Track, top unit on Signal 1065 governs movement to No. 1 Track; bottom unit governs movement through crossover to No. 2 Track.

For westward movement on East Valley Subdivision, top unit on Signal 1063 governs movement to junction switch leading to No. 1 Track; bottom unit governs movement across No. 1 Track and No. 2 Track of Mountain Subdivision to yard tracks.

Signal 1062 on east drill track governs movement to East Valley Subdivision only.

Trains stopped by Signals 1060, 1062, 1063, 1064, 1065 or 1067 must not proceed until signal displays proceed indication, but may proceed after stopping if proceed signal received from yardman, movement to be made with caution.

Switch position indicator located at:

Roseville.....Jennings Unit, switch in westward running track.

Indicator does not indicate track occupancy but when displaying red, yellow or green aspects following will govern:

Red aspect...Inoperative.
Yellow aspect.Switch lined for yard receiving unit.
Green aspect .Switch lined for running track Antelope.

Sparks: Semaphore Signal 2452 on signal bridge governs main track movements on eastward main track. Lower arm of Signal 2452 on signal bridge governs diverging-route movement from eastward main track across westward track into freight yard. Dwarf light Signals 2453 and 2459 govern main track movements on westward main track.

Following main track not protected by block signals:

Eastward, from 1400 feet east of engine lead switch at MP 245.50 to Signal 2462.

Westward, from east switch of crossover forming end of double track to Signal 2459.

Light Signal 2455 governs movement from engine lead to eastward main track. When this signal indicates "stop," engine must after stopping at signal, proceed only on hand signal from yardman. Yardman must not give signal to engineer until trains moving on eastward main track have stopped or crossover switches are lined from eastward main track into freight yard, protecting movement.

RULE 98. Railroad crossings at grade not interlocked:

Roseville: Lead from yard to East Valley Subdivision main track crosses No. 2 Track and No. 1 Track of Mountain Subdivision near passenger station. Eastward freight trains from yard to East Valley Subdivision will be governed by Signal 1062, and westward freight trains from East Valley Subdivision to enter yard will be governed by bottom unit of Signal 1063 before fouling or moving over No. 2 Track and No. 1 Track.

RULE 102. Should a passenger train break in two or an emergency application of brakes occur while in motion on the grade between Colfax and Truckee, forward brakeman will immediately go towards rear, close angle cock at opening if train is parted, set hand brakes, and turn up retainers on detached portion. After train is coupled air must be applied from engine before hand brakes and retainers are released.

If necessary to leave detached portion on main track, rear truck of detached portion ascending grade or lead truck of detached portion descending grade must be blocked or chained in such manner as to derail car should they start.

RULE 107. Roseville: Westward trains must not pass Yosemite St. when eastward passenger train is doing work at the station, unless proceed signal received from yardmaster or his representative, green flag by day, green light by night.

RULE 211 will apply when letter "M" is illuminated in letter type indicator as follows:

On Signal	Approaching
1408	Colfax
1706	Emigrant Gap
2091	Truckee

RULE 306. The following block signals, equipped with triangular plate displaying the letter "P", have included in their control limits some special protective device:

Eastward	Protection	Westward
P-1214	Collision detector, highway underpass, MP 121.94	
P-1242	Collision detector, highway underpass, MP 125.53	
	Collision detector, highway underpass. MP 133.35	P-1347
P-1374	Collision detector, highway underpass, MP 137.68	
P-1438	Slide detector fence MP 144.50	
P-2146 / P-2164	Slide detector fence MP 216.50	P-2181 / P-2165
P-2220	Slide detector fence MP 222.50	P-2239

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Midas: Push buttons near Signals 1559 and 1601.

RULE D-506. Signals govern movements in both directions on No. 1 Track and No. 2 Track between crossover at Emigrant Gap and Andover.

Signals govern movements in both directions on No. 1 Track between MP 111.89 and Newcastle.

Rule 509 as applied to single track, or Rule 510 will apply when these signals display stop indication for trains moving against the current of traffic.

Floriston: Light type indicator at MP 222.40 applies to No. 1 Track only, and indicates condition of slide detector fence only and is not connected with block signal circuit. Lunar white aspect indicates track at slide detector fence safe for trains; red aspect requires that inspection must be made of track protected by slide detector fence before train passes the fence.

RULE 535. SPRING SWITCHES

Spring switches not equipped with facing point locks are located as follows:

Location		Normal Position
Roseville	East end east drill track	No. 2 Track
Roseville	East end house track	East drill track
Midas	West end siding	No. 1 Track

Switch position indicator located at:

Roseville.....Spring switch No. 2 Track, east end drill track.

Indicator does not indicate track occupancy but governs movements against current of traffic No. 2 Track. See Rule D-539.

Midas: Westward train on siding to permit train to pass will stop after passing Approach Circuit sign, and if Signal 1599 displays proceed indication must send member of crew to operate time-release transferring signal indication to main track signal. If additional trains are to pass, time-release must be operated for each one after rear of preceding train has reached a point 200 feet west of west switch.

Movements against current of traffic governed by switch point indicator. See Rule D-539.

RULE 605. INTERLOCKING

Roseville: Limits as follows:

On main tracks between MP 102.50 and MP 106.64.

Telephones to signal operator are located at main track signals. Instructions for operation of dual control switch machines are posted in telephone booths.

Norden: Interlocking limits extend on No. 1 Track from westward signal 100 feet east of east switch Eder crossovers to eastward signal 100 feet west of west switch Eder crossovers; and from westward signal 100 feet east of snowshed 42, MP 195.82 to signal bridge 775 feet west of Norden train-order office, and interlocking limits on No. 2 Track extend from signal bridge 775 feet west of Norden train-order office to westward signal 300 feet east of Eder crossovers. Both crossovers at Eder are under control of signal operator at Norden. Both switches of east crossovers are power operated, and both switches of west crossover are hand-throw switches, but equipped with electric locks which must be released by operator before they can be hand-thrown.

On No. 1 Track, westward movement governed by two-unit signal 100 feet east of Eder crossovers, upper unit for No. 1 Track and lower unit for diverging route through crossover. Eastward movement on No. 1 Track governed by single unit signal 100 feet west of Eder crossover.

On No. 2 Track eastward movement governed by two-unit signal 50 feet west of Eder crossovers, upper unit for No. 2 Track and lower unit for diverging route through east crossover. Westward movement on No. 2 Track governed by single unit signal 300 feet east of Eder crossovers.

When desired to use west crossover at Eder consult operator at Norden by phone to release electric lock. Train must not pass interlocking signal until both switches have been lined. Electric locks cannot be released with train standing between interlocking signals.

Telephones are located in house at east end of crossover.

When instructed by signal operator to hand throw power operated switches, carefully follow instructions posted near telephones.

Fire Train spur—Switch and derail hand operated, derail electrically locked and must not be thrown until permission has been obtained from signal operator.

Run-around track—Trains or engines occupying run-around track must obtain permission from signal operator before lining switch to siding.

Spur track switches must not be lined for movement to siding without first obtaining permission from signal operator.

When permission is given by signal operator to eastward trains to pass interlocking signals located on main track and on siding east end of Norden, trains must wait ten minutes and then be preceded by flagman keeping ten minutes behind flagman to next home signal or distant signal displaying green aspect.

When interlocking signal located at MP 195.82 indicates "Stop", westward trains will call signal operator.

Repeater signal is located on left side of track governing westward movements from turntable lead to No. 2 Track.

Westward interlocking signal on No. 1 Track, 240 feet east of Norden station building connected with repeater signal on the left side of track for better visibility.

Call-on signals on certain interlocking signal masts are normally dark, but when displaying flashing yellow light are authority to pass interlocking signal at stop without obtaining permission from operator to couple to train or engine; movement to be made at restricted speed.

When westward trains are moved against current of traffic Eder to Norden, no eastward train or light engine may be permitted to occupy No. 2 Track between signal bridge 775 feet west of train-order office and east switch Norden except for movement from No. 2 Track to siding.

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illum. Letter	On Signal	Approaching	Authorizes and Requires Movement as Follows
		EASTWARD	
M	7-ft. mast.	Bowman	Proceed to Colfax.
S	1408	Colfax	Enter siding and contact operator.
M	1514	Gold Run	Proceed to Midas.
M	7-ft. mast.	Midas	Proceed to Knapp.
M	1642	Knapp	Proceed to Emigrant Gap.
S	1642	Knapp	Enter siding.
M	1656	East end siding Knapp	Enter eastward track and proceed to Emigrant Gap.
S	1706	Emigrant Gap	Enter siding and contact operator.
M	1850	Troy	Proceed to Norden.
		WESTWARD	
M	2331	Verdi	Proceed to Hinton.
M	2201	Hinton	Proceed to Truckee.
S	2091	Truckee	Enter westward siding.
M	1863	Troy	Proceed to Yuba Pass or next siding where train can get into clear.
S	1863	Troy	Enter siding expecting to pass a train on main track.
W	1853	Troy	Wait 15 minutes for following train or light engine to pass.
M	1611	Midas	Proceed to Gold Run.
S	1611	Midas	Enter middle siding expecting to pass a train on main track.
W	1601	West end Midas.	Wait 15 minutes for following train or light engine to pass.
M	1539	Gold Run	Proceed to Colfax.
S	1297	Bowman	Enter westward siding expecting to pass a train on main track.
W	1277	West end Bowman	Wait 15 minutes for following train or light engine to pass.

