

# SOUTHERN PACIFIC COMPANY



## SAN JOAQUIN DIVISION SPECIAL INSTRUCTIONS

# No. 2

EFFECTIVE SUNDAY, MARCH 12, 1950  
AT 12:01 A. M.,  
PACIFIC STANDARD TIME

SUPERSEDING SPECIAL INSTRUCTIONS No. 1

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THESE INSTRUCTIONS CONSTITUTE A PART  
OF THE TIMETABLE CURRENTLY IN  
EFFECT

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**R. E. HALLAWELL,**  
General Manager.

**E. D. MOODY,**  
**H. R. HUGHES,**  
Assistant General Managers.

**C. H. GRANT,**  
General Superintendent of  
Transportation.

**M. S. OLSEN,**  
Superintendent of Transportation.

**B. W. MITCHELL,**  
Superintendent.

## SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

**RULE A.** All, or portions of, the following rules have been changed. Pastors have been printed covering these changes, and employes must have the pasters in their copy of Book of Rules:

Rules	10 (H)	295
	15	297
	26	705
	99	707
	104 (D)	708
	210	763
	221	837
	271	

Definition of **FIXED SIGNAL** is changed to read as follows:

"A signal of fixed location indicating a condition affecting the movement of a train, such as train-order, automatic, interlocking or absolute signal; switch, stop boards, yard limit boards or speed boards."

**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.

**RULES 1(A), 2(A), 3(A) and 3(B)** are cancelled, and Rules 1, 2 and 3 are amended as follows:

**"RULE 1.** Standard time, obtained from an authorized observatory, will be transmitted by telegraph daily except Sundays and holidays. Clocks bearing the prescribed sign 'Standard Clock' will be maintained at designated places, as shown in timetable, and employes charged with the duty of receiving time signal must set standard clock to agree with time signal and make record on prescribed form of any variation.

"At enginehouses and other locations of standard clocks where time signal is not received, employe in charge of standard clock must obtain correct time from nearest train-order operator by telephone, during, or after, transmittal of time signal, and set the clock."

**"RULE 2.** Each of the following employes, and such other employes as may be designated, must carry, while on duty, a reliable railroad grade watch, and must carry a watch certificate, Form CS-2821, which must be presented to an authorized watch inspector for renewal during the month of November of each year:

<ul style="list-style-type: none"> <li>*Train-Order Operators</li> <li>*Signal Operators</li> <li>*Except when assigned in offices where a standard clock is located.</li> <li>Conductors</li> <li>Brakemen</li> <li>Engineers</li> <li>Firemen</li> </ul>	<ul style="list-style-type: none"> <li>Outside Hostlers</li> <li>Outside Hostler Helpers</li> <li>General Yardmasters</li> <li>Asst. General Yardmasters</li> <li>Yardmasters</li> <li>Asst. Yardmasters</li> <li>Yard-Engine Foremen</li> <li>Yardmen</li> <li>Switch Tenders</li> <li>Herders</li> </ul>
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"Employes must show their watches and certificates to division officers, authorized watch inspectors and traveling watch inspectors upon request."

**"RULE 3.** Conductors, yard-engine foremen, engineers and outside hostlers must compare their watches with a standard clock, and conductors and yard-engine foremen must compare time with their engineers, when commencing each day's work; and conductors must compare time with their brakemen, yard-engine foremen with their yardmen, and engineers with their firemen, as soon thereafter as practicable.

"The time when watch is compared with standard clock, and any variation of such watch, if not set to correct time, must be recorded on prescribed form.

"When an additional engine is added to a train en route, engineer of that engine must compare time with the conductor or an engineer of the train.

"When conductors and engineers tie up at a point where there is no standard clock, time must be compared with train-order operator on duty when commencing each day's work. If this cannot be done, time must be compared with conductor or engineer of first available train.

"At train-order offices and interlockings where there is no standard clock, train-order operators and signal operators must, during each tour of duty, compare time with time signal if possible, otherwise with a train-order operator where standard clock is maintained, or time signal is received.

"Watches must be set to correct time if they reflect a variation of more than twenty seconds from correct time when comparison is made as prescribed in this rule."

**RULE 10 (J).** Is revised to read as follows:

"Speed boards will be located to the right of track in direction of approach where practicable, except on double track where trains keep to the left, they will be located to the left if proximity of adjoining main track prevents location to the right.

"Speed boards that prescribe reduction in speed will be located three-fourths mile from initial point of restriction. Speed boards that authorize an increase in speed will be located at the point where higher speed is permissible, and speed may be increased accordingly as soon as rear or train has passed the speed board.

(no change in Figs. 1, 2 and 3)

"The higher number on speed board indicates the maximum speed of trains consisting entirely of passenger equipment, and the lower number indicates the maximum speed of all other trains. Where but one number is shown it indicates the maximum speed of all trains.

"Round yellow speed boards indicate by black figures the maximum speed of certain passenger trains designated by special instructions in the timetable or by timetable bulletin; speed indicated by oval white speed boards applies to those trains unless a round yellow speed board is displayed on same post below the oval speed board.

"Certain speed boards have the word 'SIGNAL' above the figures. Such speed boards in approach to a distant signal indicate the speed that must not be exceeded while engine is passing the distant signal three-fourths mile beyond the speed board, unless distant signal can plainly be seen to be displaying proceed indication; and such speed boards in approach to a home signal indicate the speed that must not be exceeded while approaching the home signal three-fourths mile beyond the speed board; until indication of home signal can plainly be seen. The word 'SIGNAL' on an oval speed board also applies to a round yellow speed board if displayed on the same post."

Speed boards prescribing an increase in speed will not be installed on branches. Speed Restrictions tables will indicate permissible speeds between mile post locations named.

**RULE 17.** Oscillating white light on engines so equipped must be operated during stormy weather day and night, foggy weather during daylight hours only and must be operated approaching road crossings at grade both day and night under all conditions.

Oscillating red light on engines so equipped shall be operated by day or night, only when a train has stopped, or is stopping, under circumstances that may cause an adjacent track to be fouled, and will not in any way relieve trainmen and enginemen from compliance with Rules 99 and 102. A train or engine on adjacent track must stop at once, and may proceed only after ascertaining that track is safe for passage of trains.

**RULES 17, 17 (B), 17 (C) and S-17.** Headlight will be displayed by day by all freight and passenger trains between Burbank Jct. and Saugus, and by Nos. 51 and 52 on all subdivisions, as an aid to motorists. When so displayed, the provisions of Rules 17, 17 (B), 17 (C) and S-17 will not apply unless other conditions require.

**RULE 19.** AT&SFRy trains will use markers with yellow lens instead of green lens and yellow aspect will be considered the same as green aspect.

Classification lamps on rear of DEF and DERS class engines will be considered as marker lamps by day or by night only when such lamps are lighted.

**RULE 34.** On multiple-unit Diesel engines in freight service, the fireman must not leave the cab while the train is in motion unless authorized by the engineer and unless a member of the train crew is in the cab in a position to communicate with the engineer the indication of signals affecting the movement of train as provided for in Rule 34. If a member of the train crew is not in the cab, and not engaged in other duties, the engineer may signal him to come to the cab by giving two short sounds of the whistle repeated twice (oo oo oo). If a condition arises which necessitates the fireman leaving the cab at a time that a member of the train crew is absent, which cannot await a regular stop of the train, the train must be stopped during the time that the fireman is absent from the cab.

**RULE 99 (C).** Will apply on Porterville line, and on all branches.

**RULE 102.** Should a passenger train break in two, or an emergency application of brakes occur while in motion on the grade between Bakersfield and Burbank Jct., or between Mojave and Inyokern, forward brakeman will immediately go towards rear, close angle cock at opening if train has 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 chained to rail in such manner as to derail car should they start.

**RULE 221.** Within block system limits only, third and sixth paragraphs of Rule 221 are modified to the extent that it will no longer be necessary for train to obtain clearance if train-order signal at an open train-order office is first seen and remains in proceed position.

If no orders are held for trains from the same direction, or if orders held are for trains originating only, the operator may clear the signal before train reaches such view-point.

Also, within block system limits only, signal may be cleared for a first-class train for which there are no orders, when orders are held for another train from the same direction, provided such orders do not restrict the train addressed at that station, and further provided that permission is first obtained from train dispatcher. Such permission must not be given if the train to which orders are addressed has passed the last open train-order office.

Last paragraph is changed to read as follows:

"When light is not displayed in a train-order signal at night, day indication of the signal arm will govern, and report must be made from next open office, unless special instructions provide that light will not be displayed."

**RULE 281B.** Movements governed by semaphore type diverging route signals displaying "Proceed on Diverging Route", Figs. 1 and 2, must be made with caution.

**RULES 281 and 281D.** Movements against the current of traffic governed by semaphore type dwarf signals displaying "Proceed", Fig. 5, Rule 281; or by light type dwarf signals displaying "Proceed Prepared to Stop at next Home Signal", Fig. 7, Rule 281D, must be made with caution, and position of switches observed.

## **RULE 505. AUTOMATIC BLOCK SYSTEM**

### **PUSH BUTTONS**

Where signal protection is provided for movements from an adjacent track to main track, push buttons and 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 until light appears. 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. 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 switch indicator indicates block clear on opposite track. Within C.T.C. limits dispatcher's permission must also be obtained before lock box door is opened.

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 lock position until all movements over the switch are completed, switch returned to normal position and locked. Within C.T.C. limits dispatcher must also be notified by telephone when completed.

When switch 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.

## SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

Low type electric locks, such as are applied direct to lever of hub type switch stands, function as above except that the removal of the switch lock has the same effect as opening the lock box door. Instead of being equipped with an "unlocked" indicator, these locks have a pilot light that indicates by illumination when the lock is unlocked.

When pilot light will not illuminate to indicate electric lock is unlocked, push button on adjacent cast iron box, protected with cover and locked with switch lock, should be depressed to illuminate green light. After a time interval of from one to seven minutes pilot light on electric lock will be illuminated, indicating lock is unlocked.

Emergency lock release is applied to side of electric lock. It is to be used only in case of electric or mechanical failure, as indicated by failure of time release to function after several minutes. When necessary, break seal and operate emergency lock release by turning knob one-half turn to right. Dispatcher must be notified immediately and movement made only after necessary flag protection is provided.

### MECHANICAL SWITCH LOCKS

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, switch returned to normal position and locked.

Emergency lock release 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, dispatcher must be notified immediately and movement made only after necessary 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.

A spring switch with facing point lock must not be trailed through unless switch target displays the letters "SS" in normal position, or switch has been lined for the movement.

When a signal with triangular number plate protecting a spring switch with facing point lock displays stop indication, member of crew must open and close spring switch by hand, removing any obstruction. If signal does not then display proceed indication, switch must be hand thrown for the movement.

When a spring switch or spring derail is hand thrown, trainman so setting same must again set it for normal position after movement has been completed, unless he has arranged for another trainman to do so.

**RULE 536.** Wheels of tenders must not be considered as engine wheels.

### RULE 605. INTERLOCKING

Trains and engines must not enter main track within interlocking limits where no signal governs such movement until permission has been obtained from signal operator, and must then run with caution not exceeding 12 MPH to the next signal.

## GENERAL REGULATIONS

**RULE 821.** During sand or dust storms sound whistle frequently, and display headlight by day or night.

**RULE 822.** Only one man is permitted to ride on pilot or leading footboard of any engine in direction of movement.

Riding on leading footboard or pilot step of engine when passing over highways, crossings or on streets is forbidden.

**RULE 824.** At any point when train crew or engine crew leave the train for any reason, sufficient hand brakes must be set to hold the train.

**RULE 825.** When necessary to cut crossing and a distance of 100 feet on each side cannot be provided, a member of crew must protect. Cars must not be left in any position that would in any way intercept the view of an autoist or pedestrian of an approaching train, unless crossing is protected as stated above.

Fifth paragraph applies to wooden outfit cars the same as to other cars, except that diner should not be separated from kitchen car.

**RULE 826.** When a sign reading "Occupied Outfit Cars" is attached to switch lock, the outfit cars must not be coupled to, nor moved, until occupants have been notified, and permission given by foreman or his representative.

**RULE 827.** Unless otherwise provided, when conditions are favorable and in the judgment of conductor it is safe, freight trains need not stop for train inspection. Where stops are made for other reasons, inspection of trains must be made as often as practicable. When weather conditions restrict visibility, or other conditions require, conductor will designate stops for inspection which in his judgment are necessary.

Trainmen must remain with their train until it stops on designated track in yard.

Trains, including military trains, made up in part of freight cars or caboose equipped with cast iron wheels are required to comply with rules and timetable instructions applying to freight trains as they relate to stopping for train inspection, and speed restrictions.

Cars bearing placards denoting contents are explosive, inflammable, poisonous, or otherwise dangerous, must be given careful inspection at all points where train inspection is made.

Conductors will notify brakemen of heavy loads in train which require special attention and frequent inspection of journal boxes.

**RULE 828** is revised to read as follows:

"Speed of freight trains must not exceed eight miles per hour for a distance sufficient to permit running inspection when starting. Trainmen must closely watch to see that brakes are released, and if necessary must signal enginemen to stop if wheels are found sliding. Conductor must promptly mail to the Superintendent a report of flat wheels discovered under cars in his train."

**RULE 831** is revised to read as follows:

"Occupied wooden frame outfit cars must be placed next ahead of passenger cars if handled in mixed trains, or next ahead of caboose if handled in freight trains.

"Women and children must not be permitted to ride in outfit cars when moved by freight train. Other occupants of outfit cars must remain inside and not ride on top, sides or between these and other cars during course of road or yard movements."

**RULE 832.** Wooden underframe cars of any class must be placed next ahead of caboose, except that when handled in the same train with wooden frame outfit cars they must be placed next ahead of the outfit cars.

**RULE 836.** Cars moved from one station to another ahead of engine on descending grade must be chained to the engine.

**RULE 837.** Switching movements on heavy grades should be accomplished in a manner to make it impossible for cars to run out on main track. Whenever possible engine should be kept on the descending grade end of cars being handled, or switching moves made toward derail. Avoid as far as practicable leaving one car standing alone on grade.

**RULE 869** is cancelled.

**RULE 873.** Sanders must not be operated within 150 feet of any power operated switch.

**RULE 883.** Engines must not be left standing unattended on any track where there is a possibility of their fouling the main track without being secured by a derailer. If no derail in the track on which engine is left standing, the engine must be secured by blocking or by leaving engine coupled to cars on which hand brakes are properly applied.

#### AIR BRAKE RULES

**RULE 17.** Speed of freight trains will be reduced or stopped if necessary at points where trainmen are required to handle retainers.

#### FREIGHT TRAINS

**RULE 25.** Before a train which has stopped on grade is given signal to proceed, air gage in caboose must be observed. If gage indicates brake pipe unobstructed and registers a pressure of not less than 65 pounds, proceed signal may be given.

