

ON THE JOB—OFF THE JOB IT'S UP TO YOU TO PREVENT ACCIDENTS.

RULE 10-1

Oral authorization and acknowledgments between Foremen and Engineers for trains to pass "Red Conditional Stop" signs must be worded in the following forms:

NWP FOREMAN.....AT MP.....CALLING NWP EXTRA.....

(After train answers giving his identification):
(i.e.) **NWP EXTRA.....**

Foreman's Response

"THIS IS NWP FOREMAN....IN CHARGE OF THE WORK BETWEEN MP....AND MP....NWP TRAIN ORDER NO....WE ARE IN THE CLEAR AND YOU MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF ORDER AT....MPH (REPEAT)....MPH."*

Engineer's Response

"THIS IS ENGINEER NWP EXTRA....I MAY PROCEED PAST THE RED CONDITIONAL STOP SIGN AND THROUGH THE LIMITS OF ORDER NO.....BETWEEN MP....AND MP....AT (Speed). REPEAT (Speed) MILES PER HOUR."

Foreman must acknowledge Engineer's response as follows:
"NWP TRAIN ORDER NO....., BETWEEN MP.....AND MP.....MPH*OK."

*When no speed restriction account above Form "Y" Train Order, tell train engineer "At Maximum Authorized Speed."

SPEED TABLE

TIME PER MILES	MILES PER HOUR
1'16"	47.4
1'17"	46.8
1'18"	46.2
1'19"	45.6
1'20"	45
1'25"	42.4
1'30"	40
1'35"	37.9
1'40"	36
1'45"	34.3
1'50"	32.7
1'55"	31.3
2'00"	30
2'15"	26.7
2'30"	24
2'45"	21.8
3'00"	20
3'30"	17.1
4'00"	15
5'00"	12
6'00"	10
7'00"	8.6
7'30"	8
8'00"	7.5
10'00"	6

NORTHWESTERN PACIFIC RAILROAD COMPANY

AND PETALUMA AND SANTA ROSA RAILROAD COMPANY

NWP

TIMETABLE

6

**EFFECTIVE SUNDAY, AUGUST 31, 1980
AT 12:01 A.M.
PACIFIC STANDARD TIME**

**FOR THE GOVERNMENT AND INFORMATION
OF EMPLOYEES ONLY**

M. D. ONGERTH
Vice President and General Manager.

W. E. CORBETT
District Superintendent.

TRAINMASTER ROAD FOREMAN OF ENGINES

J. D. LEWIS..... Willits

TRAINMASTERS

L. M. WELLER..... Eureka

CHIEF TRAIN DISPATCHERS

C. L. KENNEDY..... Roseville

H. JAY..... Roseville

**PETALUMA AND SANTA ROSA
RAILROAD COMPANY
TIMETABLE NO. 6, AUGUST 31, 1980**

EAST- WARD Mile Post Location	STATIONS AND FACILITIES	Station Number	WEST- WARD
			Distance
0.0	PETALUMA	24220	0.6
NWP 38.5	0.4 PETALUMA-NWPRR BKPD	24220	
	JUNCTION WEST PETALUMA BRANCH		
0.4		24315	0.2
NWP 39.2	0.2 PARK SIDING-NWPRR	24241	0.0
			Distance from Sagu
15.2	END OF TRACK		6.1
16.7	1.2 SEBASTOPOL	24345	4.9
	2.3 MOLINO		2.0
19.0		24350	2.0
19.6	0.6 BARLOW	24352	2.0
	1.3 GRATON		0.7
20.9		24355	
21.5	0.6 MANZANA	24357	0.1
	0.1 SAGU		0.0
21.6		24358	

Mile Post Location	Santa Rosa Branch	Station Number	Distance from Santa Rosa
16.7	SEBASTOPOL	24345	6.6
20.2	3.5 LEDDY	24375	3.1
	3.1 SANTA ROSA		0.0
23.3		24410	
NWP 53.8	PQ SANTA ROSA NWPRR	24410	

Mile Post Location	West Petaluma Branch	Station Number	Distance from West Petaluma
0.4	JUNCTION WEST PETALUMA BRANCH	24315	0.9
1.3	0.9 WEST PETALUMA	24321	0.0

SPEED RESTRICTIONS

Movements must not exceed the following maximum speeds (shown in miles per hour):

Between:

MP 15.2 and MP 15.5	10
MP 15.5 and MP 21.6	15
Petaluma and West Petaluma	10
Santa Rosa and Sebastopol	15

Speed on other than main track not to exceed 10 MPH

PETALUMA AND SANTA ROSA RAILROAD COMPANY

SPECIAL INSTRUCTIONS

RULE A. The P&SR operates under the Rules and Regulations of the Transportation Dept. of the S.P.T.Co.

Current Rules and Regulations of the Transportation Department were effective October 31, 1976.

Page 3 of current Rules and Regulations of the Transportation Department has been reprinted listing 21 additional page revisions effective June 1, 1978. Each employe whose duties are prescribed by these Rules is required to have revised page 3, along with all other revised pages listed inserted in proper numerical order in his/her book of rules.

RULE 10-H. EXCEPTION:

When a yellow flag is required it will be displayed one-half mile from point of restriction.

RULE 10-J. Speed signs to left of track:

<u>Westward</u>	<u>Reading</u>
MP 16.3	10

RULE 93. Yard limits are established to include all tracks.

RULE 103. West Petaluma: Warning devices at Washington Street are not actuated for movement until equipment is within 50 feet of crossing. Trains and engines must not proceed over crossing until warning devices have been operating 20 seconds. Equipment must not be left standing on track within 100 feet of the crossing.

Switching movements over Washington Street must not be made until a member of the crew has provided warning to traffic.

Uncontrolled movement of cars over this crossing is prohibited.

Sebastopol: Movements over Bodega-Santa Rosa Ave. must not enter the crossing until traffic signal on Main St. displays flashing yellow signal. When flashing yellow light is displayed and movement does not enter crossing within 1½ minutes, crossing must not be entered until traffic light displays green aspect for Main St. traffic.

Trains and Engines must stop before crossing Sebastopol Avenue and then proceed over crossing **with caution.**

MISCELLANEOUS

1. All engines are restricted from operating on the PSR except the following: ES408, ES409, ES415, AS409.

2. LOAD LIMIT (car and contents):

Petaluma-End of Track	263,000 pounds
West Petaluma-Park Siding	220,000 pounds
End of Track-Sagu	220,000 pounds
Santa Rosa-Leddy	263,000 pounds
Leddy-Sebastopol	220,000 pounds

**NOTHWESTERN PACIFIC RAILROAD CO.
TIMETABLE NO. 6, AUGUST 31, 1980**

EAST- WARD Mile Post Location	STATIONS		Station Number	WEST- WARD Distance from Eureka
	SIDING CAPACITIES AND FACILITIES			
40.4	Yd Lmts R	SCHELLVILLE	23730	273.1
28.8	TO	BLACK POINT	24043	261.5
25.6	Yd Lmts	IGNACIO	24050	258.3
25.8	R			
31.3	6078	BURDELL	24209	252.8
38.5	4354 Yd Lmts TO-R	PETALUMA	24220	245.8
53.8	5574 Yd Lmts	SANTA ROSA	24410	230.3
68.0	3638 Yd Lmts TO-R	HEALDSBURG	24441	216.1
75.8	6492 Yd Lmts	GEYSERVILLE	24454	208.3
85.2		CLOVERDALE	24463	198.9
100.1	4175	HOPLAND	24473	184.0
114.0	Yd Lmts TO-R	UKIAH	24479	170.1
122.1	6993 Yd Lmts	REDWOOD VALLEY	24486	162.0
139.5	Yd Lmts TO-R	WILLITS	24500	144.6
152.5	6501	LONGVALE	24533	131.6
158.1	1360	FARLEY	24538	126.0
175.5	1050	NASHMEAD	24557	108.6
194.5	Yd Lmts	ISLAND MOUNTAIN	24607	89.6
216.6	7060 Yd Lmts	FORT SEWARD	24632	67.5
237.3	2939	SOUTH FORK	24705	46.8
255.6	3628	SCOTIA	24729	28.5
262.7	1613 R	ALTON	24740	21.4
264.5	3711	ROHNERVILLE	24805	19.6
268.7	1800	FERNBRIDGE	24815	15.4
277.8	3890	SOUTH BAY	24831	6.3
284.1	Yd Lmts TO-R	EUREKA	24840	0.0
		(273.1)		

RULE 5. Schellville: Time applies at east switch.

Willits: Time applies for trains via Longvale at MP 141.3 (just west of Highway 101 crossing).

Eureka: Time applies at west switch to train yard MP 282.1.

**NOTHWESTERN PACIFIC RAILROAD CO.
TIMETABLE NO. 6, AUGUST 31, 1980**

MAXIMUM AUTHORIZED SPEED FOR TRAINS

BETWEEN (Refer to Miscellaneous Item 1, All Subdivisions)	COLUMN 2	COLUMN 3
	FRT TRAINS	HZD MTL FRT
SCHELLVILLE and EUREKA	40	30

Restrictions:

MP 40.4 and MP 29.0	25	25
MP 29.0 and MP 28.7	10	10
MP 28.7 and MP 25.6 (25.8)	25	25
MP 30.5 and MP 31.7	15	15
MP 36.9 and MP 37.2	20	20
MP 37.2 and MP 37.3	10	10
MP 37.3 and MP 39.3	20	20
MP 39.3 and MP 44.1	35	-
MP 53.0 and MP 54.5	25	25
MP 67.6 and MP 68.6	25	25
MP 85.5 and MP 88.5	30	-
MP 88.5 and MP 98.8	25	25
MP 98.8 and MP 113.5	30	-
MP 113.5 and MP 114.5	25	25
MP 114.5 and MP 122.2	30	-
MP 122.2 and MP 141.4	20	20
MP 141.4 and MP 228.1	25	25
MP 228.1 and MP 246.9	30	-
MP 246.9 and MP 247.2	25	25
MP 247.2 and MP 257.0	30	-
MP 257.0 and MP 258.1	20	20
MP 258.1 and MP 262.8	35	-
MP 270.6 and MP 271.9	35	-
MP 282.0 and MP 284.1	10	10

Column 3 speeds apply to trains handling hazardous materials as listed under Rule 827-A, Special Instructions.