Trains desiring to enter siding at Troy or Midas and finding signal displaying stop indication and not displaying illuminated letter type indicator, must secure permission from train dispatcher.

GENERAL REGULATIONS

RULE 825. Portable rail skids are hung on posts at lower end of sidings at the following stations:

Bowman Gold Run Midas Knapp Hinton Verdi

When necessary to leave cars on any of these sidings permission must first be obtained from chief train dispatcher, after which rail skid must be placed on rail and leading wheel of first car in descending direction run onto the rail skid, and hand brakes set if brakes are operative before engine is detached.

Trains picking up cars from these sidings must remove rail skid and return it to proper post and lock it in place with switch lock.

RULE 827. Freight trains handled by steam engine will stop between switches, as indicated, at the following stations for heat radiation, at which time train inspection will be made, and enginemen will inspect engines and drain water from main reservoirs and dirt collectors on engine:

Eastward	Westward
MP 202.00.....10 mins. (Stop must be made west of Culvert 202.31)	Troy.....10 mins.
Truckee.....10 mins.	Yuba Pass.....10 mins.
	Knapp..... 5 mins.
	Midas.....10 mins.
	Gold Run.....10 mins.
	Bowman.....10 mins.

During stormy weather when snow on ground, stop may be made at Crystal Lake instead of Yuba Pass, and in that event stop of 5 mins. will be made at Emigrant Gap. Stop may be made at Auburn instead of Bowman in event Bowman occupied, or if necessary to let a train by at Auburn.

Light steam engines not equipped with tire coolers, on descending grade, will stop at Truckee, Emigrant Gap and Colfax a sufficient length of time to permit heat radiation, at which time enginemen will inspect engines.

On freight trains between Lawton and Loomis, a member of the crew must observe track to rear of train for evidence of derailment or any other condition requiring immediate stopping of train. Two Dietz lanterns placed on rear of caboose will be used at night to assist in observing track. When practicable, member of crew must ride rear platform or in rear car on all trains and in a position to observe fire that may be set from moving train while passing through wooden-lined tunnels and over open-deck wooden trestles.

Freight trains handled by DF class engine with dynamic brake operating, may make continuous run Norden to Roseville, provided rolling inspection of train is made at Gold Run.

Train must approach east end of siding at Gold Run at speed not exceeding 8 MPH to allow brakeman to detrain on engineer's side, and must not exceed 8 MPH for length of train, and may then increase speed unless flashing white light appears on mast of Signal 1515.

Brakeman will make rolling inspection as train passes, and if defect requiring stopping of train is observed, will open relay box on post just east of Signal 1529 with switch key, and press button marked "Start", and hold it until white pilot light appears on the board, which will actuate flashing white light on Signal 1515 at west end of siding. Engineer must stop train when flashing white light appears, and must not again move the train until orally informed by conductor or brakeman that train is ready to proceed. After white light is actuated, it must be extinguished before train starts by pressing button marked "Cancel", but extinguishing the light will not authorize movement of train.

This does not relieve trainmen or enginemen from compliance with last paragraph of Rule 26 in the event it becomes necessary for trainman to do repair work under or about a car in the train.

Train inspection light located at east end of siding on westward track will be illuminated on approach of westward train, and inspection is to be made at that point.

AIR BRAKE RULES

RULE 17. Retainers must be used on freight and mixed trains handled by steam engines on descending grades as follows:

Norden to Truckee: One retainer for every 60 tons in train.

Summit to Yuba Pass: One retainer for every 70 tons in train.

Yuba Pass to Loomis: One retainer for every 50 tons in train.

Exception: If tonnage exceeds the number of tons specified for each retainer, trains may be handled Yuba Pass to Loomis with up to 55 tons, and Norden to Truckee with up to 62½ tons per operative retainer if necessary. Not necessary to turn down retainers at Loomis unless stop is made for other reason.

Retainers must not be turned down on eastward freight trains at Truckee until engine has passed west switch of house track.

Retainers must be used on freight and mixed trains handled by diesel engines on descending grades as follows:

Norden to Truckee: With four dynamic brakes in operation handling over 5000 tons, one retainer for each 125 tons in train.

With three dynamic brakes in operation handling over 3750 tons, one retainer for each 125 tons in train.

Norden to Loomis: With four dynamic brakes in operation handling over 4125 tons, one retainer for each 125 tons in train.

With three dynamic brakes in operation handling over 3100 tons, one retainer for each 125 tons in train.

Between Loomis and Truckee: With less than three dynamic brakes in operation, retainers as prescribed above for steam operation must be used.

Retainers must be used on passenger trains on descending grades as follows:

Norden to Truckee: Fifty percent of retainers must be used on Nos. 22 and 26 and trains consisting entirely of mail and/or express cars, which may be turned up on rear of train, and may be turned up at Emigrant Gap instead of Norden if stop is made for any reason at that point, to avoid making stop at Norden. Additional retainers must be used if in the judgment of conductor or engineer they are necessary. Accessible retainers will be used on other passenger trains.

Summit to Loomis: All retainers.

FREIGHT TRAINS

RULE 22. Hand brakes on outgoing trains at Roseville must not be released until engine is coupled to train or yard air is through train.

RULE 25. Rear end test on freight trains must be made immediately prior to leaving Norden on eastward trains; and at Truckee, Summit and Norden on westward trains.

At Colfax on ascending grade, rear end test will be made in accordance with Rule 25 (a). Whistle Signal 14 (b) from rear helper engine will indicate that brake pipe pressure has been restored and train ready to proceed.

RULE 33. Gross tonnage of any freight train must not exceed the tons per operative brake between the stations shown below:

Norden to Truckee	62½ tons
Summit to Yuba Pass	70 tons
Yuba Pass to Loomis	55 tons

TRAIN HANDLING

RULE 60. On freight trains handled by diesel engines and using dynamic brakes, before entering siding, turnout, or crossover on descending grade between Norden and Loomis, dynamic braking force must be reduced to one-half of the maximum and automatic brake applied sufficiently so that speed of 15 MPH will not be exceeded while engine is moving between points 500 feet before reaching and 1500 feet after passing turnout or crossover.

PASSENGER TRAINS

RULE 36. Roseville: Engineer on incoming train will leave brakes applied when train stops, and if continuity of brake pipe is not disturbed car inspector will note that rear brakes on train apply, then will signal outgoing engineer to release brakes, noting that rear brakes of train release. Running test in accordance with Rule 39 must be made as soon as speed permits after leaving Roseville.

RULE 39. Running test must be made on westward trains just after emerging from Tunnel 6 west of Eder.

MISCELLANEOUS

1. Take water only in emergency at Blue Canon.

Westward trains and light engines must not take water at Troy except in emergency.

Eastward freight trains stopping at Colfax for water with helper engines in train, lead engine should stop clear of fouling point of siding.

Light engines in either direction must not take water at Emigrant Gap, Blue Canon or Knapp, except in emergency, and then only sufficient to make next water tank.

After taking water at water columns at Colfax or Truckee, spout must be left cleared, and spout of eastward column pointing east, and spout of westward column pointing west.

2. Eastward passenger trains stopping at Reno, stop clear of Center St.

Eastward trains will approach crossing at Colfax with caution when westward trains are in the vicinity of the crossing.

5. Helper service:

Eastward freight trains with three AC class engines from Roseville or Colfax will place first helper four cars ahead of caboose and second helper separated from the first by eleven cars. If C class helper added at Colfax it will be placed ahead of road engine.

Eastward freight trains from Roseville with one helper other than AC class will place same one car ahead of caboose and if more than one helper required the engines must be separated by eleven cars.

Eastward freight trains requiring one, and not to exceed two helpers other than AC class from Colfax will place them in train one car ahead of caboose.

Westward freight trains requiring two helpers from Truckee will place one helper next ahead of caboose and separate the second helper from the first by five cars.

Westward freight trains cutting out helpers at Summit will observe car marker signs and make stop accordingly. If cars other than caboose are to be coupled, helper will shove rear of train to a coupling, then stretch train to insure coupling properly made, after which rear end test must be made. Trainmen will then turn up retainers, after which they will notify enginemen they are ready to move to eating house.

DF-1 to 8 class engines, when used as helper, will be placed 18 cars ahead of caboose.

6. Stop sign at Roseville on Circuit Drive where switch leads into car repair tracks. All engines must stop at this sign and then proceed with caution.

10. Storage tanks of Standard Oil Company near tracks at MP 107.90 between Roseville and Rocklin. Flues of engines must not be sanded until engine has passed this point.