#### MISCELLANEOUS

1. When necessary for freight trains of over 50 cars to make a short move to reach water or oil column, including that required to spot second engine of double header, engine must be cut off to spot at column.

#### 4. Helper service:

No helper engine will be placed behind wooden underframe cars or cabooses.

Engines weighing more than 235,000 pounds on drivers will not be placed behind steel underframe cabooses.

In no case will more than one helper engine 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 behind in train and cut in ahead of any cars of wooden frame construction, and when practicable should be placed behind a loaded car.

Helper or doubleheader engines must not be placed on head-end of freight trains powered by DEF 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. If tonnage requires more power, additional helpers of not to exceed two coupled in each case, must be separated by at least four cars.

The use of SP class engines backing in helper service, should be avoided if possible. When necessary to use them, other helper power must not be used to shove on this class of engine.

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.

On grades road engine and helper must not be cut off from train at the same time without hand brakes being securely set.

Engines with cars must not be cut off or coupled to a train while same is in motion.

Engines must not be cut off head-end of trains while same are in motion.

When helper engine is coupled behind caboose, angle cocks must not be turned and hose separated while train is in motion.

#### 4(a). Pushing trains out of yards:

No engine will be placed behind wooden underframe cabooses or other wooden frame equipment.

Engines weighing more than 235,000 pounds on drivers will not be placed behind steel underframe cabooses.

Air will not be coupled through pusher engine.

Yard engines regularly so used will be equipped with Russell-Jordan device to hold the coupler pin from dropping, thus making it unnecessary for employes to uncouple the pusher engine when cutting off.

In no case shall the knuckle be removed, or closed, or cutting lever temporarily fastened in release position on a pusher engine, as means of preventing coupling being made.

Unless local conditions require, it will not be necessary to stop trains to detach pusher engines.

5. While train is on main track oscillating red light on rear of trains so equipped must be operated continuously by night, and by day when range of vision is impaired by fog, rain, or other adverse conditions. Light must be extinguished when train is clear of main track. Red light shall be turned on and turned off by trainmen. Display of red light does not relieve conductors or engineers from providing proper flag protection, or from complying with other rules.

10. Engines having blind drivers must not operate between Fresno and Bakersfield or east of Mojave.

24. Under no circumstances may any attempt be made to rerail a derailed Diesel engine except on authority of Master Mechanic or Master Car Repairer; or Roundhouse Foreman at Fresno; or on instructions of Chief Train Dispatcher or a Division Official whose name appears on current timetable.

25. Electric lamps may be used for displaying white light only, except that yardmen may use electric lamp with green light in giving signals to trains entering or leaving yard tracks during night hours.

## SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

**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	
A.....	70	50	30
AC.....	60	40	25
B.....	50	35	30
C-2, 4, 5, 8, 9, 10, 18, 19, 26, 27, 28, 29.....	40	35	30
C-15.....	35	30	30
DEF-1 (6100 to 6137).....	65	50	30
DEF-1 (6138 and 6139).....	55	50	30
DEF-2, 3, 4, 5.....	55	50	30
DEP-3, 4, 7.....	95	70	30
DEP-5, 6.....	90	70	30
DERS-1, 2, 4, 5, 6.....	50	40	40
DERS-200, 201.....	40	40	40
DES-1 to 7; 100 to 109.....	40	40	40
DES-200.....	30	30	30
F.....	50	40	30
GS.....	75	50	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	50	30
P-1, 3, 4, 5, 6, 11.....	65	50	30
P-7, 8, 10, 12.....	75	50	30
S.....	20	20	20
SE.....	20	20	20
SP.....	50	35	30
T-1, 8, 23, 28, 31.....	50	35	30
T-26, 32, 37, 40.....	60	40	30
TW.....	40	30	30
AT&SFRy: Diesel (1 to 15).....	95	45	30
AT&SFRy: Diesel (16 to 21, 51 to 58).....	95	45	30
AT&SFRy: Mt (3751 to 3775).....	75	40	30
AT&SFRy: P (3409, 3411, 3443, 3444, 3445, 3449, 3450, 3459).....	75	45	30
AT&SFRy: A (1413 to 1468).....	70	40	30
AT&SFRy: Mt (3700 to 3750).....	70	40	30
AT&SFRy: Diesel (90, 100 to 185, 200 to 225).....	65	45	30
AT&SFRy: P (1211 to 1399, 3501 to 3534).....	65	40	30
AT&SFRy: F (3800 to 3940).....	50	40	30
AT&SFRy: F (900 to 984, 1600 to 1705).....	35	35	30
AT&SFRy: C (1950 to 1991).....	35	35	30
Any engine not listed.....	20	20	20

Steam or Diesel engines when operated in backward motion 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.

Engines with tenders having water capacity of 7,000 gallons or less, except classes 70-R-1 and 70-SC-1, must not exceed 50 MPH.

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
When hauled in train with all rods on.....	30 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. Such engine or equipment 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 30 MPH; and Diesel engines the speed shown for same engine running forward light.

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 an S or SE class and a road engine in charge of one messenger are moved dead in train, a steel underframe freight car will be placed between them, and S or SE class entrained with tender ahead.

Dead engine of 150,000 pounds or over on drivers should be placed from 10 to 15 cars behind road engine, but with any cars to set out en route ahead of dead engine. If dead engine weighs less than 150,000 pounds on drivers, it should be placed near rear of train. Road engines to be headed in direction of movement when possible.

Dead engines, pile drivers, locomotive cranes, steam shovels, etc., moving on own wheels should be placed in train as follows:

Not over 50,000 pounds.....	With at least two cars behind it,
50,000 to not over 100,000 pounds....	With at least three cars behind it,
100,000 to not over 150,000 pounds....	With at least five cars behind it,
150,000 to not over 200,000 pounds....	With at least ten cars ahead of it,
Over 200,000 pounds.....	With at least fifteen cars ahead of it.

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).

# SPECIAL INSTRUCTIONS—ALL SUBDIVISIONS

MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT	MPH MAIN TRACKS OTHER THAN BRANCHES	MPH MAIN TRACKS ON BRANCHES
Steel pile-drivers.....	40*	30*
Wooden pile-drivers.....	35*	20*
Relief outfits with steam derrick, except:.....	35*	20*
Between Fresno and Famoso via Porterville (Relief outfits 7014 and 7025 must not be operated on any branch except on Owenyo Branch between Mojave and Searles.)	25	..
Power shovel on own wheels.....	35*	20*
Ditchers on own wheels, except:.....	35*	20*
SPMW-4044.....	25*	20*
Car-top ditchers, if blocking and tie-down cables are removed.....	35*	20*
K&J, Western, and Oliver, pedestal or center- hinged air-dump cars.....	35*	25*
Locomotive cranes:		
With boom disconnected, heavy end forward	35*	20*
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 boards.

OTHER MAXIMUM SPEEDS	MPH PASSEN- GER TRAINS	MPH FREIGHT AND MIXED TRAINS
Baggage-express cars SP-5810 to 5874, incl.....	60	50
Foreign steel-wheel cars not equipped with high speed trucks.....	60	50
Trains handling not more than three wooden underframe passenger carrying cars.....	50*	50*
Trains handling more than three wooden under- frame passenger carrying cars.....	40*	40*
Trains of deadhead equipment, with caboose..	50	..
Passenger trains, with caboose.....	50	..
Engine and caboose only, except:.....	..	50
must not exceed speed for same engine run- ning forward light.		
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
Trains handling beets loaded in rack equipped flat cars.....	..	40

\*Wooden underframe passenger carrying cars must not be handled in regular passenger trains. When handled in other than regular passenger trains they must be kept together and handled on the rear.

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.

The following cars will be considered streamlined equipment: 2920, 4119, 5065 to 5070, 5123, 5125, 5127 to 5138, 5161 to 5163, 10144, 10149 and 10156.

Mail apartment cars equipped with letter case should be operated with mail apartment to the rear whenever practicable.

In mixed trains the mail car must be operated in rear-end consist, followed only by passenger carrying cars or cabooses.

## SPECIAL INSTRUCTIONS—FRESNO SUBDIVISION

**RULE 14(d).** As specified below, — — — — o will be indication that flagman may return from west as prescribed by Rule 99:

Fresno.....Trains on Pratton line,  
 Famoso.....Trains on Porterville line,  
 Ducor.....Trains on AT&SFRy,  
 Exeter.....Trains on Visalia Branch,  
 Goshen Jct..Trains on Riverdale Branch.

**RULE 14(e).** As specified below, — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Fresno.....Trains on Porterville line and Clovis Branch,  
 Porterville..Trains on Success Branch,  
 Rossi.....Trains on Stratford Branch,  
 Goshen Jct..Trains on Visalia Branch,  
 Ingle.....Trains on Riverdale Branch,  
 Richgrove...Trains on Richgrove Branch.

**RULE 21 (C).** In Bakersfield and Fresno indicators must be displayed to relief track.

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

West MP		East MP
206.32	Fresno (Pratton-Tulare line).....	210.79
208.44	" (Biola-Porterville line).....	208.15
199.07	" (Merced-Clovis line).....	209.60
219.34	Selma.....	221.61
224.72	Kingsburg.....	226.41
238.47	Goshen Jct.....	240.18
244.60	" (Hanford-Visalia line).....	246.08
247.75	Tulare.....	250.82
280.01	Delano.....	281.55
291.37	Famoso.....	293.32
308.58	" (Porterville line).....	
307.66	Bakersfield.....	321.09
	" (McKittrick Branch).....	315.67
219.01	Sanger.....	220.47
229.09	Reedley.....	230.78
234.31	Dinuba.....	235.72
248.90	Ivanhoe.....	249.90
256.33	Exeter.....	257.96
262.09	" (Visalia Branch).....	
263.40	Lindsay.....	265.00
267.90	Strathmore.....	269.00
274.28	Porterville.....	275.72
	" (Success Branch).....	275.97
294.10	Richgrove.....	299.70
	" (Richgrove Branch).....	299.06
228.83	Armona.....	229.57
229.83	" (Coalinga Branch).....	
231.72	Hanford.....	233.12
251.83	Visalia.....	254.05
	Coalinga.....	267.82
254.00	Huron.....	252.00
234.30	Lemoore.....	233.30
228.54	Friant.....	

**Fresno:** Trains or engines will not move against current of traffic on double track, except on authority of yardmaster. When making movements against current of traffic, trains or engines must be preceded by flagman over railway and street crossings at grade where wigwags installed, protecting crossings during movements, except where crossing watchman located.

Trains must receive proceed signal from yardman, green flag by day, green light by night, between Kern St. (east of passenger station) and Merced St. (west of passenger station).

Westward trains via Pratton line must receive signal from yardman at Divisadero St., green flag by day, green light by night.

When Signal 2046 on Pratton line, or Signal 2042 on eastward track displays stop indication train must stop, and after proceed signal received from yardman, green flag by day, green light by night, may then proceed as prescribed by Rules 509 (F) and 513.

Eastward trains via Pratton line to Fresno Yard must receive proceed signal from yardman, green flag by day, green light by night, before fouling eastward or westward main track.

**Fresno Yard.** Trains entering or leaving yard tracks must receive proceed signal from yardman, green flag by day, green light by night, except within limits of diverging route signals at Clinton Ave. and Biola Jct.

**RULE 98.** Railroad crossings at grade not interlocked:

AT&SFRy, MP 228.04 east of Lacjac. STOP.

AT&SFRy, MP 243.61 west of Taurusa. STOP.

Yellow reflector buttons on One Mile Boards, and red reflector buttons on Stop Boards approaching above crossings serve as warning signals and do not require application of Rules 10 (G) or 10 (H).

AT&SFRy, MP 253.21 east of Visalia. STOP and send flagman ahead who must ascertain that no movement is approaching on intersecting line before giving signal to proceed.

L&WRy, MP 221.01 east of Hub. STOP.

AT&SFRy, MP 275.66 east of Porterville, on Success Branch. STOP.

FIRy, MP 213.23 east of Las Palmas. STOP.

**RULE 103 (A).** Trains and engines must stop and member of crew must protect traffic while moving over following streets and highways:

Fresno.....Clovis Branch, crossing on Cherry Ave., while switching.

Visalia.....Goshen Ave. on Creamery spur when making reverse movement,

Flood lights over Highway US 99 across Cotton Compress spur, Calwa, and over highway crossing spur track west of Jensen Ave., Fresno, are operated from switches located in box on power pole on main track side of highway. When these crossings are to be used trainman must close floodlight switch before cars foul the highway, and open the switch after completing use of the track.

Public Utilities Commission orders prohibit operation of train, engine, motor or car over the following crossings unless first brought to a stop and traffic on the highway protected by a member of the crew.

Selma.....Highway US 99, on Grant-Pacific rock spur, On spur from

Goldleaf... Peach Ave., and Butler Ave.,

Armona..... Lake St., while switching,

Helm..... County road crossings on Holly Sugar Co. track,

Bakersfield... 30th St. on McCarthy Tank spur, Bakersfield... Highway US 99, on freight station spur.

Crossing must be cleared as quickly as possible. If flashing light signals are not operating, member of crew must push button marked "START" in box on mast of crossing signal north side highway for southward movement, or in box on instrument case on south side highway for northward movement. If movement over highway is not to be made after signals start operating, signals can be stopped by pushing button marked "STOP". If flashing light signals fail to operate, movement over crossing must be protected by member of crew.

Public Utilities Commission orders also require the following protection for traffic:

West Tulare.. If train, engine or cars stand on siding within 200 feet of county road crossing at Prosperity Ave., member of crew must protect traffic against movements on main track,

Tipton..... If train or engine stands within 100 feet of County road crossing or Arden Farms Dairy Co. crossing to meet or be passed by a train, traffic must be protected by member of crew,



**RULE 104.** The normal position of rigid switches at the end of double track and at junctions is as follows:

Fresno Yard	End double track, for westward track,
Fresno	Pratton line, for eastward track,
Fresno	Clovis Branch, for drill track,
Fresno	Drill track, for Porterville line,
Goshen Jct.	Visalia Branch, for Tulare line,
Goshen Jct.	Riverdale Branch, for No. 3 siding,
Famoso	Porterville line, for Tulare line,
Oil Jct.	Oil City Branch, for siding,
Oil Jct.	AT&SFRy, for Tulare line,
Armona	Riverdale Branch, for Coalinga Branch,
Rossi	Stratford Branch, for siding,
Ingle	Riverdale Branch, for siding,
Exeter	Visalia Branch, for siding,
Exeter	VERy, for Porterville line,
Porterville	Success Branch, for Porterville line,
Porterville	AT&SFRy, for Success Branch,
Ducor	AT&SFRy, for siding,
Richgrove	Richgrove Branch, for siding,
Gosford	McKittrick Branch, for Sunset Ry.