ADDITIONAL STATIONS

Capacity and Direction of Entry into Spurs	Mile Post	NAME	Station No.
900W	27.8	Novato (Spur)	24205
2463	39.2	Park Siding	24241
780E	46.1	Cotati (Spur)	24251
375W	48.7	Wilfred (Spur)	24254
785E	50.7	Todd (Spur)	24257
390W	58.5	Fulton (Spur)	24426
1126	62.9	Windsor (Spur)	24432
407W	66.4	Grant (Spur)	24436
2040	71.9	Lytton	24450
1840	81.3	Asti	24459
800E	120.0	Calpella (Spur)	24484
502W	124.0	Laughlin (Spur)	24488
320	131.4	Ridge	24493
1835	166.5	Dos Rios	24547
630	184.3	Bell Springs	24565
220W	209.0	Alderpoint (Spur)	24623
2416	253.8	Glynn	24727
	256.1	Yoder Jct.	24731
942E	259.0	Stone	24737
1148	266.1	Fortuna	24810
440W	271.0	Loleta (Spur)	24818

**NOTHWESTERN PACIFIC RAILROAD CO.
TIMETABLE NO. 6, AUGUST 31, 1980**

EAST- WARD Mile Post Location	STATIONS SIDING CAPACITIES AND FACILITIES		Station Number	WEST- WARD Distance
	San Rafael Branch			
14.3	Yard Limits	DETOUR	24110	11.5
17.0		2.7 SAN RAFAEL	Y 24105	8.8
25.8		8.8 IGNACIO	Y 24050	0.0
(11.5)				
Sonoma Branch				
44.2	Yd. Limits	SEBASTIANI	24003	3.8
40.4		3.8 SCHELLVILLE	BY 23730	0.0
(3.8)				
Carlotta Branch				
262.7	1613 R	ALTON	24740	5.0
267.7		5.0 CARLOTTA	24745	0.0
(5.0)				
Korblex Branch				
284.1	Yard Limits	EUREKA	BKYPQ 24840	11.1
292.5		8.4 ARCATA	Y 24920	2.7
295.2		2.7 KORBLEX	24930	0.0
(11.1)				
Samoa Branch				
292.5	Yd. Limits	ARCATA	Y 24920	8.0
300.5		8.0 SAMOA	24950	0.0
(8.0)				

MAXIMUM AUTHORIZED SPEED FOR TRAINS

(Refer to Miscellaneous Item 1, All Subdivisions)

BETWEEN	SAN RAFAEL BRANCH	ALL TRAINS
DETOUR and IGNACIO: 20		
Restrictions:		
Main track out of service every weekend from 12:01 PM Friday until 12:01 PM Monday between MP 14.9, and MP 14.3 account open structure.		
MP 14.3 and MP 17.0		10
MP 25.7 and MP 25.8		10
SONOMA BRANCH		
SEBASTIANI and SCHELLVILLE: 15		
CARLOTTA BRANCH		
ALTON and CARLOTTA: 25		
Restrictions:		
MP 262.7 and MP 262.9		10
KORBLEX BRANCH		
EUREKA and KORBLEX: 20		
Restrictions:		
MP 284.1 and MP 285.8		10
MP 292.1 and MP 292.3		10
SAMOA BRANCH		
ARCATA and SAMOA: 20		
Restrictions:		
MP 292.9 and MP 293.5		10

NORTHWESTERN PACIFIC RAILROAD COMPANY

SPECIAL INSTRUCTIONS

The N.W.P. R.R. operates under the Rules and Regulations of the Transportation Department of the S.P.T.Co.

RULE A. Current Rules and Regulations of the Transportation Department issued by Southern Pacific Transportation Co. were effective October 31, 1976.

Page 3 of current Rules and Regulations of the Transportation Department has been reprinted listing 21 additional page revisions effective June 1, 1978. Each employee whose duties are prescribed by these Rules is required to have revised page 3, along with all other revised pages listed inserted in proper numerical order in his/her book of rules.

RULE C. First paragraph will not become effective until further notice.

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

MP	Location	Description
37.8	...Schellville Bridge Side
28.5	...Black Point Drawbridge Side
37.2	...Petaluma Drawbridge Overhead and side
68.0	...Healdsburg Steel bridge over Russian River Side

RULE 1. Employee charged with the duty of maintaining standard clock with correct time may obtain standard time by telephone from San Francisco extension 22462.

RULE 3. Conductors, engineers, train order and/or interlocking operators who go on duty at locations where there is no standard clock may obtain standard time by telephone from San Francisco extension 22462.

RULE 10-H. EXCEPTIONS:

- On the San Rafael Branch
- Sonoma Branch
- Carlotta Branch
- Korblex Branch
- Samoa Branch

When a yellow flag is required it will be displayed one-half mile from point of restriction.

RULE 10-J. Speed signs to left of track:

Westward	Reading
MP 264.3	35
MP 113.5	30
Eastward	Reading
MP 54.5	40

RULE 15. EXCEPTIONS:

On the Carlotta Branch
The explosion of a torpedo requires movement at restricted speed for one mile from point where torpedo was exploded.

RULE S-72. Westward trains are superior to trains of the same class in the opposite direction.

RULE 93. Yard limits are established at the following locations:

West MP	East MP
End of San Rafael Branch	Ignacio 25.8
26.8 Ignacio	27.1
End of Sonoma Branch	Schellville 40.4
40.4 Schellville	(S.P. Mile Post) 71.3
36.4 Petaluma	40.3
53.0 Santa Rosa	56.6
65.0 Healdsburg	69.7
74.3 Geyserville	78.4
111.7 Ukiah	116.1
120.2 Redwood Valley	122.4
137.9 Willits	142.5
193.9 Island Mountain	195.6
214.3 Fort Seward	218.5
280.6 Eureka	End of Korblex Branch
292.8 Arcata	End of Samoa Branch

RULE 99-C. Will apply between Redwood Valley and Eureka.

RULE 103. Except as otherwise provided in this rule or by other Special Instructions or timetable bulletins, a public grade crossing which is blocked by a stopped train, other than a passenger train, must be opened within 10 minutes, unless no vehicle or pedestrian is waiting at the crossing. Such a cleared crossing must be left open until it is known that trains are ready to depart. When recoupling at public crossings trains shall be moved promptly consistent with safety.

Switching movements over public grade crossings should be avoided whenever reasonably possible. If not reasonably possible, such crossings must be cleared frequently to allow a vehicle or pedestrian to pass and must not be occupied continuously for longer than 10 minutes unless no vehicle or pedestrian is waiting at the crossing.

In the event of any uncontrolled blockage involving more than one grade crossing and a peace officer is on the scene, primary consideration shall be given to the clearing of that crossing which, in the peace officer's judgment, will result in minimum delay to vehicular traffic.

Train or yard crew member of a train blocking a public crossing shall immediately take all reasonable steps, consistent with the safe operation of such train, to clear the crossing upon receiving information from a peace officer, member of any fire department, or operator of an emergency vehicle, that emergency circumstances require the clearing of the crossing.

In the event of any uncontrolled blocking not otherwise provided for in this rule, crossing shall be cleared with reasonable dispatch.

CROSSING GATES EQUIPPED WITH KEY RELEASE:

Station	Location	Mile Post
*Santa Rosa	Third Street	53.7
**Ukiah	Perkins Street	114.0

*May be operated for movements from other than main track by operating key release on side of instrument case on east side of crossing and on relay post on west side of crossing.

**May be operated for movement over Track 614 by operating key release on relay post on west side of crossing.

Switch key may be removed but circuit must be occupied within one minute or gate will rise.

San Rafael: Pedestrian crosswalk located at Los Gallinas Avenue, MP 19.3, must not be blocked by standing trains or cars.

Sonoma Branch MP 48.3: Warning devices at crossing No. 5H-42.3 are not actuated until equipment is within 50 feet of crossing. Movement must not be made past stop sign until warning devices have been operating 20 seconds.

Petaluma: Movement over East D Street on Track 276 or 272 must not be made until a member of the crew has provided warning to traffic.

Alton: Warning devices at crossing No. 5R-262.85, on Carlotta Branch, are not actuated until equipment is within 50 feet of crossing. Movement must not be made past stop sign until warning devices have been operating 20 seconds.

RULE 104. Alton: Normal position of Jct. switch of Carlotta Branch is for siding.

RULE 104-D. Running switches will be made only when in the judgment of the conductor it is necessary and with his personal supervision.

RULE 105. Burdell: Eastward Trains will use Siding at Mile Post 31.3

At the following stations, sidings are located as shown below:

Santa Rosa: On eastside of main track, from East switch, MP 55.0 to MP 54.1 (177 feet east of Ninth Street).

Healdsburg: On east side of main track, from east switch MP 67.4 (10 feet west of Bailhache Ave.) to west switch.

RULES 201 and 221-A. Train orders will be issued by authority and over initials of Chief Train Dispatcher C.L. Kennedy and OK'd clearances must bear initials of Chief Train Dispatcher C.L. Kennedy.

RULE 211 (c). Is revised to read:

Oral authority to engineer of closely approaching train as follows:

"This is N.W.P. Operator (station). I have a Form 'N' train order to advance (train) on main track."

RULE 221. Unit for display of flashing light installed at the following locations:

Station	Location	Direction
Petaluma	East end siding	Eastward trains
Healdsburg	West end siding	Eastward trains

Black Point is train-order office for eastward trains only.

MOVEMENTS OF TRAINS BY STAFF SYSTEM

RULE S-240. Applies at following location:

Territory	Register Location
Alton to Carlotta	Alton

SPECIAL INSTRUCTIONS

RULE S-244. At locations where movement of extra trains or engines are authorized by use of train register, all lines of each page of the train register must be used and filled in before turning and starting a new page.

SPRING SWITCHES

RULE 538. Spring switches not equipped with facing point locks, equipped with switch point indicators, are located as follows:

Location	Normal Position
Burdell West Switch	Siding
Burdell East Switch	Main Track
Geyserville East Switch	Main Track
Redwood Valley East Swtich	Main Track

RULE 540. Switch point indicators at above locations, are located from 25 to 100 feet in advance of switch.

INTERLOCKING

RULE 605. Black Point Drawbridge: Limits extend from eastward signal at MP 29.0 to westward signal at MP 28.7.

Petaluma Drawbridge: Limits extend from eastward signal at MP 37.1 to westward signal at MP 37.3.

GENERAL REGULATIONS

RULE 825. Many new cars are equipped with truck mounted brakes. The hand brake is effective on these cars on "B" end only. It will be necessary to check "B" end of these cars to determine that hand brake has been released.

At Willits train crews must not release hand brakes until engine is coupled and brake pipe is charged.

Rail skids are located at Ridge, Spins 545 and Spins 712.

When using rail skid it must be placed on rail and leading wheel of first car in descending direction run onto rail skid and hand brakes applied, if brakes are operative, before engine is detached. Train crews picking up cars from these locations must remove rail skid, return to proper location and lock in place where lock is provided.

Cars set out on grade with defective hand brake must have another car with hand brake applied placed below and against the bad order car.

RULE 827.

When Hot Box Detectors, Dragging and/or Derailed Equipment Detectors display flashing white light and/or revolving red beacon light prior to the lead wheel of engine passing these locations, train may proceed without stopping for train inspection provided there is radio communication between crew members on the head-end and rear-end of the train. Report must be made to train dispatcher promptly.

When trains are stopped by hot box detectors, dragging and/or derailed equipment detectors at locations where bridges, trestles, etc. are not provided with walkways, train may be moved slowly ahead a sufficient distance to permit inspection.