Engines listed must not operate on tracks shown below:

Class of Engine		Restricted Tracks
F, AC, Mk, Mt, GS, DF	Auburn	Nevada St. Spurs.
"	Clipper Gap	Team track east of road crossing.
"	Colfax	Material spur in west yard.
"	Rocklin	Team and house tracks.
"	Loomis	House tracks, Tracks 1, 2 and 3 and Pacific spur.
"	Penryn	Fruit spurs west of station.
"	Auburn	Standard Oil spur and High line.
"	New England Mills	Spur, west of tool house.
"	Magra	Spur.
"	Yuba Pass	Spurs.
"	Crystal Lake	Spur.
Engines heavier than 330,000 pounds on drivers	Newcastle	Fruit spurs 3, 4, 6 and 7, Auburn Lbr. Co. spur.
"	Auburn	House track.
"	Cisco	Campbell spur.
Engines heavier than 200,000 pounds on drivers	Troy	Spur.
"	Summit	Lumber spur.
"	Boca	House track and corral.
"	Floriston	Spur.
"	Verdi	House track.
"	Mogul	Spur.
AC	Colfax	Corral track west of corral, bunk spur; house track and house lead east of freight house; team track beyond east end of freight house platform; scale track.

Engines turning at Colfax must begin the movement on west leg of wye, initial switch located just east of PFE icing deck.

Load limit (car and contents):

Roseville-Sparks ..... 251,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

11. Tracks between Roseville and Sparks numbered, and unless otherwise authorized, will be used as double track as follows:

No. 1 westward trains, via Auburn and
No. 2 eastward trains, via Auburn, Nevada Street.

14. From May 1 to Nov. 1, sprinklers will be placed in service on westward freight trains and light engines, Norden to Loomis, and on eastward freight trains and light engines Norden to Truckee.

Sprinklers are to be kept open while train is in motion; where long stops are made they will be closed temporarily to avoid waste of water.

24. Minimum clearances for rotary plows:

Rotary snow plows 7210 and 7222 equipped with wings will not clear snow sheds and tunnels when wings are extended.

All rotaries will not properly clear ground throw switches with switch lamps and it will be necessary to remove switch lamps before passing and then replace them.

Rotary snow plows must come to a stop when a train or engine is passing on adjacent track.

Rotary snow plows equipped with wide wings must not meet or pass other rotaries so equipped, on adjacent track until it is known that proper clearance exists.

Flangers operating in snow territory must raise flanger blades and stop while train or engine is passing on adjacent track.

OPERATION OF TURNTABLES

28. Yellow light signals on leads from turntable at Norden. These signals will indicate route to be used from turntable. If no aspect visible when engine is ready to leave turntable, telephone signal operator at Norden for instructions.

Turntable equipped with rail locks each end. Before moving onto table from any lead table must be lined so engine will enter from locked end only. Engines when backing and approaching table from lead from eastward siding, east end, will stop to clear table and fireman after properly lining and locking table will signal engineer to move onto table by green light controlled by push button located on post of turntable shed on engineer's side. This signal does not indicate position of turntable or turntable lock. Engines leaving turntable will leave from locked end. In making movements to or from turntable it will not be necessary to lock opposite end of table.

Norden turntable must not be moved until engineer signals fireman engine is properly spotted and brakes applied.

Marker posts are placed on each end of the Norden turntable to aid in spotting engines. AC class engines must be spotted with center of cab door directly opposite marker post to avoid couplers striking concrete piers when turning.

Enginemen must see that knuckles on both ends of engine are closed before turning engine.

Normal position turntable will be as follows:

Norden ..... East approach to eastward track.

Trainmen and enginemen using this turntable must leave it lined as shown above.

Engineer or fireman, preferably engineer, must remain in the cab of engine at all times when engines are being turned at Norden and Emigrant Gap.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP	Location	Description
	(ROSEVILLE-SPARKS—EASTWARD)	
111.21	East of Rocklin	Antelope Creek Bridge ..... Side
114.20	East of Rocklin	Tunnel No. 15 ..... Side and overhead
114.70	East of Rocklin	Tunnel No. 16 ..... Side and overhead
117.30	East of Lincoln Ave., Penryn	Tunnel No. 17 ..... Side and overhead
120.50	East of Newcastle	Tunnel No. 18 ..... Side and overhead
122.70	East of Newcastle	Tunnel No. 19 ..... Side and overhead
123.10	East of Newcastle	Tunnel No. 20 ..... Side and overhead
124.60	East of Nevada St., Auburn	Tunnel No. 21 ..... Side and overhead
131.20	East of Bowman	Tunnel No. 22 ..... Side and overhead
132.70	East of Clipper Gap	Tunnel No. 23 ..... Side and overhead
132.90	East of Clipper Gap	Tunnel No. 24 ..... Side and overhead
133.10	East of Clipper Gap	Tunnel No. 25 ..... Side and overhead
133.30	East of Clipper Gap	Tunnel No. 26 ..... Side and overhead
133.80	East of Clipper Gap	Tunnel No. 27 ..... Side and overhead
134.80	East of Applegate	Tunnel No. 28 ..... Side and overhead
135.90	East of Applegate	Tunnel No. 29 ..... Side and overhead
138.70	East of New England Mills	Tunnel No. 30 ..... Side and overhead
139.20	East of New England Mills	Tunnel No. 31 ..... Side and overhead
139.40	East of New England Mills	Tunnel No. 32 ..... Side and overhead
141.70	Colfax, west of station	Signal 1414 ..... Side
152.20	Gold Run, East of station	Water Column ..... Side
152.20	Gold Run, East of station	Oil Column ..... Side
164.30	Knapp	Tunnel No. 1 ..... Side and overhead
164.30	Knapp	Lower Water Column ..... Side
166.60	Blue Canon, West of station	Signal 1656 ..... Side
166.60	Blue Canon, East of station	Water Column ..... Side
171.80	Emigrant Gap	Signal 1718 ..... Side
177.87 to 198.91	Crystal Lake to Andover	Snowsheds and signals in Snowsheds ..... Side and overhead
210.60	East of Truckee	Signal Bridge 2106 ..... Side
214.71	East of Truckee	Signal Bridge 2146 ..... Side
216.52	Boca	Signal Bridge 2164 ..... Side
218.05	Hinton	Signal Bridge 2180 ..... Side
221.88	Wickes	Signal Bridge 2220 ..... Side
231.50	Verdi	Signal Bridge 2316 ..... Side
237.02	Lawton	Signal Bridge 2370 ..... Side
238.90	East of Lawton	Signal Bridge 2390 ..... Side
	(SPARKS-ROSEVILLE—WESTWARD)	
238.90	West of Reno	Signal Bridge 2389 ..... Side
231.50	Verdi	Signal Bridge 2317 ..... Side
218.05	Hinton	Signal Bridge 2181 ..... Side
216.52	Boca	Signal Bridge 2165 ..... Side
214.71	West of Boca	Signal Bridge 2147 ..... Side
212.63	West of Boca	Signal Bridge 2125 ..... Side
198.91 to 177.87	Andover to Crystal Lake	Snowsheds and signals in Snowsheds ..... Side and overhead
200.22	Andover	Tunnel No. 13 ..... Side and overhead
195.70	West of Eder	Tunnel No. 12 ..... Side and overhead
195.40	West of Eder	Tunnel No. 11 ..... Side and overhead
195.10	West of Eder	Tunnel No. 10 ..... Side and overhead
194.90	West of Eder	Tunnel No. 9 ..... Side and overhead
194.30	West of Eder	Tunnel No. 8 ..... Side and overhead
194.10	West of Eder	Tunnel No. 7 ..... Side and overhead
193.70	West of Eder	Tunnel No. 6 ..... Side and overhead
181.00	West of Troy	Tunnel No. 4 ..... Side and overhead
180.70	West of Troy	Tunnel No. 3 ..... Side and overhead
166.00	Blue Canon, East of station	Water Column ..... Side
164.30	West of Knapp	Tunnel No. 1 ..... Side and overhead
152.20	Gold Run, East of station	Oil Column ..... Side
141.70	Colfax, East of station	Signal 1425 ..... Side
141.70	Colfax, West of station	Water Column ..... Side
141.70	Colfax, West of station	Signal 1415 ..... Side
122.66	West of Auburn	Rock Cut ..... Side
122.52	West of Auburn	Rock Cut ..... Side
122.20	West of Auburn	Bloomer Cut ..... Side
122.00	West of Auburn	Rock Cut ..... Side