Derails in main track:

Goshen Jct.	On Visalia Branch, 250 feet east of junction switch,
Porterville	On Success Branch, 310 feet east of junction switch,
Coalinga	MP 268.7,
McKittrick	East wye switch is spring switch and serves as derail.

**RULE 505. AUTOMATIC BLOCK SYSTEM**

**Fresno:** Track between Tuolumne St. and Ventura Ave. not protected by block signals.

**West Tulare:** Train on siding to meet or 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. Push button and lights in box, west end of siding.

**Quail:** Main track switch at MP 263.3 equipped with mechanical lock. Instructions inside lock box door.

**Famoso:** Trains on Porterville line stopped by Signal 3102 must line junction switch to Tulare line before applying block signal rules to proceed.

**Bakersfield:** Eastward passenger trains may pass dwarf Signal 3132 displaying stop indication without stopping when necessary to clear Baker St. crossing. Enginemen must see that switches are in proper position immediately east of signal and must move with caution.

**RULE 510.** The following block signals equipped with triangular plate displaying the letter "P" have included in their control limits some special protective device:

Eastward Signal	Protection	Westward Signal
P-2482	Spring switch, west end siding, West Tulare.	{ P-2481
	Spring switch, east end siding, West Tulare.	{ P-2483
P-2598	Spring switch, west end siding, Tipton.	P-2495

**RULE 512 (B).** Dwarf light signals governing movements to main track are located as follows: Signals 2001, 2020 and 2022 at Fresno Yard, Signal P-2481 at West Tulare, Signals 2565 and 2625 at Exeter, Signal 2870 at Ducor.

**RULE 516.** Overlap posts:

Cross . . Westward trains, opposite fouling point east switch.

**RULE 535. SPRING SWITCHES**

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

Location	Normal Position
West Tulare, West end siding	Main track
West Tulare, East end siding	Main track
Tipton, West end siding	Main track

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

Location	Normal Position
Fresno . . . Junction switch, Clovis Branch	Drill track

Switch position indicator at the above spring switch does not indicate track occupancy. When indicator displays red aspect, or is not lighted, careful examination of switch must be made before passing over same in eastward direction.

Switch position indicator at spring switch leading from back lead to inbound engine track Bakersfield, does not indicate track occupancy. When indicator displays red aspect, or is not lighted, careful examination of switch must be made before passing over same in eastward direction.

There are other spring switches on roundhouse leads and yard tracks in Fresno and Bakersfield yard limits.

**RULE 605. INTERLOCKING**

**Biola Jct.:** Limits extend on Merced line from 675 feet west of junction switch, and on Biola line from 575 feet west of junction switch, to 930 feet east of junction switch on Merced line, and to dwarf signal 290 feet east of junction switch on No. 1 drill track.

Trains and engines stopped by signals will call signal operator at train-order office Muscatel by telephone and be governed by his instructions. Telephones and instructions for hand operation of dual control switches are located in battery house at junction switch and at derail on Biola line.

Dwarf signal on 7½-foot mast on No. 1 drill track will display green aspect for movement to Merced line, yellow aspect for movement to Biola line.

**Fresno Tower:** AT&SFRy Crossing. Whistle signals:  
For main track, —,  
To or from spur track, o — —.

**Sunmaid Tower:** AT&SFRy Crossing. Whistle signals:  
For main track, —.

**Calwa Tower:** AT&SFRy Crossing, and end double track. Whistle signals:

Eastward trains, — o —,  
Westward trains, —,  
To or from Cotton Compress spur, o — o.

**Hanford Tower:** AT&SFRy Crossing. Whistle signals:  
For main track, —.

**Tulare Tower:** AT&SFRy Crossing. Whistle signals:  
For main track, —.

**GENERAL REGULATIONS**

**RULE 827.** All passenger trains, except regular Nos. 55 and 56, must stop at Tulare, approaching at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. Brakeman will then make running 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.

On freight trains between McKittrick and Lokern, a member of crew must observe track to rear of train for evidence of derailment or any other condition requiring immediate stopping of train.

**SPECIAL INSTRUCTIONS—FRESNO SUBDIVISION**

**AIR BRAKE RULES**

**RULE 17.** Retaining valves will be turned up on freight trains as follows:  
McKittrick to Lokern. . . . . One valve for each 115 Ms.

**FREIGHT TRAINS**

**RULE 25.** Rear end test on McKittrick Branch must be made in accordance with paragraph (c).

**PASSENGER TRAINS**

**RULE 39.** Leaving Bakersfield, running test must not be made until rear car has cleared Baker St.

**MISCELLANEOUS**

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

Class of Engine	Restricted Tracks
All, except: DES; S	Fresno—Bekins spur; Drill track serving Calif. Fig Growers; Sunmaid Raisin Plant, etc.; Stewart-Nuss spur; Pierce Lbr. Co. spur; Pearl spur east of "M" St.
All, except: DES; DERS; S	Fresno—Drill track serving Pacific Crate; Roma Wine and Rosenberg Bros.; Old Pierce track; Lacey Milling Co. spur.
All, except: DES; DERS; S; TW-2, 3	Fresno—Drill track serving Levi Iron & Metal, etc.; California State Highway spur; Fresno-Vendolator Co. tracks; Bisceglia Bros. spur; Peralta Winery spur; Kellner & Sons spur.
All, except: DES; DERS; S; TW-1, 2, 3, 8; T-23; M-4, 6	Fresno—Rosenberg Bros. track No. 3; Producers Cotton Oil tracks; Sunmaid Raisin Plant Pearl St. track; Mid-State Horticultural spur; PCA canal track.
All, except DES; DERS; S; TW; SE; T; M; C; A; P	Traver—Corral track.
All, except: DES; DERS; S; TW-1, 2, 3, 8; SE-4, T-23, 28; M-4, 6; C-5, 9, 10	Bakersfield—McCarthy Tank & Steel spur. Switching may be performed only during daylight hours, and cars and engines must stop before entering building.
All, except: DES; DERS; S; TW-2, 3	Bakersfield — Lead tracks to Rio Grande Oil Co. and SP Freight House, etc.; Union Oil Co. spur.
All, except: DES, S	Bakersfield—Flue rattler spur (Back shop).
All, except: DES; DERS; TW-1, 2, 3, 8; T-23, 28; C-5, 9, 10; M-4, 6; Mk-2, 4, 5, 6; P-5, 11; B-1	Lindsay—Tracks serving Shell Oil Co.; Pacific Coast Fruit Distrs.; B. G. Rooke Packing Co.; Mid-State Chemical Supply Co.
All, except: DES	Rector—Southern Calif. Edison Co. spur beyond fouling point.
All	Glorietta—Spur, beyond road crossing.

Engines heavier than 200,000 pounds on drivers must not operate on sidings at Ivesta, Dinuba, Taurusa and Terra Bella, nor on numerous yard and industry tracks between Fresno and Famoso, as listed in current timetable bulletin.

AT&SFRy 3700 type engines must not operate on any track other than main track and sidings between Ducor and Famoso.

Flat cars loaded with poles or piling must not be spotted on team track adjacent to main track at Octol, Ivesta, Lois, Terra Bella, Fargo, Butler or Taurusa without authority from chief train dispatcher who will protect by train order. At other stations such loads must not be spotted for unloading on team tracks adjacent to main track when possible to avoid it.

**Load limits (car and contents):**

Fresno-Bakersfield	251,000 pounds
Fresno-Famoso via Porterville	251,000 pounds
Porterville-Success	169,000 pounds
Richgrove-Jovista	210,000 pounds
Goshen Jct.-Exeter	210,000 pounds
Ingle-Goshen Jct.	210,000 pounds
Rossi-Stratford	210,000 pounds
Coalinga-Armona	210,000 pounds
Fresno-Friant	210,000 pounds
Kern Jct.-McKittrick	210,000 pounds
Oil Jct.-Oil City	210,000 pounds

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

**26.** Turntables at Famoso and Friant must be secured by regulation switch lock (No. 48) when not in use.

**30.** Employes operating over AT&SFRy and FIRy tracks will be governed by current book of rules, timetable and bulletins of AT&SFRy.

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

MP	Location	Description
253.5	West of Lort	Kaweah River bridge—Side

# SPECIAL INSTRUCTIONS—FRESNO SUBDIVISION

**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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	PASSENGER TRAINS	♦FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	PASSENGER TRAINS	♦FREIGHT AND MIXED	LIGHT ENGINES	
			RUNNING FORWARD	RUNNING BACKWARD				RUNNING FORWARD	RUNNING BACKWARD
Column:	1	2	3	4	Column:	1	2	3	4
<b>EASTWARD, FRESNO YARD TO BAKERSFIELD:</b>					<b>WESTWARD, BAKERSFIELD TO FRESNO YARD:</b>				
MP MP					MP MP				
201.89 to 201.93 (thru turnout).....	25	25	25	25	312.90 to 312.27.....	35	20	20	20
201.93 to 202.73.....	50	30	30	30	312.27 to 311.20 (Bakersfield).....	20	20	20	20
*202.73 to 203.19 (Fresno).....	20	20	20	20	311.20 to 311.00.....	35	20	20	20
203.19 to 204.50.....	50	30	30	30	311.00 to 310.07 (Kern River bridge).....	50	30	30	30
*204.50 to 205.93 (Fresno).....	20	20	20	20	310.07 to 281.45.....	70	50	50	30
205.93 to 209.05 (end double track).....	50	30	30	30	281.45 to 279.16 (Delano, 6 AM to 6 PM) ..	40	30	30	30
209.05 to 209.09 (thru turnout).....	35	30	30	30	281.45 to 279.16 (Delano, 6 PM to 6 AM) ..	50	40	40	30
209.09 to 214.48.....	70	50	50	30	279.16 to 250.73.....	70	50	50	30
*214.48 to 215.65 (Fowler, 6 AM to 9 PM) ..	45	30	30	30	*250.73 to 249.21 (Tulare).....	20	20	20	20
*214.48 to 215.65 (Fowler, 9 PM to 6 AM) ..	70	40	40	30	249.21 to 225.98.....	70	50	50	30
215.65 to 220.04.....	70	50	50	30	*225.98 to 225.17 (Kingsburg).....	45	30	30	30
*220.04 to 221.30 (Selma, 5 AM to 11 PM) ..	45	40	40	30	225.17 to 221.30.....	70	50	50	30
*220.04 to 221.30 (Selma, 11 PM to 5 AM) ..	70	50	50	30	*221.30 to 220.04 (Selma, 5 AM to 11 PM) ..	45	40	40	30
221.30 to 225.17.....	70	50	50	30	*221.30 to 220.04 (Selma, 11 PM to 5 AM) ..	70	50	50	30
*225.17 to 225.98 (Kingsburg).....	45	30	30	30	220.04 to 215.65.....	70	50	50	30
225.98 to 249.21.....	70	50	50	30	*215.65 to 214.48 (Fowler, 6 AM to 9 PM) ..	45	30	30	30
*249.21 to 250.73 (Tulare).....	20	20	20	20	*215.65 to 214.48 (Fowler, 9 PM to 6 AM) ..	70	40	40	30
250.73 to 279.16.....	70	50	50	30	214.48 to 209.09.....	70	50	50	30
279.16 to 281.45 (Delano, 6 AM to 6 PM) ..	40	30	30	30	209.09 to 205.93.....	50	30	30	30
279.16 to 281.45 (Delano, 6 PM to 6 AM) ..	50	40	40	30	*205.93 to 204.50 (Fresno).....	20	20	20	20
281.45 to 310.07.....	70	50	50	30	204.50 to 203.19.....	50	30	30	30
310.07 to 311.00 (Kern River bridge).....	50	30	30	30	*203.19 to 202.73 (Fresno).....	20	20	20	20
311.00 to 311.20.....	35	20	20	20	202.73 to 201.89 (Fresno Yard).....	50	30	30	30
311.20 to 312.27 (Bakersfield).....	20	20	20	20					
312.27 to 312.90.....	35	20	20	20					

★Regulated by City ordinance. At Fowler, Selma, Kingsburg, and Delano, speed may be resumed after engine has passed last crossing within city limits in direction train is moving. During night hours as shown, speed within certain city limits as indicated in speed restrictions table for such hours is permitted.

Nos. 51 and 52, consisting of streamlined equipment with P-7, 8, 10, 12, GS or Mt class engine may run not to exceed 75 MPH where maximum speed of 70 MPH is authorized in Column 1.

♦RESTRICTED CARS are twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed Permitted with Certain Equipment"; scale test cars; and cars with arch bar trucks, and trains handling such cars must not exceed maximum speed of 40 MPH.