DRAGGING AND/OR DERAILED EQUIPMENT DETECTORS

Where dragging and/or derailed equipment detectors are installed, revolving red beacon will be mounted on hot box detector house, on post or relay case adjacent to detector and will be normally dark. When dragging and/or derailed equipment detector is activated, the revolving red light will be displayed.

Unless otherwise provided revolving red beacon will apply to trains in both directions, and when activated enginemen or trainmen must stop train promptly in accordance with Air Brake Rule 5. Sec. D. and make inspection of train and track, advising train dispatcher of conditions found.

Dragging and/or derailed equipment detector and indicator installed at the following locations:

M P	Direction(s)	Location
28.0	Both	Black Point
72.0	Both	Lytton
258.7	Both	Stone
273.9	Both	Loleta-South Bay

**ROLLER BEARINGS
LOOSE OR MISSING CAP SCREWS**

During inspection by trainmen, if any roller bearing is found with one cap screw loose or missing and hot box detector has not been activated and check with tempilstik reveals no overheated condition, train may proceed to the next terminal where car must be set out.

Under the same circumstances, when two or more roller bearing cap screws are found loose or missing, train may proceed with caution to the first available track where car **must** be set out.

HOT BOX DETECTORS

Crew members are to be familiar with the locations of these detectors:

SCANNER SITES:

MP	Direction(s)	Location
48.9	Both	Wilfred
256.0	Both	Scotia

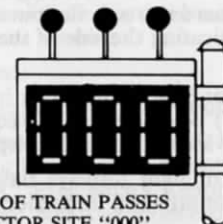
Hot box detector scanner sites have a white light continuously displayed on track side of instrument house, except when a hot bearing is detected, at which time light will start flashing. Crew members must be alert for the light and, when flashing, conductor and engineer must immediately orally compare observation when means of communication is available.

Absence of white light must be promptly reported to train dispatcher and does not require train inspection.

TYPE C. MONITOR DISPLAY BOARD WITH INDICATOR LIGHTS.

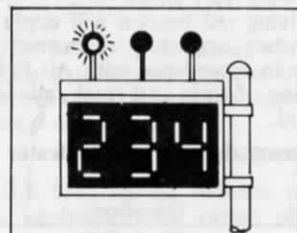
A Monitor Display Board and hot box indicator lights, as shown in diagram, are mounted on a signal mast at side of track. The display board is illuminated as train passes and will display zeros in the absence of a hot bearing. Two seconds after train passes the detector, the display board will display numerals indicating the accumulated axle count from the hot bearing to the rear of the train.

Absence of any numerical display after passage of a train must be promptly reported to train dispatcher.

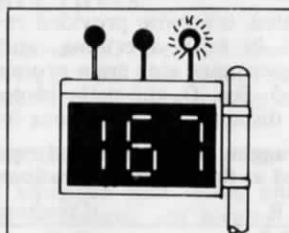


REAR OF TRAIN PASSES
DETECTOR SITE "000"
DISPLAYED INDICATING NO
HOT BOXES DETECTED

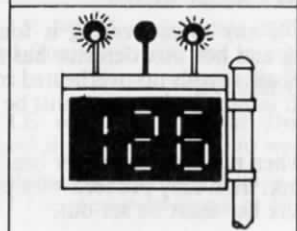
The indicator lights are normally dark, but when hot bearing is detected, will display flashing white aspect as illustrated below:



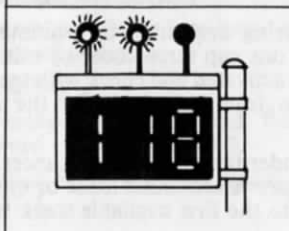
ONE HOT BOX ON RIGHT SIDE OF TRAIN IN DIRECTION OF MOVEMENT. AXLE COUNT (234) FROM REAR OF TRAIN. INSPECT ALL BEARINGS OF CAR INDICATED AS WELL AS EACH ADJOINING CAR.



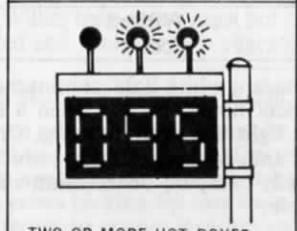
ONE HOT BOX ON LEFT SIDE OF TRAIN IN DIRECTION OF MOVEMENT. AXLE COUNT (167) FROM REAR OF TRAIN. INSPECT ALL BEARINGS AS CAR INDICATED AS WELL AS EACH ADJOINING CAR.



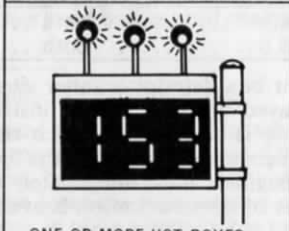
ONE HOT BOX EACH SIDE OF SAME AXLE COUNT (126) FROM REAR OF TRAIN. INSPECT ALL BEARINGS OF CAR INDICATED AS WELL AS EACH ADJOINING CAR.



TWO OR MORE HOT BOXES ON RIGHT SIDE OF TRAIN IN DIRECTION OF MOVEMENT. AXLE COUNT (118) FROM REAR OF TRAIN. INSPECT ALL JOURNALS, REAR OF TRAIN TO AND INCLUDING CAR AHEAD OF AXLE COUNT ON DISPLAY.



TWO OR MORE HOT BOXES ON LEFT SIDE OF TRAIN IN DIRECTION OF MOVEMENT. AXLE COUNT (095) FROM REAR OF TRAIN. INSPECT ALL JOURNALS, REAR OF TRAIN TO AND INCLUDING CAR AHEAD OF AXLE COUNT ON DISPLAY.

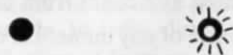


ONE OR MORE HOT BOXES ON EACH SIDE OF TRAIN. AXLE COUNT (153) FROM REAR OF TRAIN. INSPECT ALL JOURNALS ON BOTH SIDES, REAR OF TRAIN TO AND INCLUDING CAR AHEAD OF AXLE COUNT ON DISPLAY.

LEGEND

UNILLUMINATED FLASHING

INDICATOR LAMP



As the train passes the detector, the right or left hot box indicator light on top of the board starts to flash immediately upon detection of a hot journal, indicating the side of the train having overheated journal.

A flashing indicator light in the center indicates that another hot bearing (or bearings) was detected subsequent to the hot bearing which is numerically indicated on the display board.

When any indicator light displays flashing white aspect, train must be stopped promptly and inspection made to locate car with hot bearing.

Lights and illuminated numerals will automatically cancel out 90 seconds after entire train passes detector.

When hot bearing is not located then all journals of car indicated by detector as well as five cars on either side of the car involved must be inspected.

When it is known hot bearing has been detected by crew member observing the flashing white light displayed on track side of instrument house, and a numerical readout is not displayed on the display board, then train must be stopped promptly and all bearings of train must be inspected.

CHECKING FOR JOURNALS SUSPECTED OF OVERHEATING

Whenever an overheated journal is suspected due to hot box detector activation, rolling inspection or visual symptoms, a walking inspection must be made to find the exact car and journal and to observe for other physical defects on the train.

For roller bearing cars special attention must be given to proper use of tempilstiks, loose or missing cap screws, temperature sensitive cap screws and loose or leaking seals.

For plain bearing cars, look for low oil; brass, pad or wedge defective or out of place, or water in journal box.

REPORTING OF HOT BOXES

When hot box detectors are actuated the following information is to be reported at next terminal in telegraph message form identified by symbol HB addressed jointly to **Superintendent, Regional Engineer, Regional Signal Manager, and Chief Train Dispatcher.**

1. Date and time stopped and MP location.
2. Train identification.
3. Car number and location in train (whether or not defect found).
4. Box location (1, 2, 3 or 4 from "B" end of car, right or left side).
5. Disposition of car: If set out, state where. If inspection shows that it was not necessary to set out even though bearing was warm enough to activate the detector, advise what corrective action was taken to permit movement of car. If roller bearing equipped, so state.

NOTE: Report all cases where train passes over the detector without an indication having been displayed, but develops a hot bearing between detector and a point 20 miles beyond detector.

Whenever a roller bearing car experiences two successive hot box detector actuations and overheated journal or other cause of actuation cannot be found after required inspections were made and five cars checked either side, car may be continued in train with provision that conductor must report same at next terminal and inspection is made by qualified maintenance personnel.

Train dispatcher to notify terminal of mandatory inspection when brought to his attention.

If a roller bearing car experiences three successive hot box detector actuations, it must be set out.

Train dispatcher must:

1. Notify Car Department of cars set out.
2. Notify Car Department of cars which are known to have had two successive hot box detector actuations.
3. Submit CS-7159A "Preliminary Report of Overheated Journals" whenever hot box is experienced.

Connecting crews, if any, must be notified by incoming crew of failure to locate hot bearing if indication is received on any hot box detector system and car is not set out.

1. Notify Car Department of cars set out.
2. Notify Car Department of cars which are known to have had two hot box detector actuations.
3. Submit CS-7159A "Preliminary Report of Overheated Journals" whenever hot box is experienced except if on actuation of type "D" yard approach hot box detector.

Connecting crews, if any, must be notified by incoming crew of failure to locate hot bearing if indication is received on any hot box detector system and car is not set out.

For Plain Bearing Cars, look for low oil; brass, pad or wedge defective or out of place; or water in journal box.

SETTING OUT CARS SUSPECTED OF OVERHEATING.

Under the following circumstances, car **MUST** be set out:

1. If tempilstik melts on roller bearing adapter.
2. If roller bearing car experiences three hot box detector actuations.
3. If two or more roller bearing cap screws are found loose or missing.
4. If yellow or red pellet is melted in temperature sensitive cap screw on roller bearing.
5. If plain bearing journal shows any indication of overheating.
6. If passenger car or locomotive roller bearing activates odor (stink) in chemical heat indicator.

REPORTING OF HOT BOXES

When hot box detectors are actuated the following information is to be reported at next terminal in telegraph message form identified by symbol HB addressed jointly to Superintendent, Regional Engineer, Regional Signal Manager, and Chief Train Dispatcher.

1. Date and time stopped and MP location.
2. Train identification.
3. Car number and location in train (whether or not defect found).
4. Box location 1, 2, 3 or 4 from "B" end of car, right or left side.
5. Disposition of car: If set out, state where.

If loaded, state origin of car and point where waybill was left.

NOTE: Report all cases where train passes over the detector without an indication having been displayed, but develops a hot bearing between detector and a point 20 miles beyond detector.

CONTINUOUS WELDED RAIL (CWR) TRAINS

Continuous welded rail trains consist of a tiedown car and a number of roller-rack cars and may contain other cars, such as threader cars and elevator cars to accompany movement. A steel-end box car, refrigerator car, or high-side gondola car must be positioned on each end of CWR train as a buffer car during all movements except preparatory to and during unloading.