FIRE ALARM BOX LOCATIONS KNAPP TO ANDOVER

No. Box	LOCATION	MP
7	Emigrant Gap, east end of snow shed	171.60
8	East of Signal 1725	172.50
9	At Signal 1735, east of Emigrant Gap	173.70
12	East of Emigrant Gap	174.20
13	Crystal Lake, near west switch	178.00
14	Crystal Lake, near section house	178.40
17	West end Butte Canyon Bridge	178.90
18	East end of Shed No. 10	179.10
19	Opposite section house at Cisco	180.30
21	At Signal 1841, east of Cisco	184.00
22	Troy	185.50
26	East end lower Cascade Bridge	186.80
27	East end upper Cascade Bridge	187.60
28	West end snow shed, west of Norden	191.80
29	No. 1 Track Norden, east of cook house	192.50
31	No. 1 Track Norden, old Summit station	193.00
32	No. 1 Track, west of Tunnel 6	193.60
33	No. 1 Track, east of Tunnel 7	194.20
34	No. 1 Track, east of Tunnel 8	194.70
35	No. 1 Track, east of Tunnel 10	195.20
36	No. 1 Track, east of Tunnel 11	195.70
37	No. 1 Track, on top of Tunnel 12	195.80
38	No. 2 Track east portal Tunnel 41	195.50
39	Eder crossovers	197.70
42	West end of shed No. 47	198.60
43	East end of shed No. 47	199.00
44	West of Tunnel 13	200.00
46	Opposite Andover section house	200.50
49	Norden turntable	192.10
51	No. 2 Track, east switch, run-around track	192.60
52	No. 2 Track Norden, road crossing	193.00
53	No. 2 Track Norden, east switch	193.20

Code signals following box numbers are as follows:
One: Broken rail on No. 2 Track,
Two: Broken rail on No. 1 Track,
Three: Slide on No. 2 Track,
Four: Slide on No. 1 Track,
Five: Telephone,
Six: FIRE.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, wyes, balloon tracks, crossovers and turnouts, except:	15
Through slip switches	10
Through turnouts on other than sidings	10
On branches	10
Through all sidings, yard tracks and other tracks with engine running backward	10

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on page 4, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on page 5 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY, REGARDLESS OF TIME.

TERRITORY	*Streamlined PASSENGER TRAINS	OTHER PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES RUNNING FORWARD	LIGHT ENGINES RUNNING BACKWARD
Column:	A	1	2	3	4
EASTWARD, ROSEVILLE TO SPARKS, No. 2 Track: MP MP					
106.91 to 108.12	40	35	25	25	15
108.12 to 113.00	70	50	35	35	20
113.00 to 141.70 (Colfax)	50	45	35	35	20
141.70 to 152.00	32	30	20	30	15
152.00 to 153.00	32	30	30	30	15
153.00 to 171.80 (Emigrant Gap)	32	30	20	30	15
171.80 to 192.00 (Norden)	32	30	25	30	15
192.00 to 207.75, except:	32	30	20	30	15
Passing waiting room, Norden	15	15	15	15	15
207.75 to 209.10	40	35	20	30	15
209.10 to 238.80	45	40	35	35	25
238.80 to 241.68	45	40	30	30	20
★241.68 to 244.16 (Reno)	20	20	20	20	15
244.16 to 245.12	45	40	20	20	20
245.12 to 247.14	20	15	15	15	15

TERRITORY	*Streamlined PASSENGER TRAINS	OTHER PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES RUNNING FORWARD	LIGHT ENGINES RUNNING BACKWARD
Column:	A	1	2	3	4
WESTWARD, SPARKS TO ROSEVILLE, No. 1 Track: MP MP					
247.14 to 245.12	20	15	15	15	15
245.12 to 244.16	45	40	20	20	20
★244.16 to 241.68	20	20	20	20	15
241.68 to 238.80	45	40	30	30	20
238.80 to 209.10	45	40	35	35	25
209.10 to 113.26, except:	32	30	20	30	15
Passing waiting room, Norden	15	15	15	15	15
113.26 to 111.27	70	50	35	45	30
111.27 to 111.03	40	35	35	35	15
111.03 to 108.12	70	50	35	45	30
108.12 to 106.91	40	40	15	15	15

★Regulated by City ordinance.

*Streamlined passenger trains are those having electro-pneumatic brakes on all cars, and with diesel passenger engine.

Freight train handled by DF-1 to 8 class engines when permitted to operate without use of retainers, may make maximum speed as follows:
Westward, MP 192.10 (Norden) to MP 169.60 ..... 25 MPH
" MP 144.00 (Colfax) to MP 123.00 ..... 25 MPH
Eastward, MP 192.00 (Norden) to MP 209.10 ..... 25 MPH

Trains with flangers must not exceed 30 MPH between Lawton and Loomis.

Trains with rotary snow plows must not exceed 25 MPH between Lawton and Loomis, and when pushed by engine must not exceed 20 MPH between these points.

Fire trains, with water cars full must not exceed 25 MPH at any point, and with water cars less than three-fourths full must not exceed 20 MPH. Water cars must be kept full when possible.

RULE 10-J. A light engine, or an engine with caboose may make speed shown in Speed Restrictions table for light engines in territory where such speed is in excess of that authorized by speed sign.

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Roseville to Colfax via No. 2 Track	Colfax to Sparks via No. 2 Track Roseville to Colfax via No. 1 Track	Sparks to Truckee	Truckee to Summit
DP-3	6017	1300	690	1625	1125
DP-4, 7	6000 to 6004, 6018	1300	700	1675	1150
DP-5, 6	6005 to 6016	2200	1275	3275	1700
DP-8, 9	6019 to 6027	2750	1650	4075	2150
DF-1, 2	6138 to 6179	4425	3100	6400	4150
DF-3 to 8	6180 to 6405	5500	3175	7900	4150
DF-100	5200 to 5202	....	....	....	....
DF-101 to 108, 112	5203 to 5249, 5253 to 5278	1450	900	2150	1125
DF-109, 111	5250 to 5252, 5503 to 5505	....	....	....	....
DF-200 to 204	5100 to 5118	....	....	....	....
DF-300, 301	4600 to 4603, 4700 to 4703	....	....	....	....
DS-1 to 8	1000 to 1032	445	255	660	340
DS-100 to 109, 111	1300 to 1441, 1464 to 1485	685	405	1025	530
DS-110	1442 to 1463	875	530	1300	685
DS-200, 201	1900 to 1903	230	135	345	180
M-4	1617 to 1713	525	345	825	400
M-6, 8	1721 to 1803, 1824, 1825	650	435	1000	500
M-9	1804 to 1822, 1826 to 1830	700	465	1075	525
M-11	1832 to 1835	700	465	1075	525
T-1	2248, 2252	450	295	700	340
T-23	2302 to 2310	675	460	1050	525
T-28, 31	2312 to 2362	750	500	1175	575
T-32	2363 to 2370, 2372 to 2384	725	485	1150	550
T-40	2371	725	485	1150	550
T-37	2105	675	420	1050	525
P-1, 3, 5	2411, 2431, 2443, 2449	550	350	900	475
P-4	2402, 2410, 2414	625	390	1000	525
P-6	2453, 2454, 2458	725	445	1150	575
P-7	2476, 2477	800	490	1250	625
P-8, 10	2461 to 2474, 2478 to 2483	775	495	1275	675
P-8, 10	2475, 2484 to 2491	775	495	1275	675
P-12	3122, 3123	800	500	1300	700
C-5, 8, 9, 10	2513 to 2598, 2625 to 2860	850	575	1300	650
C-18	3400 to 3409	775	490	1175	625
C-19	3410 to 3426	800	500	1225	650
TW-3	2937	500	310	775	400
TW-8	2914, 2918, 2923	725	485	1125	625
Mk-2, 4	3201 to 3240	950	625	1475	800
Mk-5, 6	3242 to 3277	1050	700	1625	925
Mk-7, 8, 9	3301 to 3324	1150	750	1750	1000
Mk-10	3295	900	575	1375	725
Mk-11	3297, 3298	875	550	1325	700
F-1	3611 to 3652	1225	825	1875	1050
F-3, 4, 5	3653 to 3769	1375	925	2150	1200
MM-3	3930	1550	975	2475	1275
AC-4, 5	4100 to 4125	2225	1400	3400	1775
AC-6 to 12	3800 to 3811, 4126 to 4294	2400	1450	3650	1850
Mt-1, 3, 4, 5	4300 to 4376	1075	700	1700	925
Mt-2	4387, 4389	1200	725	1875	950
GS-1, 2	4401 to 4415	1125	725	1800	975
GS-3, 4, 5, 6	4416 to 4469	1175	775	1850	1025
SP-1, 2, 3	5000 to 5048	1625	1025	2525	1325

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

RULE 10-J. Speed sign placed to right of track but with one track intervening:

Westward at MP 144.63 Berg, bears the figures 50-35.

RULE 14(d). As specified below, — — — — o, will be indication that flagman may return from west:

Tehama on West Valley Subdivision.

RULE 14(e). As specified below, — — — — — — will be indication that flagman may return from east:

Roseville on East Valley Subdivision,
Berg on Yuba City Branch.

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following stations:

West MP		East MP
102.04	Roseville (Eastward and No. 2 Track)	110.87
102.04	" (No. 1 and Westward Track)	110.87
	" (Tehama line)	107.59
138.75	Marysville	143.94
	" (Oroville Branch)	124.44
	" (Dantoni Branch)	144.25
182.61	Chico	185.36
	" (Stirling City Branch)	187.06
146.40	Oroville	147.95
146.78	Yuba City	148.24

Yard limit sign located to left of track:

Eastward approaching Gerber.