## SPECIAL INSTRUCTIONS—FRESNO SUBDIVISION

**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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
			RUNNING FORWARD	RUNNING BACKWARD				RUNNING FORWARD	RUNNING BACKWARD
Column:	1	2	3	4	Column:	1	2	3	4
<b>EASTWARD, FRESNO TO FAMOSO, VIA PORTERVILLE:</b>					<b>WESTWARD, FAMOSO TO FRESNO, VIA PORTERVILLE:</b>				
MP MP					MP MP				
★206.11 to 207.00 (Fresno)	20	20	15	10	310.06 to 308.67	12	12	12	12
207.00 to 218.54	40	30	30	20	308.67 to 289.81	40	30	30	20
218.54 to 218.74 (curve)	35	30	20	20	289.81 to 289.62 (curve)	35	30	20	20
218.74 to 229.16	40	30	30	20	289.62 to 264.84	40	30	30	20
★229.16 to 230.66 (Reedley, 5 AM to 11 PM)	20	20	20	20	★264.84 to 263.42 (Lindsay, 5 AM to 11 PM)	20	20	20	20
★229.16 to 230.66 (Reedley, 11 PM to 5 AM)	40	30	30	20	★264.84 to 263.42 (Lindsay, 11 PM to 5 AM)	40	30	30	20
230.66 to 256.80	40	30	30	20	263.42 to 257.89	40	30	30	20
★256.80 to 257.89 (Exeter, 5 AM to 11 PM)	20	20	20	20	★257.89 to 256.80 (Exeter, 5 AM to 11 PM)	20	20	20	20
★256.80 to 257.89 (Exeter, 11 PM to 5 AM)	40	30	30	20	★257.89 to 256.80 (Exeter, 11 PM to 5 AM)	40	30	30	20
257.89 to 263.42	40	30	30	20	256.80 to 230.66	40	30	30	20
★263.42 to 264.84 (Lindsay, 5 AM to 11 PM)	20	20	20	20	★230.66 to 229.16 (Reedley, 5 AM to 11 PM)	20	20	20	20
★263.42 to 264.84 (Lindsay, 11 PM to 5 AM)	40	30	30	20	★230.66 to 229.16 (Reedley, 11 PM to 5 AM)	40	30	30	20
264.84 to 289.62	40	30	30	20	229.16 to 218.74	40	30	30	20
289.62 to 289.81 (curve)	35	30	20	20	218.74 to 218.54 (curve)	35	30	20	20
289.81 to 308.67	40	30	30	20	218.54 to 207.00	40	30	30	20
308.67 to 310.06 (Famoso)	12	12	12	12	★207.00 to 206.11 (Fresno)	20	20	15	10
<b>EASTWARD, PORTERVILLE TO SUCCESS:</b>					<b>WESTWARD, SUCCESS TO PORTERVILLE:</b>				
275.04 to 275.15 (curve)	10	10	10	10	282.68 to 281.56	15	15	15	15
275.15 to 280.89	15	15	15	15	281.56 to 280.89 (curves)	10	10	10	10
280.89 to 281.56 (curves)	10	10	10	10	280.89 to 275.15	15	15	15	15
281.56 to 282.68	15	15	15	15	275.15 to 275.04 (curve)	10	10	10	10
<b>EASTWARD, RICHGROVE TO JOVISTA:</b>					<b>WESTWARD, JOVISTA TO RICHGROVE:</b>				
295.01 to 299.17	15	15	15	15	299.17 to 295.01	15	15	15	15
<b>EASTWARD, GOSHEN JCT. TO EXETER:</b>					<b>WESTWARD, EXETER TO GOSHEN JCT.:</b>				
245.96 to 246.11 (curve)	30	20	20	15	262.72 to 255.38	40	30	30	15
246.11 to 251.87	40	30	30	15	255.38 to 255.00 (curve)	30	20	20	15
★251.87 to 253.92 (Visalia)	15	15	15	15	255.00 to 253.92	40	30	30	15
253.92 to 255.00	40	30	30	15	★253.92 to 251.87 (Visalia)	15	15	15	15
255.00 to 255.38 (curve)	30	20	20	15	251.87 to 246.11	40	30	30	15
255.38 to 262.72	40	30	30	15	246.11 to 245.96 (curve)	30	20	20	15

★Regulated by City ordinance. At Reedley, Exeter and Lindsay, speed may be resumed after engine has passed last crossing within city limits in direction train is moving. During night hours as shown, speed within certain city limits as indicated in speed restrictions table for such hours is permitted.

◆RESTRICTED CARS are twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed Permitted with Certain Equipment"; scale test cars; and cars with arch bar trucks, and trains handling such cars must not exceed maximum speed of 40 MPH.

Between Fresno and Famoso via Porterville, maximum speed of following SP engines, must not be exceeded, and is subject to further restrictions as shown in Speed Restrictions table above:

DES-100, 102 to 108. engs. 1300 to 1309; 1320 to 1402..... 25 MPH	P-1, 11..... engs. 2405, 2406, 2407, 3100, 3104, 3109..... 25 MPH
DES-101, 109..... engs. 1310 to 1319, 1403 to 1425..... 20 MPH	P-6..... eng. 2454..... 25 MPH
T-23, 28, 31, 58..... engs. 2301 to 2310; 2312 to 2362; and 2386..... 25 MPH	A-3, 6..... engs. 3000, 3001, 3002, 3025, 3057..... 15 MPH
T-40..... eng. 2371..... 20 MPH	Mk-7, 8, 9..... engs. 3300 to 3309; 3310 to 3324..... 25 MPH
P-1, 3, 4..... engs. 2401, 2402, 2408, 2409, 2410, 2414, 2419, 2420, 2422, 2424, 2436, 2459.. 20 MPH	B-1..... engs. 3500 to 3509..... 25 MPH

Between Fresno and Famoso via Porterville, maximum speed of following AT&SFRy engines, must not be exceeded, and is subject to further restrictions as shown in Speed Restrictions table above:

A type engs. 1413 to 1468..... 15 MPH	P type engs. 3501 to 3534..... 25 MPH
P type engs. 3409, 3411, 3443 to 3445..... 20 MPH	MT type engs. 3702 to 3750..... 25 MPH
P type engs. 3449, 3450, 3459..... 15 MPH	Diesel, engs. 1 to 21, 51 to 58, 90, 100 to 185, 200 to 225..... 20 MPH

# SPECIAL INSTRUCTIONS—FRESNO SUBDIVISION

**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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
			RUNNING FORWARD	RUNNING BACKWARD				RUNNING FORWARD	RUNNING BACKWARD
Column:	1	2	3	4	Column:	1	2	3	4
<b>EASTWARD, INGLE TO GOSHEN JCT.:</b> MP MP 182.21 to 215.00..... 223.00 to 245.47.....	20 25	20 25	20 25	15 15	<b>WESTWARD, GOSHEN JCT. TO INGLE:</b> MP MP 245.47 to 223.00..... 215.00 to 182.21.....	25 20	25 20	25 20	15 15
<b>EASTWARD, COALINGA TO ARMONA:</b> 269.39 to 229.47..... 229.47 to 229.46 (Lake St.)..... 229.46 to 229.18.....	25 20 25	25 20 25	25 20 25	15 15 15	<b>WESTWARD, ARMONA TO COALINGA:</b> 229.18 to 229.46..... 229.46 to 229.47 (Lake St.)..... 229.47 to 269.39.....	25 20 25	25 20 25	25 20 25	15 15 15
<b>EASTWARD, ROSSI TO STRATFORD:</b> 236.44 to 244.69, except:..... With M-9, 11 class engines.....	25 10	25 10	25 10	15 10	<b>WESTWARD, STRATFORD TO ROSSI:</b> 244.69 to 236.44, except:..... With M-9, 11 class engines.....	25 10	25 10	25 10	15 10
<b>EASTWARD, FRESNO TO FRIANT:</b> ★206.15 to 209.80..... 209.80 to 211.93..... 211.93 to 212.20 (curve)..... 212.20 to 213.21..... 213.21 to 213.25 (Over FIRy)..... 213.25 to 222.90..... 222.90 to 230.29 (curves).....	15 25 20 25 15 25 20	15 25 20 25 15 25 20	15 25 20 25 15 25 20	10 15 15 15 15 15 15	<b>WESTWARD, FRIANT TO FRESNO:</b> 230.29 to 222.90 (curves)..... 222.90 to 213.25..... 213.25 to 213.21 (Over FIRy)..... 213.21 to 212.20..... 212.20 to 211.93 (curve)..... 211.93 to 209.80..... ★209.80 to 206.15.....	20 25 15 25 20 25 15	20 25 15 25 20 25 15	20 25 15 25 20 25 15	15 15 15 15 15 15 10
<b>EASTWARD, KERN JCT. TO McKITTRICK:</b> 313.44 to 314.15 (street crossings)..... 314.15 to 360.14..... 360.14 to 361.05, except:..... With M-6, 8, 9, 11 class engines.....	15 25 25 10	15 25 25 10	15 25 25 10	15 15 15 10	<b>WESTWARD, McKITTRICK TO KERN JCT.:</b> 361.05 to 360.14, except:..... With M-6, 8, 9, 11 class engines..... 360.14 to 314.15..... 314.15 to 313.44.....	25 10 25 15	25 10 25 15	25 10 25 15	15 10 15 15
<b>EASTWARD, OIL JCT. TO OIL CITY:</b> 309.20 to 314.20.....	10	10	10	10	<b>WESTWARD, OIL CITY TO OIL JCT.:</b> 314.20 to 309.20.....	10	10	10	10

★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
On wye and packing house tracks at Locans.....	6
On spur leading from Pinedale, except:.....	20
On curves.....	10

**SPECIAL INSTRUCTIONS—FRESNO SUBDIVISION**

**RATING OF ENGINES—In Units of 1000 Lbs. (Ms)**

NOMINAL CLASS	ENGINE NUMBERS	Bakersfield and Fresno via Goshen Jct.	Famoso and Fresno via Porterville	Friant to Fresno	Fresno to Friant Goshen Jct. and Exeter Richgrove and Jovista Oil Jct. and Oil City	Bakersfield to McKittrick	Coalinga to Armona Rossi and Stratford Ingle and Goshen Jct. Porterville and Success McKittrick to Bakersfield	Armona to Coalinga
DEP-3	6017.....	.....	.....	.....	.....	.....	.....	.....
DEP-4, 7	6000 to 6004 and 6018.....	.....	.....	.....	.....	.....	.....	.....
DEP-5, 6	6005 to 6016.....	.....	.....	.....	.....	.....	.....	.....
DEF-1	6100 to 6137.....	18000	.....	.....	.....	.....	.....	.....
DEF-1	6138 and 6139.....	.....	.....	.....	.....	.....	.....	.....
DEF-2	6140 to 6179.....	.....	.....	.....	.....	.....	.....	.....
DEF-3, 4, 5	6180 to 6295.....	.....	.....	.....	.....	.....	.....	.....
DES-1 to 7	1000 to 1022.....	2750	2350	1340	1900	630	2350	1800
DES-100 to 109	1300 to 1441.....	4150	3550	2050	2900	1000	3550	2750
DERS-2, 4, 5, 6	5203 to 5227.....	8000	.....	.....	.....	.....	.....	.....
M-4	1617 to 1713.....	4150	3300	1910	2300	1070	3600	2450
M-6, 8	1721 to 1803, 1823 to 1825.....	4850	3800	2250	2700	1280	4300	2900
M-9	1804 to 1822, 1826 to 1830 and 1836.....	5100	4050	2350	2900	1360	①4500	3100
M-11	1832 to 1835.....	5300	4200	2550	3600	1420	①4700	3450
T-1	2248 and 2252.....	3450	2700	1600	2000	900	3150	2100
T-8	2178.....	2500	1950	.....	.....	.....	.....	.....
T-23	2301 to 2310.....	5050	4000	2350	2900	.....	.....	.....
T-26	2296 and 2299.....	4450	3500	.....	.....	.....	.....	.....
T-28, 31	2312 to 2362.....	5550	4400	2600	3200	.....	.....	.....
T-32	2363 to 2370, 2372 to 2384.....	5700	4500	.....	.....	.....	.....	.....
T-40	2371.....	5700	4500	.....	.....	.....	.....	.....
T-37	2105 and 2106.....	5050	4000	.....	.....	.....	.....	.....
P-1, 3, 5	{2408, 2411, 2412, 2417, 2428 to-2433, 2439 to 2452 and 2459	4600	4000	2100	2550	.....	.....	.....
P-1	2403 to 2407 and 2415.....	4800	4150	2200	2700	.....	.....	.....
P-4	{2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436	5000	4350	2300	2800	.....	.....	.....
P-6	2453, 2454 and 2458.....	5650	5000	.....	.....	.....	.....	.....
P-7	2476 and 2477.....	6000	5250	.....	.....	.....	.....	.....
P-8, 10	2461 to 2474, 2478 to 2483.....	6250	.....	.....	.....	.....	.....	.....
P-8, 10	2475, 2484 to 2491.....	6250	.....	.....	.....	.....	.....	.....
P-11	3104 and 3109.....	4900	4250	.....	.....	.....	.....	.....
P-12	3120 to 3129.....	6600	.....	.....	.....	.....	.....	.....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469.....	6100	5350	2950	4200	.....	.....	.....
C-15	2506.....	3900	3450	1900	2700	.....	.....	.....
C-18	3400 to 3409.....	5600	4900	2750	3900	.....	.....	.....
C-19	3410 to 3426.....	5850	5150	2850	4050	.....	.....	.....
TW-1	2900 to 2913.....	4650	4150	2200	2700	1250	4150	2800
TW-2, 3	2937 to 2952.....	2937	3350	1750	2150	975	3350	2250
TW-8	2914 to 2923.....	5150	4500	2600	3650	1350	4550	3500
A-3	3025 and 3057.....	3600	3350	.....	.....	.....	.....	.....
A-6	3000 to 3002.....	4400	3850	.....	.....	.....	.....	.....
Mk-2, 4	3201 to 3240.....	6900	6000	.....	.....	.....	.....	.....
Mk-5, 6	3241 to 3277.....	7800	6800	.....	.....	.....	.....	.....
Mk-7, 8, 9	3300 to 3324.....	8550	7350	.....	.....	.....	.....	.....
Mk-10	3295.....	6550	5800	.....	.....	.....	.....	.....
Mk-11	3297 and 3298.....	6300	5600	.....	.....	.....	.....	.....
B-1	3500 to 3509.....	10200	8200	.....	.....	.....	.....	.....
F-1	3611 to 3652.....	8900	.....	.....	.....	.....	.....	.....
F-3	3653 to 3667.....	10200	.....	.....	.....	.....	.....	.....
F-4, 5	3668 to 3769.....	10200	.....	.....	.....	.....	.....	.....
MM-3	3930 and 3931.....	11800	.....	.....	.....	.....	.....	.....
AC-4, 5	4100 to 4125.....	16000	.....	.....	.....	.....	.....	.....
AC-6 to 12	3800 to 3811, 4126 to 4294.....	17000	.....	.....	.....	.....	.....	.....
Mt-1, 3, 4, 5	4300 to 4376.....	8350	.....	.....	.....	.....	.....	.....
Mt-2	4385 to 4390.....	8800	.....	.....	.....	.....	.....	.....
GS-1, 2	4401 to 4415.....	9000	.....	.....	.....	.....	.....	.....
GS-3, 4, 5, 6	4416 to 4469.....	9200	.....	.....	.....	.....	.....	.....
SP-1, 2, 3	5000 to 5048.....	12000	.....	.....	.....	.....	.....	.....

Following AT&SFRy. engines may operate between Oil Jct. and Ducor. Diesel, 1 to 21, 51 to 58, 90, 100 to 185, 200 to 225; All A, P, C and Mt types, except engs. 3700, 3701, 3751 to 3775.

C class engines may operate on McKittrick Branch between Kern Jct. and MP 315.67.

①M-9, 11 class, not permitted to operate between Porterville and Success.

In figuring tonnage of train, add 6 Ms for each empty or underloaded car of less than 45 Ms and 3 Ms for each such car of 45 to 55 Ms, except from Bakersfield to McKittrick, add 3 Ms for each such car of 55 Ms or less.

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

**RULE 14(e).** As specified below — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

- Magunden.....Trains on Arvin Branch,
- Mojave.....Trains on Owenyo Branch.

**RULE 21 (C).** In Bakersfield indicators must be displayed to relief track.

**RULE 93.** Yard limits in which the provisions of Rule 93 will apply, except within C.T.C. limits, are established at the following stations:

West MP	East MP
307.66	Bakersfield..... 321.09
	" (Arvin Branch)..... 317.02
317.02	Arvin Branch..... To end of branch
359.60	Tehachapi..... 362.62
367.72	Eric..... 368.28
378.87	Mojave..... 382.43
	" (Owenyo Branch)..... 381.60

**Bakersfield:** Trains entering or leaving yard tracks between Baker St. and Haley St., or between Mt. Vernon Ave. and Signal 3147 must receive proceed signal from yardman, green flag by day, green light by night.