In addition to other requirements of this rule, when a CWR train is stopped for any reason, inspection must immediately be made of as much of train as practicable and the following items checked if train is carrying a full or partial load:

- a. Check for undesired movement of rail. The tops of rails are painted adjacent to the tiedown rack on the tiedown car which is located near center of train. Paint marks on each tier of rail must be in line; otherwise, this is an indication of an undesired movement of rail.
- b. Check each rail end to make certain it overhangs the last supporting roller by at least 12 feet and is no closer than 12 feet from the next empty roller. Rails are marked 12 feet from each end.

- c. When a load contains continuous lengths of rail made up of more than one piece, check to see that rail joints are secured with at least four bolts, properly tightened, and that rail ends have not pulled apart.
- d. Check coupler operating levers to make certain they are in position to prevent uncoupling and that coupler operating lever locking devices are in position and locked.

When any of these conditions are not as required, train must not be moved until train dispatcher has been contacted and further instructions are received.

RULE 827-A. HAZARDOUS MATERIALS.

Refer to Speed Table, Page 3.

Unless specifically authorized by Superintendent, trains or cuts of cars containing Class A Explosives, Radioactive material or tank cars containing Acrylonitrile, Anhydrous Ammonia, Chlorine, Hydrogen Fluoride, Poison Gas, or Flammable Gas (FG) **must not exceed 8,000 feet.**

Following are shipping names of **Class A Explosives:**

Standard Transportation Classification Code	Shipping Name
49 01	Class A Explosives
49 011	Class A explosives, ammunition
49 011 05	Ammunition for cannon with explosive projectiles
49 011 10	Ammunition for cannon with gas projectiles
49 011 15	Ammunition for cannon with illuminating projectiles
49 011 20	Ammunition for cannon with incendiary projectiles
49 011 25	Ammunition for cannon with smoke projectiles
49 011 30	Ammunition for small arms with explosive projectiles
49 011 40	Rocket ammunition with explosive projectiles
49 011 45	Rocket ammunition with gas projectiles
49 011 50	Rocket ammunition with illuminating projectiles
49 011 55	Rocket ammunition with incendiary projectiles
49 011 60	Rocket ammunition with smoke projectiles
49 011 65	Ammunition, chemical, explosive, with poison A material (ammunition, fixed nec. for cannon)
49 011 66	Ammunition, chemical, explosive, with poison B material (ammunition, fixed nec. for cannon)
49 011 67	Ammunition, chemical, explosive, with irritant (ammunition, fixed nec. for cannon)
49 012	Class A explosives, military devices other than ammunition
49 012 05	Fuze, detonating
49 012 10	Fuze, detonating, radioactive
49 012 15	Boosters (explosive) (military)
49 012 20	Bursters (explosive)
49 012 25	Supplementary charges (explosive)
49 012 30	Explosive bomb
49 012 35	Explosive mine
49 012 40	Explosive projectile
49 012 45	Explosive torpedo
49 012 50	Hand grenades
49 012 55	Rifle grenades
49 012 60	Detonating primers
49 013	Class A explosives, commercial devices
49 013 10	Boosters (explosive) (commercial)
49 013 20	Blasting caps (more than 1,000)
49 013 22	Blasting caps with metal clad mild detonating fuse (more than 1,000)
49 013 24	Blasting caps with safety fuse (more than 1,000)

SPECIAL INSTRUCTIONS

Standard Transportation Classification Code	Shipping Name
49 013 26	Blasting caps—electric (more than 1,000)
49 013 40	Jet thrust unit (jato) (class A explosive)
49 013 50	Rocket motor (class A explosive)
49 013 60	Igniter, jet thrust (jato) (class A explosive)
49 013 62	Igniter, rocket motor (class A explosive)
49 014	Class A explosives, initiating explosives
49 014 20	Igniting explosive (fulminate of mercury, wet)
49 014	Initiating explosive (diazondinitrophenol)
49 014 35	Initiating explosive (guanyl nitrosamino guanylidene hydrazine)
49 014 40	Initiating explosive (lead azide, dextrinated type (only))
49 014 45	Initiating explosive (lead mononitroresorcinate)
49 014 50	Initiating explosive (lead styphnate) (lead trinitroresorcinate)
49 014 55	Initiating explosive (nitro mannite)
49 014 60	Initiating explosive (nitrosoguanidine)
49 014 65	Initiating explosive (pentaerythrite tetranitrate)
49 014 70	Initiating explosive (tetrazene) (guanyl nitrosamino guanyl tetrazene)
49 014	Class A explosives, high explosives
49 015 02	High explosives
49 015 04	High explosives, liquid
49 015 10	High explosives (picric acid, dry)
49 015 20	High explosives (nitrocellulose, dry)
49 015 30	High explosives (nitrostarch, dry)
49 015 40	High explosives (trinitrotoleuol, dry)
49 016	Class A explosives, propellant explosives
49 016 02	Propellant explosive
49 016 10	Propellant explosive (gun powder)
49 017	Class A explosives, low explosives
49 107 05	Low explosives
49 107 10	Black powder

Following are shipping names of **Radioactive Materials:**

Standard Transportation Classification Code	Shipping Name
4926450	Radioactive material, special form
4927220	Radioactive material
4928746	Radioactive material
4929415	Radioactive material, N.O.S. fissile class

Following are shipping names of **Poison Gas:**

Standard Transportation Classification Code	Shipping Name
49 201 25	Hydrocyanic acid, liquefied
49 201 30	Hydrocyanic acid, solution (5% or more hydrocyanic acid)
49 203 40	Nitrogen dioxide, liquid
49 203 50	Nitrogen peroxide, liquid
49 203 60	Nitrogen tetroxide, liquid
49 203 62	Nitrogen tetroxide-nitric oxide mixture (containing up to 33.2% by weight nitric oxide)

SPECIAL INSTRUCTIONS

Following are shipping names of **Acrylonitrile, Anhydrous Ammonia, Chlorine and Hydrogen Fluoride:**

Standard Transportation Classification Code	Shipping Name
4904210	Anhydrous ammonia
4904120	Chlorine
4906810	Acrylonitrile
4930024	Hydrogen fluoride

Following are shipping names of **Flammable Gas:**

Standard Transportation Classification Code	Shipping Name
4905705	Butadiene, inhibited (utadiene from alcohol)
4905704	Butadiene, inhibited (butadiene from petroleum)
4905703	Butadiene, inhibited (butadiene, impure, for further refining)
4905706	Butane
4905706	Liquefied petroleum gas (butane)
4905702	Butane (butane, impure, for further refining)
4905702	Liquefied petroleum gas (butane, impure, for further refining)
4905727	Compressed gases, n.o.s. (despersant gases, nec. flammable)
4905748	Compressed gases, n.o.s. (iso-butene)
4905775	Compressed gases, n.o.s. (refrigerants, nec. liquid, flammable)
4905713	Cyclopropane
4905716	Difluoroethane
4905719	Difluoromonochloroethane
4905510	Dimethylamine, anhydrous
4905725	Dimethyl ether
4905734	Ethylene
4905749	Hydrocarbon gas, liquefied
4905746	Hydrogen
4905745	Hydrogen, liquefied
4905410	Hydrogen sulfide
4905747	Isobutane
4905747	Liquefied petroleum gas (isobutane)
4905750	Isobutane (isobutane for further refinery processing)
4905750	Liquefied petroleum gas (isobutane for further refinery processing)
4905752	Liquefied petroleum gas
4905707	Liquefied petroleum gas (butene gas, liquefied)
4905711	Liquefied petroleum gas (butylene, impure for further refining)
4905780	Liquefied petroleum gas (pintsch gas)
4905758	Methylacetylene—propadiene, stabilized
4905761	Methyl chloride
4905764	Methyl chloride—methylene chloride mixture
4905520	Methyl mercaptan
4905530	Monoethylamine, anhydrous
4905781	Propane
4905781	Liquefied petroleum gas (propane)
4905785	Trifluorochloroethylene
4905540	Trimethylamine, anhydrous
4905792	Vinyl chloride
4905795	Vinyl methyl ether, inhibited

When necessary to provide helper engine for trains handling cars containing Class A Explosives, Radioactive material, or tank cars containing Acrylonitrile, Anhydrous Ammonia, Hydrogen fluoride, Poison Gas or Flammable Gas, helper engine must be placed in accordance with helper service instructions and there must be a proper separation of the helper engine from cars containing these hazardous materials.

RULE 834. Loaded multi-level cars in other than solid trains must be entrained at least four cars behind working locomotives in road movement; also loaded multi-level cars must not be entrained next to hopper, gondola or tank cars loaded with stone, gravel, sand, lime, coal, soda ash, chemicals, etc., subject to wind, vapor, or fume action on adjacent cars, nor placed next to empty cars previously loaded with such commodities. Loaded multi-level cars must not be entrained next to open-top loads of lumber, poles, steel, etc. when lading extends beyond top of car.

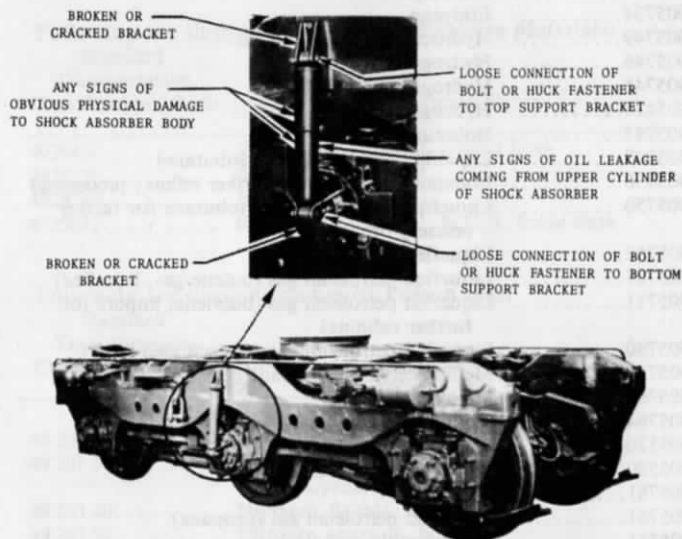
Open-top cars with lading height exceeding 15 feet six inches, except cars transporting highway trucks or trailers, multi-level freight cars either loaded or unloaded, and automobile underframe cars, shall be entrained at least five cars distance from engine or caboose if length of train permits on train operating in or through the States of California, Nevada and Arizona.

Additionally, in California, wood chip cars transporting wood chips when loaded and covered in such a manner so as to preclude any material from being dislodged enroute, are exempted from restrictions above.

RULE 872. Eureka, Willits and Schellville: Enginemen taking charge of engines at Eureka, Willits and Schellville will consider engines as having been amply supplied with fuel, sand and equipped with prescribed signals, tools, supplies and flagging equipment in serviceable condition.

RULE 874. Forward brakeman on freight trains will ride the lead unit when a seat is available.

DEFECTIVE CONDITIONS ON HYDRAULIC SHOCK ABSORBERS Axle Positions 2 and 5 of EMD HTC Trucks



Enginemen must specifically look for the following defective conditions on shock absorbers on locomotives equipped with HTC trucks when complying with Rule 874 and Air Brake Rule 2, Items A and B.