Roseville: End of double track at MP 103.14 Antelope, and at MP 106.16 Roseville. Single track between MP 103.14 and MP 106.16 is within interlocking limits.

Westward freight trains from Mountain Subdivision must not pass Signal 1065 unless proceed signal received from yardman; and westward freight trains from East Valley Subdivision must not pass Signal 1063 unless proceed signal received from yardman.

Westward freight trains using running track must not pass fouling point at west end in vicinity of Dry Creek unless proceed signal received from yardman.

Movement of trains in both directions between MP 106.64 and MP 106.78 on Mountain Subdivision, and between junction switch at MP 106.66 and MP 106.75 on East Valley Subdivision will be governed by signal indication which will supersede the superiority of trains, but movements must be made with caution, and only after block signal indicating proceed is displayed as prescribed below:

For eastward movement on No. 1 Track, top unit on Signal 1064 governs movement to No. 1 Track; bottom unit governs movement to East Valley Subdivision.

Eastward movement on No. 2 Track is governed by Signal 1060.

For westward movement on No. 1 Track, top unit on Signal 1065 governs movement to No. 1 Track; bottom unit governs movement through crossover to No. 2 Track.

For westward movement on East Valley Subdivision, top unit on Signal 1063 governs movement to junction switch leading to No. 1 Track; bottom unit governs movement across No. 1 Track and No. 2 Track of Mountain Subdivision to yard tracks.

Signal 1062 on east drill track governs movement to East Valley Subdivision only.

Trains stopped by Signals 1060, 1062, 1063, 1064, 1065 or 1067 must not proceed until signal displays proceed indication, but may proceed after stopping if proceed signal received from yardman, movment to be made with caution.

Swith position indicator located at:

Roseville.....Jennings Unit, switch in westward running track.

Indicator does not indicate track occupancy but when displaying red, yellow or green aspects following will govern:

Red aspect.....Inoperative.
Yellow aspect...Switch lined for yard receiving unit.
Green aspect...Switch lined for running track Antelope.

RULE 98: Railroad crossings at grade not interlocked:

Roseville: Lead from yard to East Valley Subdivision main track crosses No. 2 Track and No. 1 Track of Mountain Subdivision near passenger station. Eastward freight trains from yard to East Valley Subdivision will be governed by Signal 1062. and westward freight trains from East Valley Subdivision to enter yard will be governed by bottom unit of Signal 1063 before fouling or moving over No. 2 Track and No. 1 Track.

Yuba City: SNRy at Bridge St., and at B St.—Stop within 200 feet of crossings.

MP 186.60 on Stirling City Branch: SNRy crossing—Stop within 200 feet of crossing.

RULE 103-A. Trains and engines must stop and be preceded by flagman before crossing highways and streets at:

Clayton.....Both spurs,
Marysville...Fourth St. crossing on Old Cannery track and 14th and E Street crossing,
Wilson.....Wilson road crossing.

RULE 104. The normal position of rigid switches at junctions:

Dantoni Jct...Dantoni Branch, for Main line,
Berg.....Yuba City Branch, for siding,
Chico.....Stirling City Branch, for No. 1 yard track.

RULE 306. The following block signals, equipped with triangular plate displaying the letter "P", have included in their control limits some special protective device.

Eastward	Protection	Westward
P-1082	Collision detector, highway underpass, MP 108.22	P-1089
P-1344	High water detector, bridge 135.00	P-1371
P-1406	Spring switch west end siding Marysville	
P-1906	High water detector, bridge 191.83	P-1927
P-2104	Collision detector, county road underpass, MP 210.7	P-2111

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location		Normal Position
Marysville	West end siding	Main track

Spring switches not equipped with facing point locks are located as follows:

Location		Normal Position
Stirling City	50 feet west of balloon track switch	For eastward movement

Main track switch 50 feet east of spring derail at Stirling City must be left lined and locked for movement into balloon track.

Switch position indicator located at:

Roseville.....Spring switch No. 2 Track, east end drill track.

Indicator does not indicate track occupancy but governs movements against current of traffic No. 2 Track. See Rule D-539.

RULE 605. INTERLOCKING

Roseville: Limits as follows:

On main tracks between MP 102.50 and MP 106.64.

Telephones to signal operator are located at main track signals. Instructions for operation of dual control switch machines are posted in telephone booths.

Binney Jct. Tower: Limits extend from fouling point east end siding Marysville to westward interlocking signal opposite Signal 1446 at Berg.

Trains from Yuba City Branch must obtain permission from signal operator Binney Jct., before fouling Berg siding.

Westward trains on siding Berg must obtain permission from signal operator Binney Jct., before fouling main track, and will then enter interlocking limits when signal just west of siding switch displays proper indication for movement, or as prescribed by Rule 663.

If there is no westward train on siding, a train on main track finding interlocking signal for entrance to Binney Jct. interlocking in proceed position may proceed to interlocking limits.

Telephone located at west end Berg siding.

Whistle signals:

Main track to or from Tehama, — o o o o,
Siding to or from Tehama, o — — —,
Siding to or from Oroville, — — — o,
Siding to or from west leg of wye, o o o — —,
Main track to or from west leg of wye, — — o o o,
Main track to or from east leg of wye, o —.

Tehama-Gerber: Interlocking limits on main track extend from signal 398 feet west of Tehama junction switch on West Valley Subdivision. and signal 293 feet west of Tehama junction switch on East Valley Subdivision to signal 48 feet west of west switch No. 1 track Gerber yard. Interlocking limits on siding extend from west switch to dwarf semi-automatic signal 295 feet east of west switch Gerber siding.

Top unit of signal on East Valley Subdivision 293 feet west of Tehama junction switch governs movement on main track. Lower unit governs movement to Gerber siding.

Top unit of semi-automatic signal at west end siding Gerber governs movment to West Valley Subdivision; lower unit governs movement to East Valley Subdivision.

East switch of crossover between main track and Gerber siding is equipped with an electric lock. Permission to move from siding to main track through this crossover must be obtained from the operator. The electric lock on the east switch must first be operated in accordance with instructions posted inside of door of electric lock located at switch, after which manually line the east switch and then line the west switch.

Trains using crossover from main track to siding must first manually line west crossover switch, then operate electric lock in accordance with instructions posted inside door of electric lock located at the east crossover switch after which manually line the switch.

Trains authorized to enter Gerber siding through crossover must have engine east of interlocking signal before electric lock can be operated.

RULE 680. AUTOMATIC INTERLOCKING

Live Oak: Crossing SNRy one-half mile east of Live Oak.

Trains must not exceed 30 MPH between home signal and crossing.

When trains are stopped by signals governing the use of automatic interlockings, flagman must be sent to crossing to operate clock-work time release. Release must not be operated when trains are between home signals or seen approaching on intersecting line.

After release has been operated, a red indicator light should be displayed over release and home signal should indicate proceed or red indicator on home signal must be displayed. Trains may then proceed.

If red indicator lights are not displayed, trains may proceed over crossing as provided by Rule 663.

Instructions for operating time release are posted on door of box.

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illum. Letter	On Signal	Approaching	Authorizes and Requires Movement as follows
M	1432	Berg	Proceed to east end siding.
S	1432	Berg	Enter siding.
M	1467	Berg	Proceed to interlocking limits west of Berg.
S	1467	Berg	Enter siding.

GENERAL REGULATIONS

RULE 827. Freight trains, and light steam engines not equipped with tire coolers, on descending grade, will stop between switches, as indicated, at the following stations for heat radiation, at which time train inspection will be made and enginemen will inspect engines:

Westward on Stirling City Branch:

Doon ..... 10 mins.
Paradise ..... 10 mins.

RULE 830. Westward freight trains stopping at Chico to perform switching or to take water, must stop east of Sacramento Ave., or cut train at that point to permit the passage of traffic over tracks.

RULE 836. Cars must not be shoved ahead of engine at any point between Stirling City and Chico on westward trip.

AIR BRAKE RULES

RULE 17. Retainers must be used on freight and mixed trains on descending grades as follows:

Stirling City to Chico: One retainer for each 40 tons in train, except when handled by DF-103 to 108, 110 class engines with dynamic brake in operation and over 750 tons one retainer for each 75 tons in train.

FREIGHT TRAINS

RULE 22. Hand brakes on outgoing trains at Roseville must not be released until engine is coupled to train or yard air is through train.

RULE 25. Rear end test on freight trains must be made immediately prior to leaving Stirling City on westward trains.

RULE 33. Gross tonnage of any freight train must not exceed 40 tons per operative brake Stirling City to Chico.