Westward SP trains must not pass Signal 3147 at Mt. Vernon Ave. displaying stop indication, to enter yard, unless proceed signal received from yardman, green flag by day, green light by night.

Trains or engines will not move against current of traffic on double track, except on authority of yardmaster. When making movements against current of traffic, trains or engines must be preceded by flagman over railway and street crossings at grade where wigwags installed, protecting crossings during movements, except where crossing watchman located.

**Mojave:** First-class trains are authorized to move between Signals 3802 and 3815 or 3817 by block signal indications which will supersede the superiority of trains, but must move with caution and see that switches are properly lined between these points. If Signal 3802 displays stop indication, train must stop, and if proceed signal received from yardman, green flag by day, green light by night, may then proceed with caution, not exceeding 12 MPH to next signal.

Eastward trains except first-class must not pass Signal 3802 displaying proceed indication unless proceed signal received from yardman, green flag by day, green light by night.

Eastward trains except first-class may pass Signal 3802 displaying stop indication if flashing white light also displayed on signal mast, moving with caution, not exceeding 12 MPH.

When Signal 3802 displays stop indication and flashing white light not displayed, eastward trains except first class must stop and not proceed unless proceed signal received from yardman, green flag by day, green light by night.

Following whistle signals will be sounded by eastward trains approaching Mojave:

- SP passenger trains —, freight trains o — o, light engines o — —,
- AT&SFRy passenger trains — o, freight trains — o —, light engines o — —.

**RULE 99.** Westward freight trains stopping at Bena on westward main track, with rear of train standing between "End of CTC" sign and westward automatic Signal 3271 opposite fouling point at west end of siding, are not required to protect against following trains.

**RULE 103 (A).** Public Utilities Commission orders prohibit operation of train, engine, motor or car over the following crossings unless first brought to a stop and traffic on the highway protected by a member of the crew.

- Arvin.....Widmer Road, MP 332.6, while switching.

**RULE 104.** The normal position of rigid switches at the end of double track and at junctions, is as follows:

- Magunden.....Arvin Branch, for eastward track,
- Mojave.....End of double track, for westward track,
- Mojave.....Owenyo Branch, for westward track.

**RULE 505. AUTOMATIC BLOCK SYSTEM**

**Warren:** Siding is within block system limits. When dwarf signal at either end of siding indicates "stop", trains entering siding must be preceded by flagman.

**Summit:** Crossover switch in eastward track at MP 362.1 equipped with electric lock. Instructions in phone booth.

Push buttons and lights in box attached to Signal 3632 at east end siding Summit.

**RULES 510 and 776.** The following block signals equipped with triangular plate bearing the letter "P" have included in their control limits some special protective device. Absolute signals are listed as "P-A", and Rule 776 in addition to Rule 510 must be complied with when stopped by such signals.

Eastward Signal	Protection	Westward Signal
P-3546	Slide detector fence between Tunnels 14 and 15.	P-3557
P-3556		P-A

**RULE 512 (B).** Dwarf light signals governing movement to main track located as follows:

- Signal 3621 at Summit,
- Signal 3679 at Eric.

**RULE 535. SPRING SWITCHES**

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

Location	Normal Position
Bena..... West end siding.....	Westward track
Caliente..... West end westward siding.....	Eastward siding
Caliente..... East end eastward siding.....	Westward siding
Bealville..... West end westward siding.....	Eastward siding
Bealville..... East end eastward siding.....	Westward siding
Marcel..... West end westward siding.....	Eastward siding
Marcel..... East end eastward siding.....	Westward siding
Tehachapi..... West end No. 2 siding.....	Controlled siding
Summit..... East end siding.....	Eastward track

Trains and engines moving against the current of traffic must not exceed 25 MPH over spring switch in facing point direction at west end siding Bena and east end siding at Summit. Unless the movement is protected by a block signal displaying proceed indication, or by a switch-point indicator displaying green aspect, stop must be made before reaching the spring switch and member of crew must examine same and know that points are in proper position for movement and switch locked, before proceeding.

Switch position indicator at spring switch leading from back lead to inbound engine track Bakersfield, does not indicate track occupancy. When indicator displays red aspect, or is not lighted, careful examination of switch must be made before passing over same in eastward direction.

There are other spring switches on roundhouse leads and yard tracks at Bakersfield and Mojave.

**RULE 605. INTERLOCKING**

**Kern Jct. Tower:** AT&SFRy junction switch, McKittrick Branch junction switch, and end of double track. Whistle signals:

- For main track, —,
- To or from McKittrick Branch, — o —,
- From SP to AT&SFRy main track, o — —,
- Between main track and transfer track, o — o,
- To or from No. 1 track, o o — o.

Westward dwarf light signals at end of double track display green aspect for movement to SP single track, and yellow aspect for movement to AT&SFRy westward track, or to SP No. 1 track.

Eastward dwarf signal at west interlocking limit displays green aspect for movement to eastward track, and yellow aspect for movement against current of traffic to westward track.

At Kern Jct. only, Rule 628 is modified to permit movement without stopping, of helper cuts only, past interlocking signals displaying stop indication, provided yellow signal is received from signal operator from tower or on ground, and helper engineer sees that switches are properly lined for movement to be made.

**RULE 705. LETTER TYPE INDICATORS**

Indicators located as follows:

Illum.	On	Approaching	Authorizes and requires movement as follows
M.....	D-3262	Bena.....	Proceed to C.T.C. limit.
S.....	D-3262	Bena.....	Enter siding.
M.....	3273	West end siding	
		Bena.....	Enter westward track and proceed to Bakersfield.

Train on siding Bena must not enter westward track until letter "M" on dwarf signal 3273 is illuminated.

When letter "S" is illuminated on mast of westward absolute signal at entrance to C.T.C. at Tehachapi, it indicates that operator has released electric lock, and authorizes train, after stopping at absolute signal, to line switch at east end No. 2 siding.

**RULE 760. CENTRALIZED TRAFFIC CONTROL SYSTEM**

Limits extend from end of double track Bena to end of double track Tehachapi.

Eastward trains stopped by absolute signal at Bena may recall flagman when flashing white light displayed on signal, and prepare to start when signal clears.

Signal line between MP 325.2 and MP 340.5 carries 2300 volts, and if blown down or knocked down must not be touched, but dispatcher must be notified immediately.

Eastward and westward signals on siding at middle cross-overs at Rowen have call-on unit which, when flashing yellow authorizes a train on siding, after stopping, to proceed on siding beyond crossover switches without securing telephone permission from dispatcher, but must expect to find a preceding train at any point on siding.

Controlled siding at Tehachapi extends from west switch to fouling point just west of end of double track.

No. 2 siding at Tehachapi is not a controlled siding, and may be used by trains in either direction but has an electric lock on east switch which must be released by signal operator at Tehachapi before it can be hand-thrown.

Westward absolute signal on westward track at entrance to C.T.C. at Tehachapi has call-on unit which, when flashing yellow authorizes a train, after stopping, to pass signal without securing telephone permission from dispatcher, provided train is to enter No. 2 siding, or is to move through switch to No. 2 siding in order to enter No. 3 track, but must expect to find a preceding or opposing train on either track at any point.

Electric locks on switches at east and west end of house track Caliente; on switch to spur at Rowen; and on west switch of house track at Tehachapi, must be released by dispatcher before they can be hand-thrown. Instructions for operation of electric locks are posted inside of lock-box doors.

Westward absolute signal at east end of Caliente has call-on unit which may display flashing yellow light authorizing train to pass signal when making switching moves into house track after electric lock has been released and switches properly lined.

**GENERAL REGULATIONS**

**RULE 824. Instructions for setting hand brakes:**

**Mojave:** On passenger trains, if road engine is to be detached set two brakes on east end and two brakes on west end for each 16 cars or fraction thereof. When train is set out to tie up, at least half of the brakes must be set, but never less than two.

On eastward freight trains, engineer will stop train on receiving track with slack bunched on entire train. Set 10 hand brakes on head-end and 10 on rear-end, except on train powered

by Diesel engine train may be permitted to stand without hand brakes set if conductor has reached understanding with engineer that he or fireman (with not less than 2 years experience) will remain on the engine at all times to insure no undesired movement.

On westward freight trains, set 10 hand brakes on rear-end and 10 on head-end, except on train powered with Diesel engine train may be permitted to stand with 10 brakes set on rear-end if conductor has reached understanding with engineer that he or fireman (with not less than 2 years experience) will remain on the engine at all times to insure no undesired movement.

**Caliente and Woodford:** When taking water on eastward freight trains with two or more helpers, first helper may spot for water and before detaching second helper five brakes must be set ahead of second helper. If first helper is to be detached, five brakes must be set ahead of first helper only. If road engine is to be detached, five brakes must be set ahead of first helper and five behind road engine.

Freight trains with one helper may spot helper for water. If helper engine is to be detached, five brakes must be set ahead of helper, and if road engine is to be detached, five brakes must be set behind road engine.

At points where hand brakes must be set on freight trains such brakes must be securely set, using standard brake club to set staff brakes, after train has stopped. When necessary to release hand brakes to move portion of the cars, the same number must be set on remaining cars to replace them.

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

Bena	Bealville	Woodford	Cable
Ilmon	Cliff	Walong	Tehachapi
Caliente	Rowen	Marcel	Summit
Allard			

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 Diesel engine with three or more dynamic brakes working need not stop if in the judgment of engineer and conductor there is no indication of wheels overheating. With less than three dynamic brakes working, will make stops prescribed for trains handled by steam engine.**

Freight trains handled by steam engine may make continuous run Tehachapi to Woodford, where stop of 10 mins. must be made. If stop made at Cable, Marcel or Walong for 10 mins., succeeding run may be made to Cliff, where stop of 10 mins. must be made. After 10 min. stop at Woodford, Rowen or Cliff, succeeding run may be made to Bena.

On freight trains between Ilmon and Mojave, a member of crew must observe track to rear of train for evidence of derailment or any other condition requiring immediate stopping of train.

All passenger trains, except regular No. 56, must stop at Mojave, approaching at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. Brakeman will then make running 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.

Westward light engines equipped with tire coolers, except AC class, are not required to stop between Tehachapi and Caliente. AC class and engines not equipped with tire coolers must stop sufficient length of time at some point between Cable and Bealville for engineer to make one inspection.



**RULE 873.** Engines must not be blown out while passing C.T.C. relay shelters.

Engines with side blow-off cocks must not be blown out between MP 374 and MP 376.

**RULE 883.** Light engines must be left on track 3 at Tehachapi while crews are eating.

### AIR BRAKE RULES

**RULE 3.** Brake pipe pressure for freight and mixed trains handled by Diesel engine using dynamic brakes in retainer territory is 90 pounds and brake pipe pressure must not be permitted to drop below 70 pounds.

Main reservoir position of selector cock must be used on descending grades.

**RULE 17.** Retainers will be used on passenger trains handled by Diesel engines as follows:

Eastward trains with three or more dynamic brakes working and not to exceed 3000 Ms need not use retainers unless requested by engineer and when retainers not used may make maximum speed of 45 MPH from MP 371.40 to MP 380.00.

Westward trains with three or more dynamic brakes working and not to exceed 3000 Ms need not use retainers unless requested by engineer.

Trains in either direction with less than three dynamic brakes working will use retainers and observe speed as prescribed for passenger trains with steam engines.

Retainers will be used on passenger trains handled by steam engines as follows:

On eastward trains all retainers Cameron to Mojave, except when No. 52 has not to exceed three head-end cars and other trains have not to exceed two head-end cars, all accessible retainers will be used, unless more are requested by engineer. Retainers on head-end cars may be turned up at Tehachapi or Summit instead of Cameron.

On Westward trains all retainers Tehachapi to MP 337.10, except when No. 51 has not to exceed 3 head-end cars, and other trains have not to exceed two head-end cars, all accessible retainers will be used, unless more are requested by engineer. Retainers on head-end cars, except on regular No. 55, may be turned up at Mojave.

Retainers will be used on freight trains handled by Diesel engines as follows:

One retainer on eastward trains Cameron to Mojave for each 200 Ms in train when working:

Four dynamic brakes at 540 amps with over 5500 Ms; or  
Three dynamic brakes at 540 amps with over 4000 Ms; or  
Four dynamic brakes at 600 amps with over 7200 Ms; or  
Three dynamic brakes at 600 amps with over 6500 Ms.

One retainer on westward trains Tehachapi to Caliente for each 200 Ms in train when working:

Four dynamic brakes at 540 amps with over 6200 Ms; or  
Three dynamic brakes at 540 amps with over 5000 Ms; or  
Four dynamic brakes at 600 amps with over 7200 Ms; or  
Three dynamic brakes at 600 amps with over 5600 Ms.

Trains in both directions with less than three dynamic brakes working will use retainers as prescribed for trains handled by steam engines. Conductor will advise dispatcher if train is to be operated without use of retainers.

Retainers will be used on freight trains handled by steam engines as follows:

One retainer on eastward trains Cameron to Mojave, and on westward trains Tehachapi to Caliente for each 100 Ms in train. If not sufficient cars in train to make average of 100 Ms per retainer, all retainers will be used.

Eastward trains may turn up retainers at Summit instead of Cameron; but if train brakes applied after retainers are turned up, speed of 20 MPH must not be exceeded from point where brakes applied to MP 371.40. Retainers must not be turned down until train stops on designated track at Mojave.

Westward trains may turn up retainers at west end of Tehachapi if not required to stop before entering C.T.C. Retainers may be turned down at Ilmon or Bena instead of Caliente. If retainers not turned down before reaching Bena, speed of 25 MPH must not be exceeded Ilmon to Bena.

Engineer operating Diesel engine in passenger or freight service must have made required qualifying trips and have been instructed in use of dynamic brakes.

### FREIGHT TRAINS

**RULE 22.** Trainmen must not couple air hose on outgoing trains at Mojave, until train is made up and caboose on train. Coupling the caboose to rear of train will be considered as an indication that the train is made up and yardmen have completed their work. Yardmen must not perform switching on, or couple other cars to a train on which caboose has been attached, without instructions from the yardmaster, who will see that members of crew are notified in advance.

**RULE 25.** Rear end test will be made in accordance with Rule 25 (b); and in addition will be made by all trains that stop at Summit and Mojave; and by westward trains that stop at Eric.

Trains not required to stop at Summit must make running air brake test between siding switches, unless rear end test has been made at Tehachapi, Monolith or Eric. Trainmen will note reduction on caboose gage, and following build up in pressure when brakes are released, give proceed signal. Running test will be made as follows: Engineer, while working steam will make reduction of approximately seven pounds, wait for slack to adjust itself, then add three pounds before releasing.