What to do in case defect is noted:

1. Reduce train speed to not exceeding 50 MPH.
2. Notify dispatcher of defective condition.
3. Enter defect on Form CS 2326 for correction.

RULE 958. First paragraph is revised to read:

Employees shall identify the radio station from which they are calling by prefacing their call with the railroad name, for example: 'NWP Caboose Train Second 802 calling NWP Engine Second 802, over' and to answer a call, announce, for example: 'This is NWP Caboose, Train Second 802, over.'

AIR BRAKE RULES

RULE 3. Badge plate located in cab of locomotives will state maximum brake cylinder pressure for each class of locomotive. This brake cylinder pressure must be maintained to provide required braking power at very low speeds or when stopped. Under no circumstances must independent brake valve be changed except to obtain maximum brake cylinder pressure as shown on badge plate from a full independent brake application.

RULE 9. The following series of cars are equipped with ABEL brake system, which has automatic change-over feature to provide proper brake function when car is loaded and when empty.

SSW	75700- 75799	Gondolas
SSW	78500- 78599	Hoppers (Open Top)
SP	333500-334399	Gondolas
SP	337500-337599	Gondolas
SP	345000-345669	Gondolas
SP	354000-354749	Gondolas
SP	463500-463999	Hoppers (Open Top)
SP	464000-464899	Hoppers (Open Top)
SP	467500-467549	Hoppers (Open Top)
SP	480000-480193	Hoppers (Open Top)
SP	491000-491059	Hoppers (Covered)
SP	492000-492039	Hoppers (Covered)
SP	500604	Flat Car
SP	590000-590099	Flat Cars

The following series of cars are equipped with ABDEL brake system which has automatic change-over feature to provide proper brake function when car is loaded and when empty. This feature is fully automatic on these series and requires no action on part of engineer.

SP	337600-337699	Gondolas
SP	354750-355299	Gondolas
SP	463337-463486	Hoppers (Open Top)
SP	464000-465699	Hoppers (Open Top)
SP	590100-590131	Flat Cars (Anode)
SP	595500-595624	Cradle Flats

RULE 17. When dynamic brakes are not used on helper engine(s), tonnage of such engine(s) must be added to that of train in determining the number of retaining valves required.

Retaining valves must be used on freight and mixed trains on descending grades as follows:

Redwood Valley to Willits
Willits to Redwood Valley





























WITHOUT DYNAMIC BRAKE IN OPERATION: One retaining valve for each 80 tons in train. If gross tonnage exceeds 80 tons per operative brake, retaining valves must be used on all cars and speed must not exceed 10 MPH.

Position in train of placarded cars containing hazardous materials

NOTE: Cars with same placards may be placed next to each other.

Cars placarded  No restrictions

RESTRICTIONS

	Cars placarded: 	Cars placarded: 	Cars placarded: 	Loaded tank cars placarded:           	Empty tank cars placarded: Corrosive Poison Chlorine Organic Peroxide Oxidizer Oxygen Flammable Flammable Solid Non Flammable Gas Flammable Gas Flammable Solid W Poison Gas	Loaded cars other than tank cars placarded:              
Must not be nearer than the sixth car from the engine occupied caboose or passenger car	X	X		X		
When train length does not permit, must be placed as near the middle of train as possible but not nearer than the second car from the engine, occupied caboose or passenger car	X	X		X		
Engine, occupied caboose or passenger car	X	X	X	X	X	
Car occupied by guard or escort	X(1)	X(1)		X(1)		
Loaded plain flat car	X	X		X		
Loaded bulkhead flat car	X(2)	X(2)		X(2)		
Loaded TOFC/COFC flat car	X(3)	X		X(4)		
Car loaded with vehicles	X	X		X(5)		
Open top car with shiftable load	X(2)	X(2)		X(2)		
Car with internal combustion engine in operation. Car with any heating apparatus or any lighted stove, heater or lantern	X	X		X		
Car Placarded EXPLOSIVES A		X	X	X	X	
Car placarded POISON GAS	X		X	X	X	
Car placarded RADIOACTIVE	X	X		X	X	
Any loaded placarded car (other than COMBUSTIBLE or same placard)	X	X	X			

MUST NOT BE NEXT TO

(1) A placarded rail car must be next to and ahead of any car occupied by the guards or technical escorts accompanying this car. However, if a car occupied by guards or technical escorts is equipped with a lighted heater or stove, it must be the fourth car behind any car placarded EXPLOSIVES A.

(2) Restriction applies only when any of the lading protrudes beyond the car ends or when any of the lading extending above the car ends is liable to shift so as to protrude beyond the car ends.

(3) Cars placarded EXPLOSIVES A may be placed next to each other.

(4) Restriction applies only to loaded flatbed or opentop trucks and trailers and to loaded trucks and trailers without securely closed doors.

(5) Restriction does NOT apply to a car loaded with vehicles secured by a device designed for that purpose and permanently installed on the car and of a type generally accepted for handling in interchange between railroads.

SPECIAL INSTRUCTIONS

WITH DYNAMIC BRAKE IN OPERATION: Permissible Tons Per AXLE Without Retaining Valves

	Basic-Dynamic Brake PER AXLE	Extended Range Dynamic Brake PER AXLE
Redwood Valley to Willits	400	500
Willits to Redwood Valley ..	200	250

If permissible tonnage is exceeded, one retaining valve must be used for each 150 tons in excess thereof.

RULE 25-B. When radio communication is available, employe at rear of train will notify road engineer the amount of air pressure as indicated on the caboose gauge approximately one mile before reaching Ridge.

When helpers are employed and radio communication is available, they will also notify road engineer the brake pipe pressure and speedometer reading as shown on the helper unit.

RULE 33. Redwood Valley-Willits:

Maximum tons per operative brake—80 tons except with not more than 200 tons per axle of dynamic brake and speed not exceeding 15 MPH 110 Tons.

Should dynamic brake failure occur while handling in excess of 80 tons per operative brake train may proceed at speed not exceeding 10 MPH if in judgment of conductor and engineer it is safe to do so and provided retaining valves are used as prescribed by Air Brake Rule 17.

MISCELLANEOUS

1. SPEED RESTRICTIONS FOR TRAINS

Engines operated with engineer in other than lead unit in direction of movement, must not exceed 20 MPH when approaching highway or street crossing at grade, subject to further restrictions imposed by local conditions.

Unless otherwise authorized, trains handling passenger cars with flat spots on wheels in excess of 3/4 inches in length must not exceed 10 MPH. When flat spots are not in excess of 3/4 inches long such cars may be operated at maximum authorized speeds.

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

CLASSIFICATIONS ARE DESCRIPTIVE OF ENGINES AS FOLLOWS:

E F 4 18 A

Denotes Car Body Type with Control Cab;
B = Booster; No Letter = Road Switcher Type.

Denotes Horsepower in Hundreds: 00 = Not Powered;
18 = 1750-1800 HP, etc.

Denotes Number of Axles.

Denotes Service Assignment: F = Freight; M = Misc.;
P = Passenger; S = Switcher.

Denotes Builder: A = Alco; E = EMD; G = GE; S = SPT.

SPECIAL INSTRUCTIONS

ENGINE NUMBER	MAX- IMUM SPEED	CLAS- SIFICA- TION	STARTING TRACTIVE EFFORT	WGT 000'S
1000-1002	70	AS600	98,640	408
1010-1013	65	ES400	62,800	261
1100	65	ES408	51,700	207
1105-1128	65	ES408	55,000	233
1191-1197	65	ES409	59,180	237
1204-1277	60	AS409	58,000	233
1300-1337	65	ES410	61,600	247
1500-1542	70	ES615	82,500	330
④ 1600-1609	70	GS400	70,000	280
2250-2316	65	ES412	62,500	249
2450-2759	65	ES415	65,400	261
2868-2899	70	ES418	64,200	253
2961-2970	70	ES620	97,540	416
2971-2976	50	ES620	102,000	416
3118-3135	25**	AS628	97,710	391
3148-3153	25**	AS630	101,110	391
3186-3196	70	EP418	64,200	260
3197-3199	70	EP430	70,200	280
3200-3209	70	EP636	102,500	410
3301-3885	70	EF418	62,500	253
4042-4152	70	EF420	65,100	261
4200-4249	70	EF420	66,000	264
4300-4451	70	EF618	89,700	360
4700-4709	70	EF620	95,540	390
4800-4844	70	EF420	69,250	277
5000-5017	70	EF423	66,100	264
5100-5114	70	GF423	66,500	266
5300-5325	70	EF623	104,150	417
6300-6681	70	EF425	66,000	264
6800-6801	70	GF425	67,800	275
6901-6953	70	EF625	95,540	390
7030-7033	70	SF428	69,750	280
① 7200-7201	70	EF435	69,500	278
② 7230-7231	70	EF435	69,500	278
7300-7399	70	EF630	102,100	410
7400-7599	70	EF632	102,100	410
7600-7607	70	EF430	67,560	278
7608-7657	70	EF430	69,500	277
7658-7677	70	EF430	69,250	277
7770-7799	70	GF430	70,000	280
7800-7883	70	GF430	69,125	276
7900-7936	70	GF630	104,850	419
③ 7940-7959	70	EF430	69,500	278
# 8230-8299	70	EF630	97,750	391
# ① 8300-8341	70	EF630	102,100	410
# ② 8350-8391	70	EF630	102,100	410
# 8400-8488	70	EF630	102,750	411
# 8489-8573	70	EF630	102,100	411
# 8585-8796	70	GF633	104,710	419
# 8800-9156	70	EF636	103,470	414
# 9157-9404	70	EF636	102,600	411
# 9500-9504	70	EF642	103,240	413

SPECIAL INSTRUCTIONS

ENGINE NUMBER	MAX- IMUM SPEED	CLASSIFI- CATION	STARTING TRACTIVE EFFORT	WGT 000'S
UP ENGINES				
1-50	70	EF636	98,250	...
2400-2459	70	GF630	98,250	...
2800-2809	70	GF628	93,500	...
2810-2959	70	GF630	97,750	...
3000-3122	70	EF630	98,250	...
3123-3488	50	EF630	97,500	...
# 3489-3768	70	EF630	97,500	...
8000-8074	50	EF630	97,500	...
# 8075-8099	70	EF630	97,500	...
9000-9005	70	EF435	68,750	...

#Equipped with HTC trucks and truck snubbers. Refer to Rule 874, All Subdivisions

**May be handled isolated in multiple, dead in multiple, or dead in train at maximum speed of 70 MPH.

①RCE Master.

②SP RCE Remote Control Units. These units must not be used as lead unit except on cap hops or light engine consists.

③Mother.

④Mate.

Engines handled dead must not exceed speed shown in table.

When operated in multiple unit control, on head end of train or running light and engineer is in other than the leading control cab in direction of movement, speed must not exceed 30 MPH. 'A' type units (indicated by letter 'A' following classification numerals) operating in reverse as lead unit in direction of movement must not exceed 30 MPH.