TRAIN HANDLING

RULE 60. On freight trains handled by diesel engines and using dynamic brakes, before entering siding, turnout, or crossover on descending grade between Stirling City and Chico, dynamic braking force must be reduced to one-half of the maximum and automatic brake applied sufficiently so that speed of 15 MPH will not be exceeded while engine is moving between points 500 feet before reaching and 1500 feet after passing turnout or crossover.

MISCELLANEOUS

1. In valley territory engines may take oil and water without cutting off from train at any point except westward freight trains at Marysville.

Emergency stand pipe water supply for engines 300 feet west of station on main track Marysville. Operated from valve handle extending above platform railing.

4. Helper service:

Two engines must not be coupled on Stirling City Branch. Helper engine must be cut back in train.

10. Engines listed must not operate on tracks shown below:

Class of Engine		Restricted Tracks
F, AC, Mk, Mt, GS	Chico	Priol warehouse spur; Reynolds warehouse spur; No. 3 and No. 4 tracks, Barber yard.
"	Marysville	Strain warehouse—9th and B Sts.—(Engines must not enter warehouse).
F, AC	Clayton	Stockton Fire Brick spur across highway.
Engines heavier than 210,000 pounds on drivers	Marysville	Old Cannery spur.
"	Lincoln	Grain Growers elevator track.
Engines heavier than 200,000 pounds on drivers	Lincoln	Gladding McBean tracks.
All engines	Chico	Diamond Match Co. track at wye.
Engines heavier than C class	Marysville	Within yard limits on Oroville line beyond Valley Meat corral track.
All engines	Dantoni	Industry track beyond 700 feet east of east switch of siding.
"	Oswald	Back track, beyond three car-lengths from west end, and beyond road crossing from east end.

Load limit (car and contents):

Roseville-Tehama ..... 251,000 pounds
Chico-Stirling City ..... 210,000 pounds
Berg-Wilson ..... 210,000 pounds
Dantoni Jct.-Dantoni ..... 210,000 pounds
Binney Jct.-Oroville ..... 210,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

14. From May 1 to Nov. 1, sprinklers will be placed in service on westward freight trains and light engines Stirling City to Butte Creek bridge.

LOCATION OF OVERHEAD AND SIDE STRUCTURES NOT STANDARD CLEARANCE ON MAIN TRACK AND SIDINGS

MP	Location	Description
147.6	Yuba City	SNRy trolley wire, Bridge St. Overhead
147.6	Yuba City	SNRy trolley wire, B St. Overhead

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on page 4, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on page 5 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY, REGARDLESS OF TIME.

TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES RUNNING FORWARD	LIGHT ENGINES RUNNING BACKWARD
Column:	1	2	3	4
EASTWARD, ROSEVILLE TO TEHAMA:				
MP MP				
106.60 (106.58) to 106.85 (junction switch)	15	15	15	15
106.85 to 117.17	60	50	50	30
117.17 to 117.43	50	50	50	30
117.43 to 126.88	60	50	50	30
126.88 to 126.96 (Bear River bridge) except:	60	50	50	30
with GS, AC, or F class engines	25	25	25	25
126.96 to 139.80	60	50	50	30
139.80 to 142.44	25	25	25	25
142.44 to 143.88	50	35	35	30
143.88 to 152.30	60	50	50	30
152.30 to 152.31 (SNRy. crossing)	30	30	30	30
152.31 to 162.00	60	50	50	30
162.00 to 182.75	50	35	35	30
182.75 to 185.08 (Chico)	25	25	25	20
185.08 to 192.00	50	35	35	30
192.00 to 198.96	60	50	50	30
198.96 to 203.67	60	40	40	30
203.67 to 203.69 (Deer Creek bridge) except:	60	40	40	30
with GS, AC, or F class engines	25	25	25	25
203.69 to 209.93	60	40	40	30
209.93 to 210.82	35	35	35	30
210.82 to 210.97 (Sacramento River bridge) except:	35	35	35	30
with GS, AC, or F class engines	25	25	25	25
210.97 to 211.85	35	35	35	30
211.85 to 211.87 (junction switch)	25	25	25	20
EASTWARD, CHICO TO STIRLING CITY:				
184.38 to 188.75	20	20	20	20
188.75 to 215.46	12	12	12	12
EASTWARD, DANTONI JCT. TO DANTONI	20	20	20	15
EASTWARD, BINNEY JCT. TO OROVILLE:	20	20	20	15
EASTWARD, BERG TO WILSON:				
★144.43 to 148.80	15	15	15	15
148.80 to 159.24	25	25	25	20

TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES RUNNING FORWARD	LIGHT ENGINES RUNNING BACKWARD
Column:	1	2	3	4
WESTWARD, TEHAMA TO ROSEVILLE:				
MP MP				
211.87 to 211.85 (junction switch)	25	25	25	20
211.85 to 210.97	35	35	35	30
210.97 to 210.82 (Sacramento River bridge) except:	35	35	35	30
with GS, AC, or F class engines	25	25	25	25
210.82 to 209.93	35	35	35	30
209.93 to 203.69	60	40	40	30
203.69 to 203.67 (Deer Creek bridge) except:	60	40	40	30
with GS, AC, or F class engines	25	25	25	25
203.67 to 198.96	60	50	50	30
198.96 to 192.00	60	50	50	30
192.00 to 185.08	50	35	35	30
185.08 to 182.75 (Chico)	25	25	25	20
182.75 to 162.00	50	35	35	30
162.00 to 152.31	60	50	50	30
152.31 to 152.30 (SNRy. crossing)	30	30	30	30
152.30 to 143.88	60	50	50	30
143.88 to 142.44	50	35	35	30
142.44 to 139.80	25	25	25	25
139.80 to 126.96	60	50	50	30
126.96 to 126.88 (Bear River bridge) except:	60	50	50	30
with GS, AC, or F class engines	25	25	25	25
126.88 to 117.43	60	50	50	30
117.43 to 117.17	50	50	50	30
117.17 to 106.85	60	50	50	30
106.85 to 106.58 (106.60) (junction switch)	15	15	15	15
WESTWARD, STIRLING CITY TO CHICO:				
215.46 to 188.75	12	12	12	12
188.75 to 184.38	20	20	20	20
WESTWARD, DANTONI TO DANTONI JCT.	20	20	20	15
WESTWARD, OROVILLE TO BINNEY JCT.	20	20	20	15
WESTWARD, WILSON TO BERG:				
159.24 to 148.80	25	25	25	20
★148.80 to 144.43	15	15	15	15

★Regulated by City ordinance.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, wyes, balloon tracks, crossovers and turnouts, except:	15
Through slip switches	10
Through turnouts on other than sidings	10
On branches	10
Through all sidings, yard tracks and other tracks with engine running backward	10

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Roseville and Gerber	Chico to Stirling City	Stirling City to Chico	Wilson and Berg	Dantoni Jct. and Dantoni	Binney Jct. and Oroville
DP-3	6017	3750	....	....	....	....	....
DP-4, 7	6000 to 6004, 6018	3750	....	....	....	....	....
DP-5, 6	6005 to 6016	6850	....	....	....	....	....
DP-8, 9	6019 to 6027	9250	....	....	....	....	....
DF-1, 2	6138 to 6179	16575	....	....	....	....	....
DF-3 to 8	6180 to 6405	17850	....	....	....	....	....
DF-100	5200 to 5202	....	....	....	....	....	....
DF-101 to 108, 112	5203 to 5249, 5253 to 5278	5000	725	1250	....	....	....
DF-109, 111	5250 to 5252, 5503 to 5505	5000	....	....	....	....	....
DF-200 to 204	5100 to 5118	....	....	....	....	....	....
DF-300, 301	4600 to 4603, 4700 to 4703	....	....	....	....	....	....
DS-1 to 8	1000 to 1032	1600	145	280	1200	1200	1200
DS-100 to 109, 111	1300 to 1441, 1464 to 1485	2400	275	490	2000	2000	2000
DS-110	1442 to 1463	3100	345	625	2375	2375	2375
DS-200, 201	1900 to 1903	775	100	150	620	620	620
M-4	1617 to 1713	2150	215	415	1700	1700	1700
M-6, 8	1721 to 1803, 1824, 1825	2625	265	490	2075	2075	2075
M-9	1804 to 1822, 1826 to 1830	2775	270	510	2200	2200	2200
M-11	1832 to 1835	2775	285	535	2200	2200	2200
T-1	2248, 2252	1925	170	335	1550	1550	1550
T-23	2302 to 2310	2775	275	500	2200	2200	2200
T-28, 31	2312 to 2362	3025	300	550	2400	2400	2400
T-32	2363 to 2370, 2372 to 2384	3075	320	575	2525	2525	....
T-40	2371	3075	....	....	....	2525	....
T-37	2105	2725	255	490	2125	2125	2125
P-1, 3, 5	2411, 2431, 2443, 2449	2425	....	....	1900	1900	....
P-4	2402, 2410, 2414	2675	....	....	2075	2075	....
P-6	2453, 2454, 2458	3050	....	....	2375	2375	....
P-7	2476, 2477	3250	....	....	2525	2525	....
P-8, 10	2461 to 2474, 2478 to 2483	3375	....	....	....	2625	....
P-8, 10	2475, 2484 to 2491	3375	....	....	....	2625	....
P-12	3122, 3123	3500	....	....	....	2675	....
C-5, 8, 9, 10	2513 to 2598, 2625 to 2860	3325	350	625	2600	2600	....
C-18	3400 to 3409	3025	320	585	2450	....	2450
C-19	3410 to 3426	3150	....	....	....	....	....
TW-3	2937	2025	200	375	1575	1575	1575
TW-8	2914, 2918, 2923	2875	300	555	2300	2300	2300
Mk-2, 4	3201 to 3240	3825	....	....	....	....	....
Mk-5, 6	3242 to 3277	4200	....	....	....	....	....
Mk-7, 8, 9	3301 to 3324	4600	....	....	....	....	....
Mk-10	3295	3550	....	....	....	....	....
Mk-11	3297, 3298	3400	....	....	....	....	....
F-1	3611 to 3652	4825	....	....	....	....	....
F-3, 4, 5	3653 to 3769	5725	....	....	....	....	....
MM-3	3930	6350	....	....	....	....	....
AC-4, 5	4100 to 4125	8650	....	....	....	....	....
AC-6 to 12	3800 to 3811, 4126 to 4294	9250	....	....	....	....	....
Mt-1, 3, 4, 5	4300 to 4376	4475	....	....	....	....	....
Mt-2	4387, 4389	4875	....	....	....	....	....
GS-1, 2	4401 to 4415	4775	....	....	....	....	....
GS-3, 4, 5, 6	4416 to 4469	4950	....	....	....	....	....
SP-1, 2, 3	5000 to 5048	6725	....	....	....	....	....