**RULE 33.** The maximum tonnage per operative brake Tehachapi to Caliente and Cameron to Mojave is 125 Ms, except: trains handled by Diesel engines with four dynamic brakes working, will not exceed 150 Ms per operative brake, with three dynamic brakes working, not to exceed 140 Ms per operative brake, with two dynamic brakes working, not to exceed 130 Ms per operative brake.

### PASSENGER TRAINS

**RULE 39.** Running test must be made at Summit, except that if road test as prescribed by Rule 38, and running test have been made at or after leaving Tehachapi on eastward trains running test will not be required at Summit on those trains.

MISCELLANEOUS

1. Water supply at Bealville is for emergency use only.

When the word "Water" is illuminated in indicator on pole opposite switch west end of siding at Caliente or Woodford, each engine of eastward trains will take water at that station.

When eastward three-engine freight trains have taken water at Caliente, the through helper only may take water at Tehachapi while cutting out helpers.

4. Eastward freight trains stopped on siding at Summit will, after cutting out helpers, move to east end of siding promptly.

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

Class of Engine	Restricted Tracks
F, MM, Mt, GS, SP, AT&SFry 3700, 3800, 5000 type.....	Bakersfield—Santa Fe Interchange tracks 1, 2 and 3.
All.....	Monolith—Tracks 2 and 3 between east and west end of Cement plant.

Flat cars loaded with poles or piling must not be spotted on team track adjacent to main track at Warren or Cameron without authority from chief train dispatcher who will protect by train order. At other stations such loads must not be spotted for unloading on team tracks adjacent to main track when possible to avoid it.

Load limit (car and contents):

Bakersfield-Mojave.....	251,000 pounds
Magunden-Arvin.....	210,000 pounds

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

23. Westward trains entering middle siding at Warren or Monolith must line switches in the following order: Westward main track switch first; inside switch next; then derail. After train is in siding, switches must be lined in the following order: Westward main track switch first; derail next; then inside switch.

# SPECIAL INSTRUCTIONS—TEHACHAPI SUBDIVISION

**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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES			
			RUNNING FORWARD	RUNNING BACKWARD				RUNNING FORWARD	RUNNING BACKWARD		
Column:	1	2	3	4	Column:	1	2	3	4		
<b>EASTWARD, BAKERSFIELD TO MOJAVE:</b> MP      MP 312.90 to 313.60 (Bakersfield)..... 20    20    20    20 313.60 to 314.60..... 35    20    20    20 314.60 to 325.60..... 55    40    40    30 325.60 to 326.00 (curve)..... 40    40    40    30 326.00 to 327.96 (Bena)..... 50    40    40    30 327.96 to 328.10 (thru turnout)..... 35    30    30    30 328.10 to 331.00..... 50    40    40    30 331.00 to 359.50 (curves)..... 25    20    20    20 359.50 to 360.60..... 50    40    40    30 360.60 to 368.74..... 60    40    40    30 368.74 to 371.40..... 50    40    35    30 371.40 to 380.00 (curves)..... ③30 20 ①20 20 380.00 to 380.20 (thru turnout)..... 15    15    15    15 380.20 to 380.70 (Mojave)..... 30    20    20    20					<b>WESTWARD, MOJAVE TO BAKERSFIELD:</b> MP      MP 380.70 to 380.00..... 30    30    20    20 380.00 to 376.50..... 55    35    35    30 376.50 to 371.40 (curves)..... 40    35    35    30 371.40 to 368.74..... 50    40    40    30 368.74 to 360.60..... 60    40    40    30 360.60 to 331.00 (end D. T. & curves)..... 25    20 ②20 15 331.00 to 326.00..... 50    40    40    30 326.00 to 325.60 (curve)..... 40    40    40    30 325.60 to 314.60..... 55    40    40    30 314.60 to 313.80..... 35    20    20    20 313.80 to 313.60 (Kern Jct.), except:..... 15    15    15    15 AT&SFRy trains..... 10    10    10    10 313.60 to 312.90 (Bakersfield)..... 20    20    20    20						
<b>EASTWARD, MAGUNDEN TO ARVIN:</b> 316.66 to 317.06 (curves)..... 8    8    8    8 317.06 to 324.22..... 15    15    15    15 324.22 to 324.41 (curve)..... 8    8    8    8 324.41 to 329.76..... 15    15    15    15 329.76 to 329.95 (curve)..... 8    8    8    8 329.95 to 333.54..... 15    15    15    15					<b>WESTWARD, ARVIN TO MAGUNDEN:</b> 333.54 to 329.95..... 15    15    15    15 329.95 to 329.76 (curve)..... 8    8    8    8 329.76 to 324.41..... 15    15    15    15 324.41 to 324.22 (curve)..... 8    8    8    8 324.22 to 317.06..... 15    15    15    15 317.06 to 316.66 (curves)..... 8    8    8    8						

③ No. 52 may make maximum speed of 45 MPH from MP 371.40 to MP 380.00.

① DEF class engines running light, with not less than three dynamic brakes working, may make maximum speed of 30 MPH from MP 371.40 to MP 380.00.

② DEP, DEF, P, Mt and GS engines; and AT&SFRy Mt and DE engines running light may make maximum speed of 25 MPH from MP 360.60 to MP 331.00.

AT&SFRy passenger trains with Diesel engine on rear shoving in backward motion, may operate at passenger train speed, but must not exceed 50 MPH.

When moving against current of traffic, maximum speed of passenger trains 50 MPH, freight and mixed trains and engines 40 MPH, but must not exceed speed restrictions applying on opposite track. Unless proceed signal received, such trains and engines must stop approaching road crossings where automatic warning devices are installed, and may proceed after member of crew protects crossing.

♦ **RESTRICTED CARS** are twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed Permitted with Certain Equipment"; scale test cars; and cars with arch bar trucks, and trains handling such cars must not exceed maximum speed of 40 MPH.

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

## SPECIAL INSTRUCTIONS—TEHACHAPI SUBDIVISION

## RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Bakersfield to Mojave	Mojave to Bakersfield	Magunden and Arvin
DEP-3	6017	....	....	....
DEP-4, 7	6000 to 6004 and 6018	....	1750	....
DEP-5, 6	6005 to 6016	....	....	....
DEF-1	6100 to 6137	4400	5000	....
DEF-1	6138 and 6139	5600	6800	....
DEF-2	6140 to 6179	5600	6800	....
DEF-3, 4, 5	6180 to 6295	6550	7100	....
DES-1 to 7	1000 to 1022	480	530	1800
DES-100 to 109	1300 to 1441	750	840	2750
DERS-2, 4, 5, 6	5203 to 5227	....	1850	....
M-4	1617 to 1713	580	680	2300
M-6, 8	1721 to 1803, 1823 to 1825	700	820	2700
M-9	1804 to 1822, 1826 to 1830 and 1836	760	890	2900
M-11	1832 to 1835	780	910	....
T-1	2248 and 2252	470	560	2000
T-8	2178	320	390	....
T-23	2301 to 2310	730	850	2900
T-26	2296 and 2299	610	730	....
T-28, 31	2312 to 2362	820	950	3200
T-32	2363 to 2370, 2372 to 2384	860	990	3600
T-40	2371	860	990	3600
T-37	2105 and 2106	740	870	....
P-1, 3, 5	{ 2408, 2411, 2412, 2417, 2428 to 2433, 2439 to 2452 and 2459 }	630	740	2550
P-1	2403 to 2407 and 2415	630	750	2700
P-4	{ 2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436 }	690	800	2800
P-6	2453, 2454 and 2458	810	940	....
P-7	2476 and 2477	860	1000	....
P-8, 10	2461 to 2474, 2478 to 2483	830	980	....
P-8, 10	2475, 2484 to 2491	830	980	....
P-11	3104 and 3109	660	770	....
P-12	3120 to 3129	900	1050	....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	900	1050	4000
C-15	2506	590	690	2600
C-18	3400 to 3409	870	1000	3700
C-19	3410 to 3426	890	1050	3850
TW-1	2900 to 2913	700	820	2700
TW-2, 3	2937 to 2952	540	640	2150
TW-8	2914 to 2923	770	910	2950
A-3	3025 and 3057	450	530	....
A-6	3000 to 3002	600	690	....
Mk-2, 4	3201 to 3240	1050	1200	....
Mk-5, 6	3241 to 3277	1200	1350	....
Mk-7, 8, 9	3300 to 3324	1300	1500	....
Mk-10	3295	1000	1200	....
Mk-11	3297 and 3298	980	1150	....
B-1	3500 to 3509	1500	1750	....
F-1	3611 to 3652	1350	1550	....
F-3	3653 to 3667	1500	1750	....
F-4, 5	3668 to 3769	1500	1750	....
MM-3	3930 and 3931	1750	2050	....
AC-4, 5	4100 to 4125	2500	2900	....
AC-6 to 12	3800 to 3811, 4126 to 4294	2700	3100	....
Mt-1, 3, 4, 5	4300 to 4376	1200	1350	....
Mt-2	4385 to 4390	1200	1400	....
GS-1, 2	4401 to 4415	1200	1400	....
GS-3, 4, 5, 6	4416 to 4469	1250	1450	....
SP-1, 2, 3	5000 to 5048	1800	2100	....

Following AT&SFry. engines may operate between Kern Jct. and Mojave: All A, P, C, Mt, SFe, Diesel 1 to 21, 51 to 58, 90, 100 to 185, 200 to 225.

In figuring tonnage of train, add 3 Ms for each empty or underloaded car of 55 Ms or less, except between Magunden and Arvin, add 6 Ms for each such car of less than 45 Ms, and 3 Ms for each such car of 45 to 55 Ms.

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

**RULE 10 (J).** Speed board for westward trains at MP 461.75, reading 25 is located to left of track.

Speed boards for eastward trains at MP 458.94, MP 461.80 are located to left of track.

**RULE 14(e).** As specified below, — — — — — will be indication that flagman may return from east as prescribed by Rule 99:

Mojave.....Trains on Owenyo Branch.

**RULE 21 (B).** Does not apply on Keeler Branch.

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

West MP		East MP
378.87	Mojave.....	382.43
	(Owenyo Branch).....	381.60
404.40	Lancaster.....	405.85
419.73	Vincent.....	421.27
449.37	Saugus.....	451.64
448.17	(Santa Paula Branch).....	
460.87	San Fernando.....	462.10
427.68	Searles.....	429.05
446.58	Inyokern.....	447.75
522.26	Owenyo.....	523.26
559.30	(Keeler Branch).....	560.45
574.79	Keeler.....	
	Laws.....	507.49

Yard limit board located to left of track:

Eastward at Burbank Jct. at MP 471.20.

**Mojave:** First-class trains are authorized to move between Signals 3815 or 3817 and 3802 by block signal indications which will supersede the superiority of trains, but must move with caution and see that switches are properly lined between these points. If Signal 3815 or 3817 displays stop indication, train must stop and not proceed unless proceed signal received from yardman, yellow flag by day, yellow light by night, to pass Signal 3815, or green flag by day, green light by night to pass Signal 3817, movement to be made with caution not exceeding 12 MPH to next signal.

Trains and engines from Owenyo Branch may pass Signal 3800 displaying stop indication without stopping, to enter yard tracks, if switches are properly lined and proceed signal received from yardman, green flag by day, green light by night, moving with caution, not exceeding 12 MPH. If stopped, State Highway crossing must not be obstructed.

Westward trains except first-class may pass Signals 3815 or 3817 displaying stop indication without stopping if flashing white light also displayed on signal mast, moving with caution not exceeding 12 MPH.

When Signal 3815 or 3817 displays stop indication and flashing white light not displayed, westward trains except first-class must stop and not proceed unless proceed signal received from yardman, yellow flag by day, yellow light by night, to pass Signal 3815, or green flag by day, green light by night to pass Signal 3817.

Westward trains except first-class must not pass Signals 3815 or 3817 displaying proceed indication unless proceed signal received from yardman, yellow flag by day, yellow light by night, to pass Signal 3815, or green flag by day, green light by night to pass Signal 3817.

Trains from AT&SFRy via A&P track will be governed by indications in AT&SFRy Signal 8173 near crossover leading to SP main track.

Eastward SP and AT&SFRy trains on yard tracks must not start until they have received oral instructions or proceed signal from yardman and in addition track signals must be given at night.

Trains en route to AT&SFRy may pass Signal 3814 displaying stop indication without stopping, provided switches are properly lined and proceed signal received from yardman, yellow flag by day, yellow light by night, moving with caution not exceeding 12 MPH to Signal 8166 on AT&SFRy main track.

Signal 3816 has a push button device under control of yardman for placing this signal in stop position, and yard engines must not pass this signal in stop position without first having definite understanding with yardman and be governed by his instructions before applying block signal rules to proceed.

Following whistle signals will be sounded by westward trains approaching Mojave:

SP passenger trains —, freight trains o — o, light engines o — —

AT&SFRy passenger trains — o, freight trains — o —, light engines o — —

**RULE 103 (A).** Crossing wig-wag at Sunland Blvd., Sun Valley, will not operate after train has stopped and crossing has been cut. It will be necessary for brakeman to protect highway traffic during reverse movement when train is re-coupled.

**RULE 104.** The normal position of switches at the end of double track and at junctions is as follows:

- Mojave.....End of double track, for westward track,
- Mojave.....Owenyo Branch, for westward track,
- Mojave.....AT&SFRy, for SP main track,
- Saugus.....Santa Paula Branch, for westward siding,
- Searles.....Trona Ry, for track 1.

Derails in main track:

- Mojave.....230 feet east of junction switch on Owenyo Branch.

**RULE 505. AUTOMATIC BLOCK SYSTEM**

**Saugus:** Eastward siding is within block system limits. When dwarf signal at fouling point at west end of eastward siding displays stop indication, eastward trains entering siding must be preceded by flagman.

**Burbank Jct.:** Trains stopped by Signal 4704 must call train-order operator and be governed by his instructions, before applying block signal rules to proceed.

**Searles:** Signals 4277 and 4268 east and west of Tunnel 29. Knife switches in relay boxes on these signals are for use of track-car operators. Track cars must stop before entering tunnel, and if signal displays proceed indication switch should be thrown to reverse position which will cause opposing signal to display stop indication. After passing through tunnel switch at that signal must be thrown to reverse position to clear signals.

Push buttons and lights in box at west end siding at Harold and Sylmar, and at east end siding at Ravenna, Russ, Lang and Humphreys.