Any locomotive not listed in these tables is not to be operated in trains unless authorized by train order indicating maximum permissible speed for locomotive which is then subject to any further restrictions imposed by the timetable or otherwise.

SPECIAL INSTRUCTIONS

3. MAXIMUM SPEED PERMITTED WITH CERTAIN EQUIPMENT	MPH MAIN TRACKS OTHER THAN	MPH MAIN TRACKS ON BRANCHES
	BRANCHES	
Double or Multiple loads		25
Scale test cars	40**	30
except: SPMW 2024, 2025, 5007, 5090 WO-3, WO-4, WO-5	65	49
Relief outfits with steam derrick, except: Nos. 7070 and 7110 must not operate on any branch	45*	25*
40-ton Locomotive Crane/Pile Drivers SPMW 6603, 6604, 8000		
With boom in place, either end forward ①	25*	15*
With boom disconnected, heavy end forward	40	25
boom end forward	20	15*
With boom disconnected and removable counterweight properly positioned, either end forward	40	25
88-ton Locomotive Crane/Pile Drivers SPMW 8002, 8003, 8004		
With boom in place, either end forward ①	25*	15*
With boom disconnected, heavy end forward	40	25
boom end forward	20*	15*
With boom disconnected and removable counterweight properly positioned, either end forward	40	25
SPMW 4028, 4029, SSW 96405:		
With boom in place, either end forward ①	25*	15*
With boom disconnected, heavy end forward	40	25
boom end forward	20*	15*
With boom disconnected and removable counterweight properly positioned, either end forward	40	25
SPMW 4027 SPMW 5870		
4088 5874		
4091 5899		
5437 6601		
5479 6602		
5595 SSW 96404		
5852 NWPMW 31		
With boom in place, either end forward	25*	15*
With boom disconnected, heavy end forward	45	25
boom end forward	20*	15*
Steam pile driver SPMW 4053	35	25*
Jordan Spreaders:		
Running backward	25	20
Moving forward (prepared for travel)	35	35

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

**Scale Test Car NBS-1 to be handled on trains not more than 20 cars ahead of caboose and speed of train handling NBS-1 not to exceed 60 MPH.

①When moving in train with boom in place, operator must be on board.

Unless specifically authorized, all relief outfit cranes and the following locomotive cranes and pile drivers; SPMW 4027, 4028, 4029, 4088, 5479, 5595, 5852, 5870, 5874, 5899, 6601, 6602, 6603, 6604, SSW 96404 and SSW 96405 must not operate over lines having maximum load limits of less than 263,000 lbs. and must observe all restrictions applying to cars weighing over 210,000 lbs.

SPMW 5479, 5499 and 5497 are restricted to 45 MPH.

Loaded CWR trains must be handled separately from other trains.

4. PLACEMENT OF RESTRICTED CARS IN TRAIN WITH OR WITHOUT HELPER:

- (a) Between Eureka and Redwood Valley empty 73-foot-long or longer equipment must be entrained ten or more cars behind road engine and ten or more cars ahead of helper engine. A flat with one van or one container, whether loaded or empty, must be considered as an empty.
- (b) When average weight of cars in train, other than locals or switchers, is more than 60 tons per car, do not handle any cars which weigh less than 50 tons within five cars of road engine. These instructions will not apply to continuous welded rail (CWR) trains.
- (c) Any car measuring less than 42 feet in length must not be coupled to a car longer than 73 feet in length. This restriction will not apply to rear 20 cars of train.

Empty tank cars measuring less than 35 feet in length must be entrained in rear 20 cars of train.

The Train Mass Profile (graph) will identify a car measuring less than 42 feet in length with the letter "S", tank cars less than 35 feet with the letters "T". Cars measuring over 73 feet will be identified by the letter "L".

- (d) It is the responsibility of Conductors to take into consideration the overall distribution of tonnage when making up or changing consist of train. The following are requirements governing train makeup.
 1. Train consisting of predominantly empty cars will have any block of loaded cars entrained near the head end.
 2. Train makeup requirements will prevail when they conflict with outstanding blocking instructions unless authorized by Division Officer or Chief Dispatcher.
 3. Train Mass Profile Graph should be used to monitor train makeup when available.
 4. When in doubt as to proper distribution of train tonnage, Conductor will contact Division Officer or Chief Dispatcher for instructions.
- (e) SP 354000-354199 series wood chip cars exceed clearances east of MP 90 and must not be moved beyond that point. Trains handling loaded cars in above series, must reduce speed of train not exceeding 10 MPH over Healdsburg bridge, MP 67.6. On all movements, cars must be separated at least five cars from engine or caboose, train length permitting.

5. HELPER SERVICE

NOTE: For classification of engines, see miscellaneous Item 2.

A. Rule for entraining one helper engine:

- (1) On trains of less than 100 cars, helper engine consisting of not more than two six-axle operating units totaling 179,400 pounds tractive effort nor more than two four-axle operating units totaling 135,600 pounds tractive effort or a combination of one four-axle and one six-axle operating unit totaling 157,600 pounds tractive effort may be placed behind caboose.
- (2) On trains of 100 or more cars helper engine consisting of only one unit may be placed behind caboose.
- (3) Helper engine that does not qualify under (1) or (2) must be entrained as near as practicable to shove 1/3 and pull 2/3 of tonnage handled by helper engine.
- (4) Not more than two units (operative or isolated in helper consist) may be placed behind caboose at any time, except may assist in setting out bad order cars or recoupling train.

B. Rule for entraining more than one helper engine:

- (1) Trains having more than one helper engine must have each engine entrained as near as practicable so that it will shove 1/3 and pull 2/3 of tonnage handled.
- (2) Trains powered with two helper engines, one of which qualifies to be placed behind caboose, must entrain the swing helper as near as practicable to shove 1/3 and pull 2/3 of tonnage handled by the swing helper.

C. Air must be cut in on all helper engines and helper engine must not be coupled nor uncoupled while train is in motion.

D. Road engineer and helper engineer must communicate any change affecting the operation of their train when means of communication is available. When speed is being held above 8 MPH on ascending grade, helper engineer must regulate amperage during speed reductions or speed increases to maintain the amperage indicated before speed change; if speed of train drops below 8 MPH or when coming to a stop on ascending grade, helper engineer must regulate amperage during speed reduction to maintain the amperage indicated before speed change, then close throttle just before train stops.

E. When speed of trains powered with 12,000 or more horsepower on the head end and with helper engine in train, drops below 16 MPH, road engineer must reduce throttle to Run 6.

When train speed drops below 16 MPH, head end power being reduced to Run 6 may result in helper power working in short time rating. The short time rating must not be exceeded. If it appears that short time rating will be exceeded, assistance must be requested from train dispatcher. If assistance cannot be obtained, grade must be doubled.

F. Trailing tonnage must not exceed that amount of tonnage listed under column "Maximum Tonnage to be Handled by Road Engine With Helper Entrained" for territory over which helper will be used. Should the amount of tonnage computed exceed the maximum tonnage listed, it may be necessary to isolate road units or add helper power. If practical, isolate units behind the lead unit leaving operating units next to the train. Weight of those units isolated and separated from the train by operating units need not be added to train weight in computing location of helper.

If units have to be isolated next to the train, weight of these units must be added to the train when computing location of the helper.

If units are moved dead in consist, they should be placed next to the train and their weight added to the tonnage of the train.

SPECIAL INSTRUCTIONS

UNLESS OTHERWISE RESTRICTED MAXIMUM TONNAGE TO BE HANDLED BY ROAD ENGINES WITH HELPERS ENTRAINED:

TERRITORY

Willits-Redwood Valley (W).....	4,800
Redwood Valley-Willits (E)	3,000

UNLESS OTHERWISE RESTRICTED MAXIMUM TONNAGE TO BE HANDLED BEHIND HELPER ENGINES:

TERRITORY

Willits-Redwood Valley (W).....	4,080
Redwood Valley-Willits (E)	2,550

G. In locating helper engine(s) in train, the following example of calculating tonnage for road engine and helper engine(s) will be used:

EXAMPLE

Train: 42 loads, 87 empties = 5756 tons.
Four-unit road engine (2-GF630, 1-EF623, 1-EF625).
Three-unit helper engine (2-EF623, 1-EF630).

Total road horsepower	10800
Total helper horsepower	<u>7600</u>
Total horsepower	18400

(1) Divide total horsepower by tonnage =

$$\frac{18400}{5756} = 3.196 \text{ HP/T}$$

(2) Divide road horsepower by HP/T factor =

$$\frac{10800}{3.196} = 3379 \text{ tons}$$

Road engine will handle 3379 tons

(3) Divide helper horsepower by HP/T factor =

$$\frac{7600}{3.196} = 2377 \text{ tons}$$

(4) To determine 1/3 of helper tonnage divide

$$\frac{2377}{3} = 792 \text{ tons}$$

Helper engine will shove 792 tons.

(5) To determine 2/3 of helper tonnage

multiply $792 \times 2 = 1584$ tons
Helper engine will pull 1584 tons.

(6) Under no circumstances should the tonnage that will trail the helper engine exceed that amount indicated in the chart.

(7) Should tonnage trailing road or helper engine, as computed above, exceed the amount indicated in the chart it will be necessary to:

- (a) Reduce tonnage or
- (b) Relocate helper in compliance with instructions. (Item J or,
- (c) Add additional helper(s) of sufficient horsepower to handle tonnage in excess of amounts indicated in chart. Additional helper(s) may be placed behind caboose if they meet requirements of item A1., if not they are to be entrained as follows:

SPECIAL INSTRUCTIONS

EXAMPLE:

Train: 170 loads, 2 empties = 13,980 tons
Three-unit road engine (1-EF630, 1-EF636, 1-GF633).
Four-unit swing helper (1-EF630, 2-EF636, 1-GF633).
Two-unit rear helper (1-EF618, 1-EF630).

Total road horsepower	9900
Total swing helper horsepower	13500
Total rear helper horsepower	<u>4800</u>
Total horsepower	28200

(1) Divide total horsepower by tonnage =

$$\frac{28200}{13980} = 2.017 \text{ HP/T}$$

(2) Divide road horsepower by HP/T factor =

$$\frac{9900}{2.017} = 4908 \text{ tons}$$

Road engine will handle 4908 tons

(3) Divide swing helper horsepower by HP/T factor =

$$\frac{13500}{2.017} = 6693 \text{ tons}$$

Swing helper will handle 6693 tons (total).

(4) To determine 1/3 of swing helper tonnage =

$$\frac{6693}{3} = 2231 \text{ tons}$$

Swing helper will shove 2231 tons.

(5) To determine 2/3 of swing helper tonnage =

$$2231 \times 2 = 4462 \text{ tons}$$

Swing helper will pull 4462 tons.

(6) Divide rear helper horsepower by HP/T factor =

$$\frac{4800}{2.017} = 2380 \text{ tons}$$

Rear helper will handle 2380 tons (total).