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.

RULE 10-J. Round yellow speed signs indicate the speed restrictions applying to passenger trains with electro-pneumatic brakes on all cars, and with diesel passenger engine.

Speed sign placed to the right of track but with one track intervening:

Eastward at MP 212.75 Gerber bears the figure 35.

RULE 14(d). As specified below, — — — — o, will be indication that flagman may return from west:

Tehama on West Valley subdivision.

RULE 14(e). As specified below, — — — — — — will be indication that flagman may return from east:

Davis on West Valley subdivision,
Woodland on Knights Landing Branch,
Harrington on Colusa Branch.

RULE 93. Yard limits in which the provisions of Rule 93 will apply are established at the following stations:

West MP		East MP
74.20	Davis (Dixon line)	77.37
	" (Tehama line)	77.39
83.66	Woodland	85.82
	" (Knights Landing Branch)	88.08
106.80	Harrington	110.10
	" (Colusa Branch)	110.00
147.96	Willows	150.84
	" (Kurand Branch)	151.82
164.48	Orland	167.72
177.62	" (Colusa Branch)	
211.92	Gerber	216.08
120.00	Grimes	122.00
169.00	Hamilton	171.00

Yard limit signs located to left of track:

Eastward approaching Gerber.

Gerber: Westward freight trains and light engines must not pass east switch of No. 1 yard track unless proceed signal received from yardman.

Eastward trains except first-class must not pass crossover just west of Signal 2136 unless proceed signal received from yardman.

RULE 98. Drawbridges not interlocked:

Drawbridge 94.14, Knights Landing Branch: Over Sacramento River—Stop within 200 feet of drawbridge.

RULE 103-A. Trains and engines must stop and be preceded by flagman before crossing highway at:

Woodland . . . Main St. crossing on house track.

RULE 104. The normal position of rigid switches at junctions:

Woodland . . . Knights Landing Branch, for movement from siding through crossover to main line,
Harrington . . . Colusa Branch, for siding,
Willows . . . . . Kurand Branch, for main line,
Wyo . . . . . Colusa Branch, for main line,
Marchant . . . . Ensley Branch, for Knights Landing Branch.

RULE 306. The following block signals, equipped with triangular plate displaying the letter "P", have included in their control limits some special protective device.

Eastward	Protection	Westward
P-1178	High water detector, bridge 118.88	P-1201
P-1354	High water detector, bridge 137.44	P-1381
P-1756	High water detector, bridge 176.21	P-1781

RULE 505. AUTOMATIC BLOCK SIGNAL SYSTEM

Gerber: Yellow aspect in diverging route unit on Signal 2134 governs movement through crossover 1300 feet beyond signal.

RULE 516. Overlap posts:

Westward Trains: Wyo—at fouling point east switch of siding.

RULE 535. SPRING SWITCHES

Spring switches equipped with facing point locks are located as follows:

Location		Normal Position
Gerber	East end siding	Main track

Spring switch east end siding Gerber equipped with electric switch lamp. If green light is not displayed, trains must stop and examine switch and it must be known that it is safe for passage of train before passing over it; and when trailing movement is to be made from siding, switch must be hand-thrown before and after the movement is made.

RULE 605. INTERLOCKING

Woodland: SNRy crossing.

Whistle signals:
Siding through crossover to or from Gerber line, — o o o o,
House track to or from Gerber line, — — — o.

Hand signals as required by Rule 628 may be given from the tower instead of from the ground.

Towerman not on duty Saturdays, Sundays and holidays, nor between 5:00 PM and 8:00 AM on other days. Signals on SNRy will be placed at "stop" position and signals on SP will be in "clear" position for eastward and westward movements.

Tehama-Gerber: Interlocking limits on main track extend from signal 398 feet west of Tehama junction switch on West Valley subdivision and signal 293 feet west of Tehama junction switch on East Valley subdivision to signal 48 feet west of west switch No. 1 track Gerber yard. Interlocking limits on siding extend from west switch to dwarf semi-automatic signal 295 feet east of west switch Gerber siding.

Top unit of signal on East Valley subdivision 293 feet west of Tehama junction switch governs movement on main track. Lower unit governs movement to Gerber siding.

Top unit of semi-automatic signal at west end siding Gerber governs movement to West Valley subdivision; lower unit governs movement to East Valley subdivision.

East switch of crossover between main track and Gerber siding is equipped with an electric lock. Permission to move from siding to main track through this crossover must be obtained from the operator. The electric lock must first be operated in accordance with instructions posted inside of the lock box door, after which manually line the east switch and then line the west switch.

Trains using crossover from main track to siding must first manually line west crossover switch, then open and operate electric lock, after which manually line the switch.

Trains authorized to enter Gerber siding through crossover must have engine east of interlocking signal before electric lock can be operated.

RULE 705. LETTER TYPE INDICATORS

Indicators located as follows:

Illum. Letter	On Signal	Approaching	Authorizes and Requires Movement as Follows:
		East end siding	
M.	7-ft. mast.	Gerber	Enter main track and proceed to crossover just west of Signal 2136 to enter yard.
M.	2134	Gerber	If passenger train, proceed to train-order office. If freight train, proceed to crossover to enter yard.

These indicators do not apply to trains entering yard at west switch No. 1 track.

If "M" is not illuminated train must stop and call operator for instructions.

GENERAL REGULATIONS

RULE 827. At Gerber, forward brakeman of streamlined passenger trains will take position on station side where rear of train will stop and make rolling inspection of train, then walk length of train on opposite side making standing inspection, giving careful attention to running gear and journal boxes, and entrain on station side.

AIR BRAKE RULES

FREIGHT TRAINS

RULE 22. Gerber: Trainmen must not couple air hose on outgoing trains until train is made up and engine and caboose on train.

PASSENGER TRAINS

RULE 37. Gerber: Trainmen must not couple steam and air hose on outgoing trains until train is made up.

RULE 38. Rear end air test need not be made at Gerber if continuity of brake pipe is not disturbed. Incoming engineer will apply brakes when train is stopped. Outgoing engineer will release them. Running test in accordance with Rule 39 must be made immediately after leaving terminal.

MISCELLANEOUS

1. Take water only in emergency at:

Woodland and Orland.

Engines may take oil and water without cutting off from train at any point.

10. Engines listed must not operate on tracks shown below:

Class of Engine		Restricted Tracks
F, AC, Mk, Mt, GS, DF, DP	Merritt	Ellison spur.
F, GS	Woodland	Swanston spur.
F, AC, Mk, Mt, GS, DF	Dunnigan	Standard Oil spur.
"	Riz	Warehouse spur.
"	Willows	Union Oil spur; Union Ice spur.
"	Orland	Standard Oil spur; Union Oil spur.
"	Corning	Heinz spur.
All engines	Sugarfield	Must not operate on Track 5 beyond 50 feet west of west end of beet dump pit.
"	Wyo	Stoney Creek gravel pit—Engines must not go beyond gravel bin more than three car lengths. Any class engine may use either leg of wye at Wyo and on Colusa Branch between Wyo and east switch Cory.

Underground gasoline tanks installed opposite house track at a point 300 feet west of station Colusa. Engines must not be stopped in front of unloading spot when oil or gasoline cars are being unloaded.