**RULE 510.** The following block signals equipped with triangular plate displaying the letter "P" have included in their control limits some special protective device:

Eastward Signal	Protection	Westward Signal
	Spring switch, east end siding, Gloster.....	P-3879
	Spring switch, east end siding, Ansel.....	P-3911
P-3938	Spring switch, west end siding, Rosamond...	
P-4046	Spring switch, west end siding, Lancaster.....	
	Spring switch, east end siding, Denis.....	P-4105
P-4156	Spring switch, west end siding, Harold.....	P-4155
		P-4157
	Spring switch, east end siding, Harold.....	P-4167
P-4248	Spring switch, west end siding, Paris.....	
	Spring switch, east end siding, Paris.....	P-4257
P-4288	Spring switch, west end siding, Ravenna....	
P-4296	Spring switch, east end siding, Ravenna....	P-4297
P-4298		
P-4338	Spring switch, west end siding, and slide detector fence middle of siding, Russ.....	
P-4346	Spring switch, east end siding, Russ, and slide detector fence at MP 435.....	P-4347
P-4348		
	Spring switch, east end siding, and slide detector fence middle of siding, Russ.....	P-4347
	Slide detector fence at MP 435.....	P-4365
P-4382	Spring switch, west end siding, Lang.....	
P-4392	Spring switch, east end siding, Lang.....	P-4393
P-4394		
P-4426	Spring switch, west end siding, Humphreys..	
P-4434	Spring switch, east end siding, Humphreys ..	P-4435
P-4436		
P-4466	Spring switch, west end siding, Honby.....	
	Spring switch, east end siding, Honby.....	P-4475
	Spring switch, east end siding, Newhall.....	P-4541
P-4580	Spring switch, west end siding, Sylmar.....	P-4581
		P-4583
P-4610	Spring switch, west end siding, San Fernando.	

**SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION**

**RULE 512 (B).** Dwarf light signals governing movements to main track located as follows:

- Signal 4155 at Harold,
- Signal 4296 at Ravenna,
- Signal 4348 at Russ,
- Signal 4392 at Lang,
- Signal 4436 at Humphreys,
- Signal 4583 at Sylmar.

**RULE 516.** Overlap posts:  
Pacoima . . . . . Westward trains, MP 463.30.

**RULE 535. SPRING SWITCHES**

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

Location	Normal Position
Gloster . . . . .	East end siding . . . . . Main track
Ansel . . . . .	East end siding . . . . . Main track
Rosamond . . . . .	West end siding . . . . . Main track
Lancaster . . . . .	West end siding . . . . . Main track
Denis . . . . .	East end siding . . . . . Main track
Harold . . . . .	West end siding . . . . . Main track
Harold . . . . .	East end siding . . . . . Main track
Paris . . . . .	West end siding . . . . . Main track
Paris . . . . .	East end siding . . . . . Main track
Ravenna . . . . .	West end siding . . . . . Main track
Ravenna . . . . .	East end siding . . . . . Main track
Russ . . . . .	West end siding . . . . . Main track
Russ . . . . .	East end siding . . . . . Main track
Lang . . . . .	West end siding . . . . . Main track
Lang . . . . .	East end siding . . . . . Main track
Humphreys . . . . .	West end siding . . . . . Main track
Humphreys . . . . .	East end siding . . . . . Main track
Honby . . . . .	West end siding . . . . . Main track
Honby . . . . .	East end siding . . . . . Main track
Newhall . . . . .	East end siding . . . . . Main track
Sylmar . . . . .	West end siding . . . . . Main track
San Fernando . . . . .	West end siding . . . . . Main track

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

Location	Normal Position
Vincent . . . . .	West end westward siding . . . . . Eastward siding
Vincent . . . . .	East end eastward siding . . . . . Westward siding

There are other spring switches on roundhouse leads and yard tracks in Mojave yard limits.

**RULE 605. INTERLOCKING**

**Vincent:** Limits extend from 50 feet west of west switch to 50 feet east of east switch.

**Saugus-Newhall:** Limits extend from 265 feet west of east switch of westward siding Saugus to 265 feet east of west switch of siding Newhall.

When authorized by signal operator at Saugus to hand-throw either switch, member of crew cranking switch over must remain with switch to return it to normal position, or arrange for another member of crew to do so, unless otherwise instructed by signal operator.

**Burbank Jct.:** Whistle signals:  
To Mojave Subdivision, or to Los Angeles, —,  
To siding, o o o o o.

**GENERAL REGULATIONS**

**RULE 824.** Instructions for setting hand brakes:

**Mojave:** On passenger trains, if road engine is to be detached, set two brakes on east end and two brakes on west end for each 16 cars or fraction thereof. When train is set out to tie up, at least half of the brakes must be set, but never less than two.

On eastward freight trains, engineer will stop train on receiving track with slack bunched on entire train. Set 10 hand brakes on head-end and 10 on rear-end, except on train powered by DEF class engine train may be permitted to stand without hand brakes set if conductor has reached understanding with engineer that he or fireman (with not less than 2 years experience) will remain on the engine at all times to insure no undesired movement.

On westward freight trains, set 10 hand brakes on rear-end and 10 on head-end, except on train powered with DEF class engine train may be permitted to stand with 10 brakes set on rear-end if conductor has reached understanding with engineer that he or fireman (with not less than 2 years experience) will remain on the engine at all times to insure no undesired movement.

At points where hand brakes must be set on freight trains such brakes must be securely set, using standard brake club to set staff brakes, after train has stopped. When necessary to release hand brakes to move portion of the cars, the same number must be set on remaining cars to replace them.

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

- Harold      Vincent      Ravenna      Russ      Newhall

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.** On freight trains between Palmdale and San Fernando, and between Searles and Cantil, a member of crew must observe track to rear of train for evidence of derailment or any other condition requiring immediate stopping of train.

All passenger trains, except regular No. 55, must stop at Mojave, approaching at not to exceed 8 MPH to allow forward brakeman to detrain on station side where rear of train will stop. Brakeman will then make running 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.

**RULE 874.** Tank heaters on engines must be turned off on eastward trains at Newhall, and on westward trains at Sylmar.

**AIR BRAKE RULES**

**RULE 3.** Brake pipe pressure for freight and mixed trains handled by Diesel engine using dynamic brakes in retainer territory is 90 pounds and brake pipe pressure must not be permitted to drop below 70 pounds.

Main reservoir position of selector cock must be used on descending grades.

**RULE 17.** Eastward passenger trains handled by steam engine, Vincent to Lang, with less than 75% graduated release equipment, will use at least 75% of retainers.

Westward passenger trains handled by steam engine, Vincent to Palmdale, with less than 75% graduated release equipment must not exceed 20 MPH, unless five retainers (or more if requested by engineer), are turned up, on the head end.

Retainers will be used on freight trains handled by Diesel engines as follows:

One retainer on eastward trains Vincent to Lang for each 250 Ms in train when working:

- Four dynamic brakes at 540 amps with over 5500 Ms; or
- Three dynamic brakes at 540 amps with over 4000 Ms; or
- Four dynamic brakes at 600 amps with over 7500 Ms; or
- Three dynamic brakes at 600 amps with over 6500 Ms.

Retainers need not be used on eastward trains Tunnel or San Fernando to Burbank Jct., unless requested by Engineer, if working:

- Four dynamic brakes and not to exceed 10500 Ms; or
- Three dynamic brakes and not to exceed 8500 Ms; or
- Two dynamic brakes and not to exceed 6500 Ms, and when retainers not used, train may run not to exceed 25 MPH from MP 456.25 to MP 457.25; and 35 MPH from MP 461.90 to MP 471.49.

Retainers as prescribed for trains handled by steam engines must be used on eastward trains Vincent to Lang if less than three dynamic brakes working; and Tunnel to Burbank Jct. if less than two dynamic brakes working. Conductor will advise dispatcher if train is to be operated without use of retainers.

Retainers will be used on freight trains handled by steam engines as follows:

- One retainer for each 100 Ms in train, Vincent to Lang;
- One retainer for each 400 Ms in train of 45 cars or more, Tunnel or San Fernando to Burbank Jct.;
- One retainer for each 150 Ms in train, Searles to Garlock.

Eastward trains may turn up retainers approachng Vincent, or at Harold instead of Vincent; or at Saugus or Newhall instead of Tunnel or San Fernando.

Trains with 20 or more cars of rock or sand Sun Valley to Los Angeles Yard must turn up one retainer for each 150 Ms in train; and continuous run may be made Sun Valley to Los Angeles Yard. If stop made east of Burbank Jct., retainers may be turned down if not required beyond.

Trains using retainers Searles to Garlock must not exceed 20 MPH.

Engineer operating Diesel engine in passenger or freight service must have made required qualifying trips and have been instructed in use of dynamic brakes.

FREIGHT TRAINS

**RULE 22.** Trainmen must not couple air hose on outgoing trains at Mojave, until train is made up and caboose on train. Coupling the caboose to rear of train will be considered as an indication that the train is made up and yardmen have completed their work. Yardmen must not perform switching on, or couple other cars to a train on which caboose has been attached, without instructions from the yardmaster, who will see that members of crew are notified in advance.

**RULE 25.** Rear end test will be made in accordance with Rule 25 (b); and in addition will be made by all trains that stop at Mojave and Vincent. This test will also be made by all trains at Searles.

Trains not required to stop at Vincent must make running air brake test between siding switches. Trainmen will note reduction on caboose gage, and following build up in pressure when brakes are released, give proceed signal. Running test will be made as follows: Engineer, while working steam will make reduction of approximately seven pounds, wait for slack to adjust itself, then add three pounds before releasing.

**RULE 33.** The maximum tonnage per operative brake between Searles and Garlock is 150 Ms; and between Palmdale and Saugus is 125 Ms, except that maximum tonnage of 135 Ms per operative brake may be handled between Palmdale and Saugus if train is not in excess of 60 cars, and when handling maximum tonnage train must not exceed 20 MPH.

Between Palmdale and Saugus, trains handled by DEF class engines with four dynamic brakes working, will not exceed 150 Ms per operative brake, with three dynamic brakes working, not to exceed 140 Ms per operative brake, or two dynamic brakes working, not to exceed 130 Ms per operative brake.

PASSENGER TRAINS

**RULE 39.** Running test will be made at following points:

- Vincent.....Trains in both directions.
- After passing MP 452.....Eastward trains that have stopped at Saugus.
- Three miles west of Burbank Jct....Eastward trains.
- After passing MP 458.....Westward trains.

**SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION**

**MISCELLANEOUS**

1. Westward light engines take water at Ravenna in preference to Lancaster.

4. Helper engines on freight trains must be placed in rear through Tunnel 25.

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

Class of Engine	Restricted Tracks
MM, AC, Mt, GS, SP	San Fernando — Transfer track, beyond 300 feet from switch.
All	Sun Valley — Consolidated Rock tracks, beyond 75 feet west of derail.
MM, AC, Mt, GS, SP	Sun Valley—Union Supply track.
A, Mk, F, MM, AC, Mt, GS, SP	All stations between Mojave and Searles—Must not leave main track, except at sidings Neuralia, Cantil, Rand, Garlock.
F class	Saltdale—Must not go beyond frog on west end.
All	Inyokern—Must not go beyond 200 feet west of east interchange track.
All	Keeler—Must not go beyond signs on Natural Soda Products tracks.

Flat cars loaded with poles or piling must not be spotted on team track adjacent to main track at Rosamond without authority from chief train dispatcher who will protect by train order. At other stations such loads must not be spotted for unloading on team tracks adjacent to main track when possible to avoid it.

Due to impaired overhead and side clearance, the spotting or switching of box cars under the Narrow Gage high line at Owenyo is prohibited.

Engines equipped with pilot snow plow, except Mt and GS class, are prohibited from entering Los Angeles LAUPT, account impaired platform clearance.

Load limit (car and contents):

Mojave-Burbank Jct.	251,000 pounds
Mojave-Owenyo	210,000 pounds
Laws-Keeler (Narrow Gage)	65,000 pounds

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

17. Sanding of flues not permitted between Tunnels 18 and 19, or between east switch Russ and 1000 feet east of east switch Russ.

26. Turntable at Laws must be secured by regulation switch lock (No. 48) when not in use.

30. Maintenance and operation between MP 449.78 Saugus, and Burbank Jct., are under the jurisdiction of Los Angeles Division. Train dispatching between Saugus and Burbank Jct. is under the jurisdiction of San Joaquin Division.

Employes operating in and out of Los Angeles LAUPT are required to have a copy of, and be conversant with current book of rules of LAUPT.

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

MP	Location	Description
426.8	West of Searles	Tunnel 29 Overhead
519.4	East of Lone Pine	Owens River bridge Side



# SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION

**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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	PASSENGER TRAINS	♦FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	PASSENGER TRAINS	♦FREIGHT AND MIXED	LIGHT ENGINES	
			RUNNING FORWARD	RUNNING BACKWARD				RUNNING FORWARD	RUNNING BACKWARD
Column:	1	2	3	4	Column:	1	2	3	4
<b>EASTWARD, MOJAVE TO BURBANK JCT.:</b> MP MP 380.70 to 381.40 ..... 30 20 20 20 381.40 to 405.07 ..... 65 ①50 50 30 405.07 to 405.46 (street crossings) ..... 65 40 40 20 405.46 to 414.80 ..... 65 ①50 50 30 414.80 to 417.36 (curves) ..... 50 40 40 30 417.36 to 420.50 (curves) ..... 30 25 25 20 420.50 to 425.68 ..... 30 20 20 20 425.68 to 435.19 ..... 30 25 25 20  435.19 to 436.74 ..... 35 25 25 20 436.74 to 438.17 (curves) ..... 30 25 25 20 438.17 to 439.30 ..... 35 25 25 20 439.30 to 442.13 ..... 40 30 30 20 442.13 to 446.22 (curves) ..... 30 25 25 20 446.22 to 448.23 ..... 40 30 30 20 448.23 to 450.60 (Saugus) ..... 30 25 25 20  450.60 to 454.81 (curves) ..... 40 35 35 30 454.81 to 456.25 (tunnel) ..... 40 25 25 25 456.25 to 457.25 (curves) ..... 30 20 20 20 457.25 to 458.94 (Sylmar) ..... 40 25 25 25 458.94 to 461.80 (San Fernando) ..... 60 25 25 25 461.80 to 461.90 (street crossings) ..... 25 25 25 20 461.90 to 471.49 (Burbank Jct.), except: Thru crossover west of tower ..... 60 25 25 25 25 25 25 25					<b>WESTWARD, BURBANK JCT. TO MOJAVE:</b> MP MP Thru Burbank Jct. interlocking ..... 35 35 35 30 471.49 to 461.90 (San Fernando) ..... 60 40 40 30 461.90 to 461.80 (street crossings) ..... 25 25 25 20 461.80 to 458.94 (Sylmar) ..... 60 40 40 30 458.94 to 457.25 (curves) ..... 40 25 25 25 457.25 to 456.25 (tunnel) ..... 30 20 20 20 456.25 to 450.60 (Saugus), except: while passing SA signal, MP 451.53 ..... 40 25 25 25 20 20 20 20  450.60 to 448.23 (curves) ..... 30 25 25 20 448.23 to 446.22 ..... 40 30 30 20 446.22 to 442.13 (curves) ..... 30 25 25 20 442.13 to 439.30 ..... 40 30 30 20 439.30 to 438.17 (curves) ..... 35 25 25 20 438.17 to 436.74 (curves) ..... 30 25 25 20 436.74 to 435.19 ..... 35 25 25 20  435.19 to 426.00 (curves) ..... 30 25 25 20 426.00 to 422.00 ..... 40 25 25 20 422.00 to 420.50 (curves) ..... 30 25 25 20 420.50 to 417.00 ..... 30 20 20 20 417.00 to 414.80 ..... 50 20 20 20 414.80 to 405.46 ..... 65 ①50 50 30 405.46 to 405.07 (street crossings) ..... 65 40 40 20 405.07 to 381.40 ..... 65 ①50 50 30 381.40 to 380.70 (Mojave) ..... 30 30 20 20				

①Applies to single engine trains only. If more than one engine in train, speed must not exceed 40 MPH.