(7) To determine 1/3 of rear helper tonnage =

$$\frac{2380}{3} = 793 \text{ tons}$$

Rear helper will shove 793 tons.

(8) To determine 2/3 of rear helper tonnage =

$$793 \times 2 = 1586 \text{ tons}$$

Rear helper will pull 1586 tons.

H. Helper engine must not be placed on head end of train without authority being obtained from train dispatcher.

I. ES412 and ES415 class units must not be cut into train in helper service. No more than two of these units may be placed behind the caboose.

J. Should it become necessary to relocate the helper at other than the shove 1/3, pull 2/3 location in order to separate helper from restrictive cars or in compliance with maximum tonnage trailing helper limitations, the helper may be relocated, but under no circumstances in relocations may helper shove less than 30% nor more than 45% of the total tonnage to be handled by the helper.

6. MOVEMENT OF LOCOMOTIVES

RULES GOVERNING MOVEMENT OF ENGINES NOT EQUIPPED WITH ALIGNMENT CONTROL COUPLERS

1. ES415 and following ES412 (2266, 2271, 2272, 2275, 2276, 2279, 2282, 2283, 2284, 2285, 2286, 2287, 2288) class engines must if practicable be MU'd in accordance with rules. These engines are equipped with dynamic brake wire.

SPECIAL INSTRUCTIONS

2. When necessary to entrain the following class engines:

ES408	AS409	ES412
ES409	ES410	ES415

Placement in train will be as follows:

- Foreign lines switch engines are to be considered in above listings.
 - Engines moved dead in train must be prepared for such movement.
 - These engines may be moved on the head end of train, provided train does not exceed 800 tons.
 - On trains of more than 800 tons, these engines must be moved not less than five cars nor more than 10 cars ahead of rear of train and behind any helper engine.
 - Not more than two of these engines may be moved in a train and when two are moved they must be separated by a car no longer than 50 feet.
3. When only ES415 and the ES412 units listed in Item 4 are used in engine consist, not more than 2 units may be used.

4. Before handling in multiple units, ES415 and following ES412:

2266	2279	2286
2271	2282	2287
2272	2283	2288
2275	2284	
2276	2285	

unit(s) must be positioned in engine consist as follows:

- No more than two will be MU'd in any one consist.
 - When MU'd with one road unit, the road unit must be coupled against train.
 - When one is used with two or more road units, it will be placed as second unit in consist.
 - When two are used with two or more road units, they will be placed as second and third units in consist.
 - If necessary to make a reverse move with cars or train, lead unit must be isolated.
5. Extreme caution must be used during dynamic braking or when making reverse moves to prevent jackknifing and track damage.
6. Engines equipped with multiple unit controls (MU) weighing 150,000 pounds or more, may be handled on head end of train: if weighing less than 150,000 pounds, must be placed near rear of train.

INSTRUCTIONS FOR USE OF HINGED COUPLER STOPS

For use in switching service, the coupler stops must be opened (swung back) against end of engine and locking pin secured in bracket provided.

For use in road service, MU service, or dead in train, the coupler stops must be closed (swung in) into coupler opening against coupler pocket side with locking pin secured behind coupler carrier on both ends of engine.

Locking pins must be in place (whether coupler stop is swung back or swung in) to insure securement of the coupler stop.

Class ES415, Nos. 2450-2679 are equipped with hinged coupler stops.

SPECIAL INSTRUCTIONS

PREPARATION OF AIR EQUIPMENT FOR MOVEMENT DEAD IN TRAIN

ALL UNITS:

Reduce main reservoir pressure to 25 lbs. above zero

Cut-in dead engine feature.

Remove automatic brake valve handle in running position or with 26-L equipment, remove in handle off position.

If brake valve handles cannot be removed, they must be blocked in running position.

IN ADDITION:

24 RL equipment:

Close brake pipe cut-out cock and place the dual ported cut-out cock in cut-in position.

Open the end cocks on actuating pipe and independent application and release pipe.

6 SL equipment:

Close the brake pipe cut-out cock, or place the rotair valve or 3 position brake pipe cut-out cock in dead position.

26 L equipment:

Place the brake pipe cut-off valve in cut-out position.

Place the dual ported cut-out cock in open or cut-in position, or place the MU 2a valve in lead or dead position.

Open the end cocks on actuating pipe and brake cylinder equalizing pipe.

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

8. In event overspeed device (or speed indicator) malfunctions enroute on a controlling unit which has no overspeed cut-out cock, unit should be rearranged in the locomotive consist as a trailing unit to clear the condition.

9. When unit or units in locomotive consist emit excessive smoke through exhaust stacks other than from cold start, prompt report must be made to train dispatcher who will arrange to notify roundhouse foreman or locomotive maintenance forces on duty at first maintenance facility where train is scheduled to stop. Unit number, time and location where excessive smoking of unit was first observed must be reported.

When a yard engine is observed emitting excessive smoke, report must be made to roundhouse foreman or locomotive maintenance forces on duty.

In addition, engineer must make appropriate entry on work report, Form CS 2326.

10. Not more than 10 units in multiple operative or inoperative may be entrained on head end of any train.

Not more than 12600 operating horsepower will be used on head end of train between Willits and Redwood Valley. Excess horsepower and/or units in road consist, must be either isolated, or if tonnage requires, transferred to helper consist.

11. Except when handling cabooses on or near the head end in local or road switcher service when handling only a few cars, cabooses are not to be moved other than at rear of train, unless specifically authorized.

SPECIAL INSTRUCTIONS

12. Following units will not be operated between Willits and Eureka.

Class
EF 642
EF 636
GF 633
EF 630
GF 630
GF 628
EF 625
EF 623
ES 620

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

Class of Engine	Restricted Tracks
All engines . . . San Rafael . . .	Beyond tipple on track 133.
All engines . . . Petaluma . . .	Beyond second road crossing (city yard) on track 258.
All engines . . . Healdsburg . .	Beyond tipple on track 505.
All engines . . . Firco	Beyond engine restriction sign placed 100 feet east of derail.

14. When setting out bad cars enroute, head portion of train, together with bad order car, must be taken to the nearest set out point in direction of movement, bad order car set out, engine detached and head portion of train left at set out point, when practicable. Rear portion of train is then to be brought to set out point and head and rear portions of train coupled together.

15. LOAD LIMIT (car and contents):

*Schellville-Willits	263,000 pounds
Willits-Eureka	251,000 pounds
Schellville-Sebastiani	240,000 pounds
Ignacio-San Rafael (15.7)	263,000 pounds
San Rafael (15.7)-Detour	240,000 pounds
Alton-Carlotta	240,000 pounds
Eureka-Korblex	240,000 pounds
Arcata-Samoa	240,000 pounds

*Any car 45' 0" or less in length over end sills having excess of 251,000 gross weight on rail must be handled at speed not exceeding 10 MPH when moving through Russian River Bridge, MP 67.7 Healdsburg.

Where 263,000 pound load limit applies:

Gross weight of 263,000 pounds or less applies to uniformly loaded four-axle cars having trucks spaced 23'-0" or more center to center and minimum axle spacing of 5'-6".

Where maximum load limit shown is 263,000 pounds or more, gross loads of 395,000 pounds may be handled on 6 (six) axle tank cars when load limit of car is not exceeded.

Where maximum load limit is 263,000 pounds or more, gross loads of 526,000 pounds may be handled on 8 (eight) axle tank cars, with a maximum of 3 (three) tank cars coupled together, when load limit of cars is not exceeded.

Gross weight of SPMW 6400-6439 100-ton air dump cars cannot exceed the gross weight shown in Timetable or Line Clearance Circular for each branch line. Also, cars must not be dumped on curves of 25 degrees or more, or operated through curves of 35 degrees or more.

SPECIAL INSTRUCTIONS

16. REPEATER AIR CARS (RAC) SP 260 thru 266.

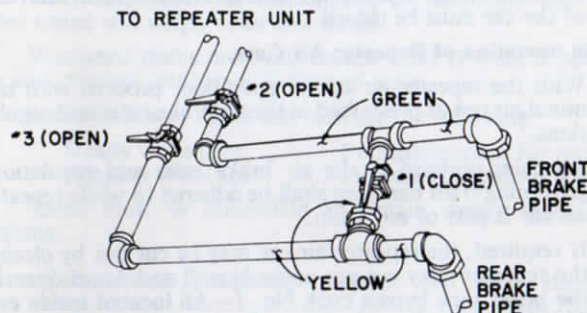
The repeater air car is utilized to increase efficiency of train air brakes on long trains and during cold weather. The purpose of repeater relay equipment is to accept pneumatic signals from the brake pipe of forward portion of a train, and by relay action, produce a corresponding response in the brake pipe of the rear section of the train.

The repeater relay car has the ability to produce faster train charging time, reduce or eliminate brake pipe pressure gradient, more uniform braking forces, and faster brake application and release times.

A. Procedure for adding Repeater Air Car to a train to use Repeater Car Air Equipment.

1. Place as near to center of train as makeup will permit.
2. The RAC car is operational in either direction. The front brake pipe must be coupled to the portion of the train to which the road engine is attached. The rear brake pipe must be coupled to the other end of the train.

The angle cock on the unused brake pipe on each end of the car must be closed.
3. Where repeater air car is positioned in train and front and rear brake pipes have been properly connected and opened, then close the brake pipe bypass cock No. 1 and open the two repeater relay cut-out cocks Nos. 2 and 3, **all located inside of car.**

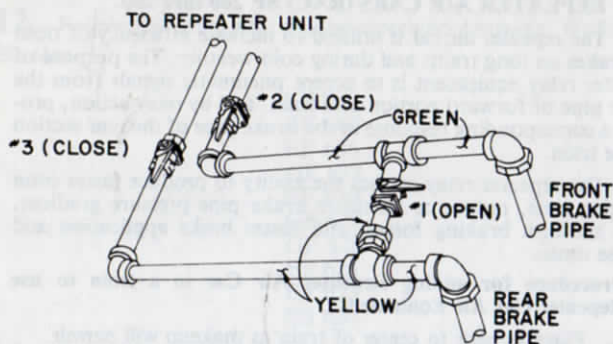


Note: If for any reason it becomes necessary to transfer control of air brakes to the helper engine located in the portion of the train **behind** the RAC car with the RAC air equipment in operation, the brake pipe hose connections must be changed. The forward brake pipe must be coupled to the portion of the train having the brake valve which is controlling the train. The rear brake pipe must be coupled to the other end of the train.

4. The repeater relay valve No. 5 is a variable valve and is employed to reestablish a satisfactory brake pipe pressure on the rear portion of train. A regulator and gauge to indicate pounds of differential is provided. Trainline pressure on rear portion of train must not be increased above 90 PSI at RAC car. Preferred adjustment is to have the rear brake pipe 1.5 to 2 lbs. above the front brake pipe.

B. Procedure for cutting the RAC car out of train.

1. Close the repeater relay cut-out cocks Nos. 2 and 3.
2. Open the brake pipe bypass cock No. 1—**All located inside the car.**
3. The car diesel engine and compressor are to remain running except during layover time.