Load limit (car and contents):

Davis-Gerber	251,000 pounds
Willows-Kurand	136,000 pounds
Woodland-Josephine	210,000 pounds
Harrington-Wyo via Colusa	210,000 pounds
Marchant-Ensley	210,000 pounds

Unless authorized by Superintendent, heavier loads must not be handled.

SPEED RESTRICTIONS FOR TRAINS: Maximum speed of trains in territory shown below is subject to further restrictions applicable to engines in the train as shown in SPEED RESTRICTIONS FOR ENGINES appearing on page 4, and MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT and OTHER MAXIMUM SPEEDS appearing on page 5 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed signs, except as specifically authorized by Special Instructions herein, or by timetable bulletin.

All trains must run carefully during and after heavy storms, particularly when the track is apt to be affected. When fog, storms or other conditions obscure track or signals, speed of trains must be so reduced as to permit strict observance of signals and INSURE SAFETY, REGARDLESS OF TIME.

TERRITORY	*Streamlined PASSENGER TRAINS	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
				RUNNING FORWARD	RUNNING BACKWARD
Column:	A	1	2	3	4
EASTWARD, DAVIS TO GERBER:					
MP MP					
75.60 to 76.00	40	40	30	30	20
76.00 to 81.80	79	70	55	50	30
81.80 to 82.20	70	65	55	50	20
82.20 to 85.03	79	70	55	50	30
85.03 to 85.13 (Woodland)	12	12	12	12	12
85.13 to 86.02	65	60	50	50	30
86.02 to 149.50	79	70	55	50	30
149.50 to 150.00 (Willows)	40	40	40	40	20
150.00 to 165.50	79	70	55	50	30
165.50 to 165.70 (Orland)	40	40	40	40	20
165.70 to 178.00	79	70	55	50	30
178.00 to 178.90 (Corning)	40	40	40	40	20
178.90 to 185.90	79	70	55	50	30
185.90 to 186.51 (211.87)	45	45	35	35	30
211.87 to 213.50	60	60	50	50	30
213.50 to 213.80	35	35	35	35	30
EASTWARD, WILLOWS TO KURAND:					
149.91 to 156.09	..	15	15	15	15
EASTWARD, HARRINGTON TO WYO, VIA COLUSA:					
108.80 to 120.70	..	25	25	25	20
120.70 to 121.30 (Grimes)	..	15	15	15	15
121.30 to 170.00	..	25	25	25	20
170.00 (Hamilton) to 180.46	..	30	30	30	30
EASTWARD, WOODLAND TO JOSEPHINE:					
85.56 to 96.50	..	25	25	25	20
96.50 to 117.42	..	20	20	20	15
EASTWARD, MARCHANT TO ENSLEY	..	15	15	15	15

TERRITORY	*Streamlined PASSENGER TRAINS	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
				RUNNING FORWARD	RUNNING BACKWARD
Column:	A	1	2	3	4
WESTWARD, GERBER TO DAVIS:					
MP MP					
213.80 to 213.50	35	35	35	35	30
213.50 to 211.87 (186.51)	60	60	50	50	30
186.51 to 185.90	45	45	35	35	30
185.90 to 178.90	79	70	55	50	30
178.90 to 178.00 (Corning)	40	40	40	40	20
178.00 to 165.70	79	70	55	50	30
165.70 to 165.50 (Orland)	40	40	40	40	20
165.50 to 150.00	79	70	55	50	30
150.00 to 149.50 (Willows)	40	40	40	40	20
149.50 to 86.02	79	70	55	50	30
86.02 to 85.13	65	60	50	50	30
85.13 to 85.03 (Woodland)	12	12	12	12	12
85.03 to 82.20	79	70	55	50	30
82.20 to 81.80	70	65	55	50	20
81.80 to 76.00	79	70	55	50	30
76.00 to 75.60	40	40	30	30	20
WESTWARD, KURAND TO WILLOWS:					
156.09 to 149.91	..	15	15	15	15
WESTWARD, WYO TO HARRINGTON, VIA COLUSA:					
180.46 to 170.00	..	30	30	30	20
170.00 (Hamilton) to 121.30	..	25	25	25	20
121.30 to 120.70 (Grimes)	..	15	15	15	15
120.70 to 108.80	..	25	25	25	20
WESTWARD, JOSEPHINE TO WOODLAND:					
117.42 to 96.50	..	20	20	20	15
96.50 to 85.56	..	25	25	25	20
WESTWARD, ENSLEY TO MARCHANT	..	15	15	15	15

*Streamlined passenger trains are those having electro-pneumatic brakes on all cars, and with diesel passenger engine.

Passenger trains with electro-pneumatic brakes on all cars, and with P-7, 8, 10, 12; GS; or Mt class engine, may run not to exceed 75 MPH on tagnent track where 70 MPH is authorized in Column 1.

SPEED RESTRICTIONS FOR OTHER THAN MAIN TRACKS	With Caution Not Exceeding MPH
Through sidings, yard and other tracks, wyes, balloon tracks, crossovers and turnouts, except:	15
Through slip switches	10
Through turnouts on other than sidings	10
On branches	10
Through all sidings, yard tracks and other tracks with engine running backward	10
On gravel pit tracks—Cory	10

RATING OF ENGINES—In Units of 2000 Lbs. (Tons)

NOMINAL CLASS	ENGINE NUMBERS	Davis and Gerber	Woodland and Josephine Marchant and Ensley	Willows and Kurand	Harrington and Wyo via Colusa
DP-3	6017	3750	....	....	....
DP-4, 7	6000 to 6004, 6018	3750	....	....	....
DP-5, 6	6005 to 6016	5850	....	....	....
DP-8, 9	6019 to 6027	7450	....	....	....
DF-1, 2	6138 to 6179	11350	....	....	....
DF-3 to 8	6180 to 6405	14025	....	....	....
DF-100	5200 to 5202	....	....	....	....
DF-101 to 108, 112	5203 to 5249, 5253 to 5278	3925	4775	....	5000
DF-109, 111	5250 to 5252, 5503 to 5505	5000	....	....	....
DF-200 to 204	5100 to 5118	....	....	....	....
DF-300, 301	4600 to 4603, 4700 to 4703	....	....	....	....
DS-1 to 8	1000 to 1032	1175	1200	....	1375
DS-100 to 109, 111	1300 to 1441, 1464 to 1485	1775	2000	....	2275
DS-110	1442 to 1463	2375	2375	....	2675
DS-200, 201	1900 to 1903	620	620	620	705
M-4	1617 to 1713	1700	1700	1700	1700
M-6, 8	1721 to 1803, 1824, 1825	2075	2075	....	2075
M-9	1804 to 1822, 1826 to 1830	2200	2200	....	2200
M-11	1832 to 1835	2200	2200	....	2200
T-1	2248, 2252	1550	1550	1550	1550
T-23	2302 to 2310	2200	2200	....	2200
T-28, 31	2312 to 2362	2400	2400	....	2400
T-32	2363 to 2370, 2372 to 2384	2525	2525	....	....
T-40	2371	2525	....	....	....
T-37	2105	2125	2125	....	2125
P-1, 3, 5	2411, 2431, 2443, 2449	1900	....	....	....
P-4	2402, 2410, 2414	2075	....	....	....
P-6	2453, 2454, 2458	2375	....	....	....
P-7	2476, 2477	2525	....	....	....
P-8, 10	2461 to 2474, 2478 to 2483	2625	....	....	....
P-8, 10	2475, 2484 to 2491	2625	....	....	....
P-12	3122, 3123	2675	....	....	....
C-5, 8, 9, 10	2513 to 2598, 2625 to 2860	2600	2600	....	3025
C-18	3400 to 3409	2375	2450	....	....
C-19	3410 to 3426	2475	2550	....	2900
TW-3	2937	1575	1575	....	1575
TW-8	2914, 2918, 2923	2300	2300	....	2650
Mk-2, 4	3201 to 3240	2975	....	....	....
Mk-5, 6	3242 to 3277	3300	....	....	....
Mk-7, 8, 9	3301 to 3324	3600	....	....	....
Mk-10	3295	2775	....	....	....
Mk-11	3297, 3298	2650	....	....	....
F-1	3611 to 3652	3775	....	....	....
F-3, 4, 5	3653 to 3769	4475	....	....	....
MM-3	3930	5025	....	....	....
AC-4, 5	4100 to 4125	6775	....	....	....
AC-6 to 12	3800 to 3811, 4126 to 4294	7250	....	....	....
Mt-1, 3, 4, 5	4300 to 4376	3475	....	....	....
Mt-2	4387, 4389	3800	....	....	....
GS-1, 2	4401 to 4415	3725	....	....	....
GS-3, 4, 5, 6	4416 to 4469	3850	....	....	....
SP-1, 2, 3	5000 to 5048	5250	....	....	....

UNLESS AUTHORIZED BY SUPERINTENDENT, ENGINES WILL NOT BE PERMITTED TO OPERATE IN THOSE TERRITORIES WHERE NO RATING IS SHOWN IN ENGINE RATING TABLE.