Westward freight and Mixed trains handled by DEF class engine, when retainers are not used, may run not to exceed 30 MPH from MP 417.36 to MP 414.80.

♦RESTRICTED CARS are twin or multiple loads; cars of excess height or width; loads of excess height, width or weight; any equipment listed under "Maximum Speed Permitted with Certain Equipment"; scale test cars; and cars with arch bar trucks, and trains handling such cars must not exceed maximum speed of 40 MPH.

Maximum speed with DEF light engine with not less than three dynamic brakes working:

Eastward, MP 417.36 to MP 450.60 ..... 30 MPH  
 Westward, MP 450.60 to 414.80 ..... 30 MPH

## SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION

**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 6 of Special Instructions for All Subdivisions. Speed must be further reduced as prescribed by speed boards, 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 ABSOLUTE SAFETY, REGARDLESS OF TIME.**

TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES		TERRITORY	PASSENGER TRAINS	FREIGHT AND MIXED	LIGHT ENGINES	
			RUNNING FORWARD	RUNNING BACKWARD				RUNNING FORWARD	RUNNING BACKWARD
Column:	1	2	3	4	Column:	1	2	3	4
<b>EASTWARD, MOJAVE TO OWENYO:</b>					<b>WESTWARD, OWENYO TO MOJAVE:</b>				
MP MP					MP MP				
380.09 to 406.83, except:	30	30	30	20	523.25 to 522.55 (Owenyo)	10	10	10	10
With F-4, 5 and AC-4, 5, 6, 7, 8, 9, 10, 11,					522.55 to 517.00	30	30	30	20
12 class engines	25	25	25	20	517.00 to 516.20	15	15	15	15
406.83 to 413.65, except:	30	30	30	20	516.20 to 428.40	30	30	30	20
With F-4, 5 and AC-4, 5 class engines	20	20	20	20	428.40 to 426.74, except:	30	30	30	20
With AC-6, 7, 8, 9, 10, 11, 12 class engines	15	15	15	15	With F-4, 5 and AC-4, 5 class engines	20	20	20	20
413.65 to 426.74, except:	30	30	30	20	With AC-6, 7, 8, 9, 10, 11, 12 class engines	15	15	15	15
With F-4, 5 and AC-4, 5, 6, 7, 8, 9, 10, 11,					426.74 to 413.65, except:	30	30	30	20
12 class engines	25	25	25	20	With F-4, 5 and AC-4, 5, 6, 7, 8, 9, 10, 11,				
426.74 to 428.40, except:	30	30	30	20	12 class engines	25	25	25	20
With F-4, 5 and AC-4, 5 class engines	20	20	20	20	413.65 to 406.83, except:	30	30	30	20
With AC-6, 7, 8, 9, 10, 11, 12 class engines	15	15	15	15	With F-4, 5 and AC-4, 5 class engines	20	20	20	20
428.40 to 516.20	30	30	30	20	With AC-6, 7, 8, 9, 10, 11, 12 class engines	15	15	15	15
516.20 to 517.00	15	15	15	15	406.83 to 380.09, except:	30	30	30	20
517.00 to 522.55	30	30	30	20	With F-4, 5 and AC-4, 5, 6, 7, 8, 9, 10, 11,				
522.55 to 523.25 (Owenyo)	10	10	10	10	12 class engines	25	25	25	20
<b>EASTWARD, LAWS TO KEELER:</b>					<b>WESTWARD, KEELER TO LAWS:</b>				
506.80 to 520.50	30	30	20	15	576.93 to 557.00	30	30	20	15
520.50 to 522.70	25	25	20	15	557.00 to 552.00	25	25	20	15
522.70 to 528.50	30	30	20	15	552.00 to 550.00	30	30	20	15
528.50 to 529.00	15	15	15	15	550.00 to 547.00	25	25	20	15
529.00 to 547.00	30	30	20	15	547.00 to 529.00	30	30	20	15
547.00 to 550.00	25	25	20	15	529.00 to 528.50	15	15	15	15
550.00 to 552.00	30	30	20	15	528.50 to 522.70	30	30	20	15
552.00 to 557.00	25	25	20	15	522.70 to 520.50	25	25	20	15
557.00 to 576.93	30	30	20	15	520.50 to 506.80	30	30	20	15

**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

# SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION

## RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Mojave to Rosamond Rosamond and Lancaster	Lancaster to Saugus	Rosamond to Mojave	Saugus to Lancaster	Los Angeles to Saugus	Saugus to Los Angeles
DEP-3	6017	.....	.....	.....	.....	.....	.....
DEP-4, 7	6000 to 6004 and 6018	7500	.....	3800	1850	3150	.....
DEP-5, 6	6005 to 6016	.....	.....	.....	.....	.....	.....
DEF-1	6100 to 6137	18000	6000	7100	5000	6600	6000
DEF-1	6138 and 6139	20000	7000	9250	6800	8050	7800
DEF-2	6140 to 6179	20000	7000	9250	6800	8050	7800
DEF-3, 4, 5	6180 to 6295	20000	7400	11500	7400	8050	7800
DES-1 to 7	1000 to 1022	2750	560	970	560	600	600
DES-100 to 109	1300 to 1441	4150	890	1500	890	980	980
DERS-2, 4, 5, 6	5203 to 5227	8000	.....	3050	1950	①2700	2700
M-4	1617 to 1713	4150	750	1300	680	730	820
M-6, 8	1721 to 1803, 1823 to 1825	4850	900	1500	820	930	1000
M-9	1804 to 1822, 1826 to 1830 and 1836	5100	970	1650	890	990	1100
M-11	1832 to 1835	5300	1000	1700	910	1000	1130
T-1	2248 and 2252	3450	620	1100	560	630	710
T-8	2178	2500	430	780	390	420	480
T-23	2301 to 2310	5050	940	1600	850	930	1030
T-26	2296 and 2299	4450	800	1400	730	800	900
T-28, 31	2312 to 2362	5550	1050	1800	950	1050	1200
T-32	2363 to 2370, 2372 to 2384	5700	1050	1850	990	1050	1200
T-40	2371	5700	1050	1850	990	1050	1200
T-37	2105 and 2106	5050	940	1600	870	940	1050
P-1, 3, 5	{ 2408, 2411, 2412, 2417, 2428 to 2433, 2439 to 2452 and 2459 }	4600	800	1400	740	800	890
P-1	2403 to 2407 and 2415	4800	820	1500	750	840	930
P-4	{ 2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436 }	5000	870	1550	800	900	1100
P-6	2453, 2454 and 2458	5650	1000	1800	940	1000	1150
P-7	2476 and 2477	6000	1100	1900	1000	1100	1250
P-8, 10	2461 to 2474, 2478 to 2483	6250	1100	1950	980	1100	1250
P-8, 10	2475, 2484 to 2491	6250	1100	2050	980	1100	1250
P-11	3104 and 3109	4900	850	1550	770	850	950
P-12	3120 to 3129	6600	1150	2050	1050	1200	1350
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469	6100	1150	2000	1050	1200	1300
C-15	2506	3900	750	1300	690	740	820
C-18	3400 to 3409	5600	1100	1850	1000	1100	1200
C-19	3410 to 3426	5850	1150	1900	1050	1100	1250
TW-1	2900 to 2913	4650	900	1500	820	890	980
TW-2, 3	2937 to 2952	3750	700	1200	640	690	770
TW-8	2914 to 2923	5150	990	1700	910	980	1050
A-3	3025 and 3057	3600	580	1150	530	600	690
A-6	3000 to 3002	4400	750	1350	690	700	800
Mk-2, 4	3201 to 3240	6900	1250	2200	1200	1300	1400
Mk-5, 6	3241 to 3277	7800	1500	2500	1350	1450	1600
Mk-7, 8, 9	3300 to 3324	8550	1650	2800	1500	1650	1850
Mk-10	3295	6550	1300	2150	1200	1250	1400
Mk-11	3297 and 3298	6300	1250	2100	1150	1200	1350
B-1	3500 to 3509	10200	1950	3300	1750	2100	2150
F-1	3611 to 3652	8900	1700	2900	1550	1750	1950
F-3	3653 to 3667	10200	1950	3350	1750	2000	2200
F-4, 5	3668 to 3769	10200	1950	3500	1750	2100	2300
MM-3	3930 and 3931	11800	2300	3900	2050	2250	2450
AC-4, 5	4100 to 4125	16000	3200	5300	2900	3200	3500
AC-6 to 12	3800 to 3811, 4126 to 4294	17000	3400	5550	3100	3400	3700
Mt-1, 3, 4, 5	4300 to 4376	8350	1500	2600	1350	1550	1750
Mt-2	4385 to 4390	8800	1550	2900	1400	1600	1800
GS-1, 2	4401 to 4415	9000	1550	2750	1400	1600	1800
GS-3, 4, 5, 6	4416 to 4469	9200	1600	2900	1450	1650	1850
SP-1, 2, 3	5000 to 5048	12000	2350	3950	2100	2300	2500

① Rating Los Angeles to San Fernando 4500.

Between Rosamond and Lancaster, and from Mojave to Rosamond, in figuring tonnage of train, add 6 Ms for each empty or underloaded car of less than 45 Ms, and 3 Ms for each such car of 45 to 55 Ms. Between Lancaster and Los Angeles, and from Rosamond to Mojave, add 3 Ms for each such car of 55 Ms or less.

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

## SPECIAL INSTRUCTIONS—MOJAVE SUBDIVISION

## RATING OF ENGINES—In Units of 1000 Lbs. (Ms)

NOMINAL CLASS	ENGINE NUMBERS	Mojave to Searles	Searles to Owenyo	Owenyo to Searles	Searles to Mojave
DES-1 to 7	1000 to 1022.....	750	750	1320	1320
DES-100 to 109	1300 to 1441.....	1170	1170	2050	2050
M-4	1617 to 1713.....	970	970	1700	1700
M-6, 8	1721 to 1803, 1823 to 1825.....	1150	1150	2000	2000
M-9	1804 to 1822, 1826 to 1830 and 1836.....	1250	1250	2150	2150
M-11	1832 to 1835.....	1300	1300	2250	2250
T-1	2248 and 2252.....	830	830	1450	1450
T-8	2178.....	560	560	1000	1000
T-23	2301 to 2310.....	1200	1200	2100	2100
T-26	2296 and 2299.....	1000	1000	1850	1850
T-28, 31	2312 to 2362.....	1350	1350	2350	2350
T-32	2363 to 2370, 2372 to 2384.....	1350	1350	2400	2400
T-40	2371.....	1350	.....	.....	2400
T-37	2105 and 2106.....	1200	1200	2150	2150
P-1, 3, 5	{ 2408, 2411, 2412, 2417, 2428 to 2433, 2439 to 2452 and 2459 }	.....	.....	.....	.....
P-1	2403 to 2407 and 2415.....	.....	.....	.....	.....
P-4	{ 2401, 2402, 2409, 2410, 2414, 2419, 2420, 2422, 2424 and 2436 }	.....	.....	.....	.....
P-6	2453, 2454 and 2458.....	.....	.....	.....	.....
P-7	2476 and 2477.....	.....	.....	.....	.....
P-8, 10	2461 to 2474, 2478 to 2483.....	.....	.....	.....	.....
P-8, 10	2475, 2484 to 2491.....	.....	.....	.....	.....
P-11	3104 and 3109.....	.....	.....	.....	.....
P-12	3120 to 3129.....	.....	.....	.....	.....
C-5, 8, 9, 10, 26 to 29	2513 to 2599, 2624 to 2860, 3440 to 3469.....	1700	1700	2900	2900
C-15	2506.....	960	960	1650	1650
C-18	3400 to 3409.....	1400	1480	2400	2400
C-19	3410 to 3426.....	1450	1450	2500	2500
TW-1	2900 to 2913.....	1100	1100	2000	2000
TW-2, 3	2937 to 2952.....	900	900	1550	1550
TW-8	2914 to 2923.....	1250	1250	2200	2200
A-3	3025 and 3057.....	.....	.....	.....	.....
A-6	3000 to 3002.....	.....	.....	.....	.....
Mk-2, 4	3201 to 3240.....	1700	.....	.....	3000
Mk-5, 6	3241 to 3277.....	1850	.....	.....	3300
Mk-7, 8, 9	3300 to 3324.....	2100	.....	.....	3650
Mk-10	3295.....	1600	①1600	①2800	2800
Mk-11	3297 and 3298.....	1550	①1570	①2700	2700
F-1	3611 to 3652.....	.....	.....	.....	.....
F-3	3653 to 3667.....	.....	.....	.....	.....
F-4, 5	3668 to 3769.....	.....	.....	.....	.....
MM-3	3930 and 3931.....	.....	.....	.....	.....
AC-4, 5	4100 to 4125.....	3700	.....	.....	7500
AC-6 to 12	3800 to 3811, 4126 to 4294.....	3900	.....	.....	8000
Mt-1, 3, 4, 5	4300 to 4376.....	.....	.....	.....	.....
Mt-2	4385 to 4390.....	.....	.....	.....	.....
GS-1, 2	4401 to 4415.....	.....	.....	.....	.....
GS-3, 4, 5, 6	4416 to 4469.....	.....	.....	.....	.....
SP-1, 2, 3	5000 to 5048.....	.....	.....	.....	.....

①These engines must not operate east of MP 450.

From Mojave to Owenyo, in figuring tonnage of train, add 3 Ms for each empty or underloaded car of 55 Ms or less. From Owenyo to Mojave, add 6 Ms for each such car of less than 45 Ms and 3 Ms for each such car of 45 to 55 Ms.

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