C. Procedure for adding Repeater Air Car to a train when Repeater Car Air Equipment is not to be used.

1. Close the repeater relay cut-out cocks Nos. 2 and 3.
2. Open the brake pipe bypass cock No. 1—**All located inside the car.**
3. Forward brake pipe must be coupled to portion of the train to which the road engine is attached.
Rear brake pipe must be coupled to the other end of the train. The angle cock on the unused brake pipe on each end of the car must be closed.

D. Train operation of Repeater Air Cars.

1. With the repeater air car in operation, proceed with terminal air test as prescribed in the air brake rules and regulations.
2. All rules outlined in the air brake rules and regulations governing train handling shall be adhered to while repeater air car is part of any train.
3. If required, the repeater air car may be cut out by closing the repeater relay cut-out cocks Nos. 2 and 3 and opening the brake pipe bypass cock No. 1—**All located inside car.** This provides for normal train operation without the repeater relay equipment operating.
4. If yard air is used to charge the train, it **must be cut in** ahead of the repeater air car.
5. The RAC car must not be kicked, dropped, or humped.
6. During a pickup or setout, or at any time the engine is separated from the train and the air car is in operation in the train, it is absolutely essential that the trainline angle cock be left open on the train.

E. Loss of main reservoir air on RAC car.

1. The depletion of main reservoir air to below 100 lbs. will initiate a service brake pipe reduction in the forward and rear portions of the train.
2. When main reservoir pressure drops below 110 pounds, a radio signal will be initiated and will transmit a series of short beeps for a period of approximately ten seconds and then cease. It will reset itself automatically upon an increase of main reservoir pressure above 110 pounds.
3. If in power, throttle must be reduced to idle and automatic brake valve placed in full service zone until train stops.
4. If in dynamic braking, automatic brake valve must be placed in full service zone and dynamic braking lever handled as prescribed by rules.
5. Train must be immediately secured before determining reason for main reservoir air depletion.

F. Setting RAC car out of train.

1. If it becomes necessary to set RAC car out of train, shut down compressor engine in car and secure car per rules.

Instructions for starting and shutting down compressor engine posted inside of car.

17. LIGHT-TYPE INDICATORS

Schellville yard, MP 39.1: Switch Point Indicator located 300 feet east of east switch.

Healdsburg: Warning light has been installed on top of tipple on track 505. No movement will be permitted beyond tipple until green aspect is displayed on this warning light, which indicates that movable overhead gravel loader has been retracted to lawful clearance.

Scotia Bluff: Light-type indicators are installed at MP 256.9 and MP 257.5. Protective equipment is installed on trestle to detect disturbance from falling rocks or high water. On approach, lunar aspect indicates proceed; yellow aspect indicates proceed at reduced speed not to exceed 4 MPH over trestle and trainmen and enginemen most closely observe the trestle to determine if trestle has been displaced or damaged.

Burdell: Couple-in-Motion Track Scale located on main track at MP 31.3, designed to weigh on westward movement only.

Westward trains for interchange at Schellville will weigh. Other trains will weigh when instructed.

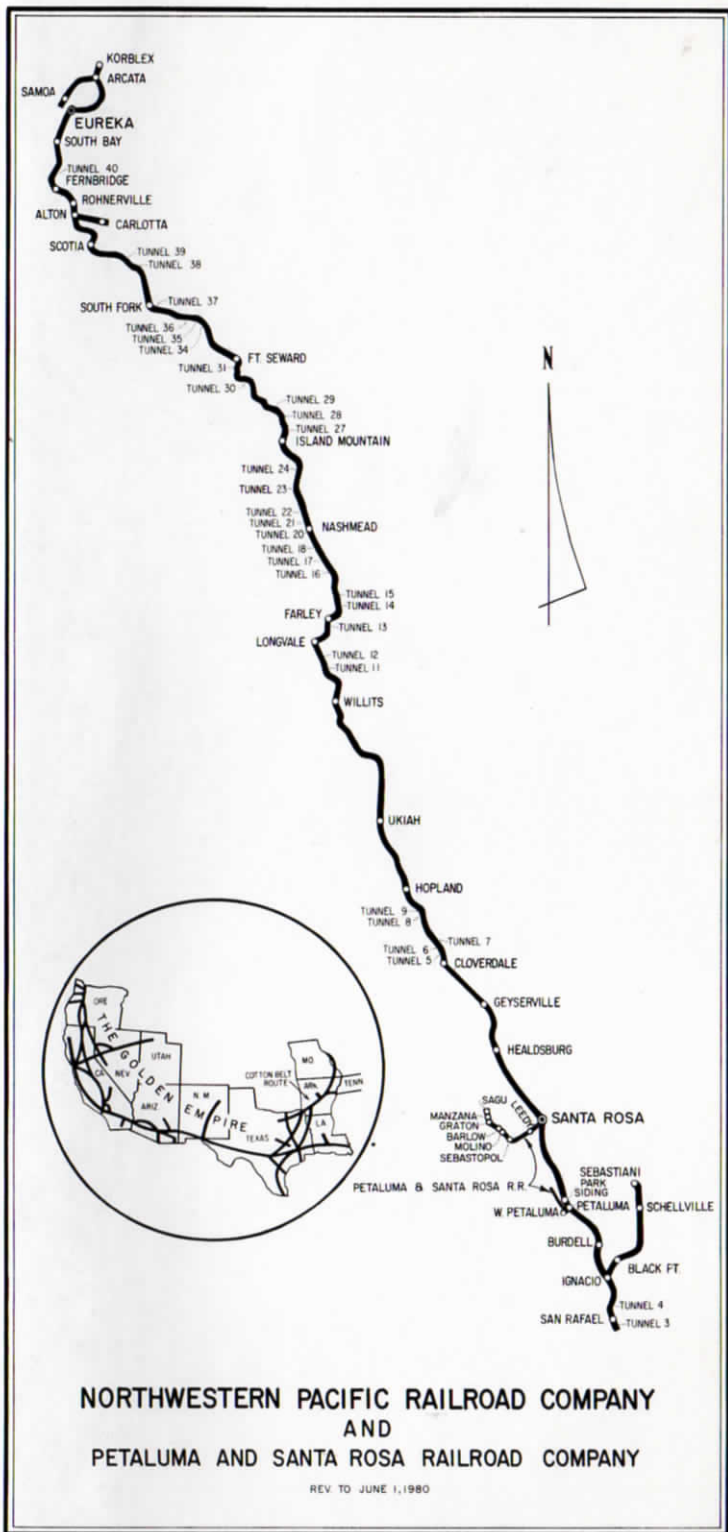
Westward trains must not exceed 4 MPH from a point 500 feet east of scale until train is clear of scale.

Speed indicator lights will indicate the following:

Steady white light Permissive speed for weighing.
Blinking white light Excessive speed for weighing.

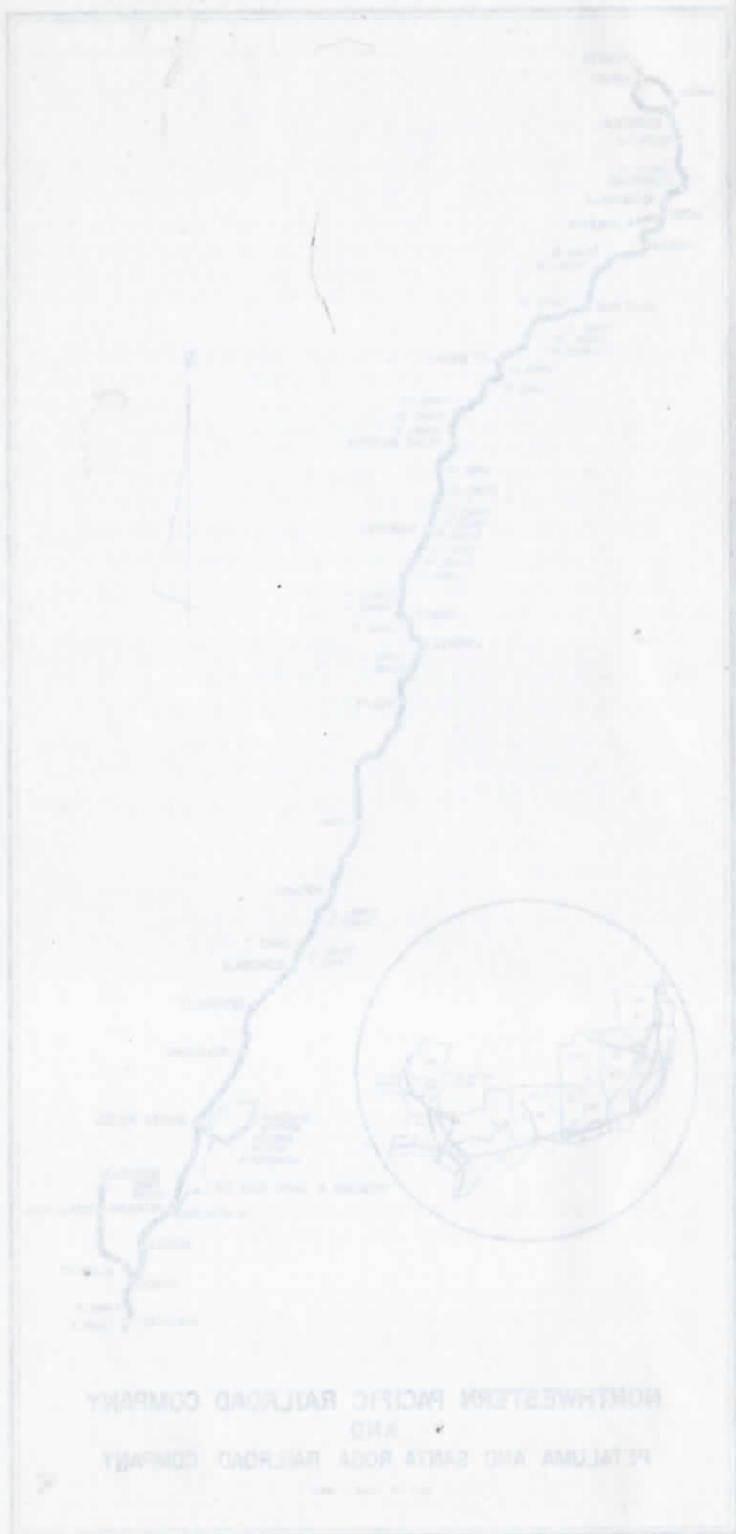
Speed must be controlled to obtain steady aspect while weighing.

18. Commercial Telephone number for train dispatcher is (916) 782-1776. This number is to be used for emergency purposes only.



**NORTHWESTERN PACIFIC RAILROAD COMPANY
AND
PETALUMA AND SANTA ROSA RAILROAD COMPANY**

REV TO JUNE 1, 1980



NORTHWESTERN PACIFIC RAILROAD COMPANY
AND
SANTA ROSA RAILROAD COMPANY