BURLINGTON NORTHERN RAILROAD

System Special Instructions

All Subdivisions

IN EFFECT AT 0001
Central, Mountain,
and Pacific Continental Time

Sunday
April 10, 1994

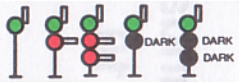
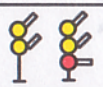
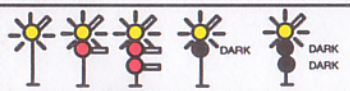
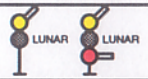
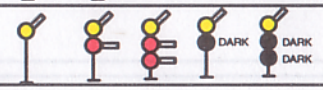
SIGNAL ASPECTS AND INDICATIONS

DISTANT SIGNALS

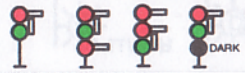
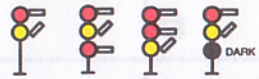
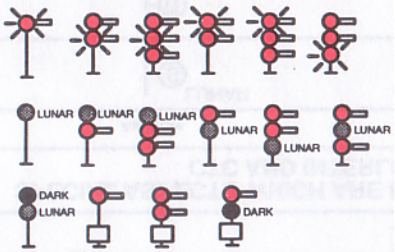
Rule	Aspects of Color Light and Semaphore Signals	Cab Signal Aspects	Name	Indication
9.1.1			DISTANT SIGNAL CLEAR	Proceed. If delayed as per Rule 9.9 or Rule 9.9.1 between this signal and block or interlocking signal, proceed prepared to stop short of the next signal.
9.1.2			DISTANT SIGNAL APPROACH	Approach next signal prepared to stop short of signal.

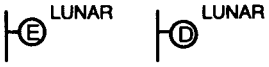
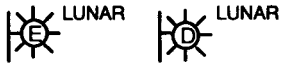
BLOCK AND INTERLOCKING SIGNALS

Aspects shown in Rules 9.1.3 through 9.1.8 may be displayed on signals with or without a number plate on signal mast.

9.1.3			CLEAR	Proceed
9.1.4			ADVANCE APPROACH	Proceed prepared to stop at second signal.
9.1.5			APPROACH DIVERGING	Proceed prepared to advance on diverging route at the next signal at prescibed speed through turnout.
9.1.6			APPROACH MEDIUM	Proceed prepared to pass next signal not exceeding 35 MPH.
9.1.7			APPROACH RESTRICTING	Proceed prepared to pass next signal at restricted speed.
9.1.8			APPROACH	Proceed prepared to stop at next signal. Trains exceeding 35 MPH immediately reduce to that speed.

BLOCK AND INTERLOCKING SIGNALS (Cont.)

Rule	Aspects of Color Light and Semaphore Signals	Cab Signal Aspects	Name	Indication
9.1.9			DIVERGING CLEAR	Proceed on diverging route not exceeding prescibed speed through turnout.
9.1.10			DIVERGING APPROACH DIVERGING	Proceed on diverging route not exceeding prescibed speed through turnout prepared to advance on diverging route at the next signal at prescribed speed through turnout.
9.1.11			DIVERGING APPROACH MEDIUM	Proceed on diverging route not exceeding prescibed speed through turnout prepared to pass next signal not exceeding 35 MPH.
9.1.12			DIVERGING APPROACH	Proceed on diverging route not exceeding prescribed speed through turnout prepared to stop at next signal,trains exceeding 35 MPH immediately reduce to that speed.
9.1.13			RESTRICTED PROCEED	Proceed at restricted speed.
9.1.14			STOP	Stop.

SPECIAL ASPECTS WHICH ARE NOT PART OF AUTOMATIC BLOCK CTC AND INTERLOCKING SYSTEMS			
Rule	**Aspects**	**Name**	**Indication**
9.1.15		TAKE SIDING INDICATOR	When illuminated, hand operate switch to enter next siding or to leave siding and enter main track.
9.1.16		BLOCK INDICATOR	Block clear.
9.1.17		BLOCK INDICATOR	Block occupied.
9.1.18		SPRING SWITCH INDICATOR	When lunar is not illuminated, stop and inspect spring switches per Rule 8.9
9.1.19		FAILED EQUIPMENT INDICATOR	When illuminated continuously, or when not illuminated, stop train and inspect for failed equipment. Advise dispatcher reason for delay by first available means of communication.
9.1.20		FAILED EQUIPMENT INDICATOR	When flashing, no failed equipment has been detected.

SPECIAL ASPECTS WHICH ARE NOT PART OF AUTOMATIC BLOCK CTC AND INTERLOCKING SYSTEMS (Cont.)			
Rule	**Aspects**	**Name**	**Indication**
9.1.21		SLIDE FENCE INDICATOR	When illuminated continuously or when not illuminated, slide fence has been activated; proceed at restricted speed.
9.1.22	 LUNAR	SLIDE FENCE INDICATOR	When flashing, slide fence has not been activated.
9.1.23		RESUME SPEED	End of slide fence restriction;resume speed.

GENERAL SIGNAL INSTRUCTIONS

In addition to Rule 9.1 of the General Code of Operating Rules, the following General Signal Instructions apply on Burlington Northern Railroad

When a track intervenes to the right between a signal and the track governed, a stub post with a blue light will be attached to the right of the signal mast.

When a track intervenes to the left between a signal and the track governed, a stub post with a blue light will be attached to the left of the signal mast.

Dwarf signals will display the same aspects and indications as high signals.

The following symbols are used in diagrams of signal aspects:

 To indicate number plate.

 To indicate flashing light.

 To indicate color light signal head.

 To indicate position of semaphore arm.

NOTES

ALL SUBDIVISIONS

1. Speed Restrictions

All speeds are subject to modification by speed restrictions indicated under Individual Subdivision Special Instructions.

Passenger trains will be governed by freight train speeds if passenger train speed is not specified under Individual Subdivision Special Instructions.

Tons per operative brake (Tons/OB) is defined as the gross trailing tonnage of the train divided by the total number of cars having operative brakes. For purposes of this definition, each platform of multi–platform cars is considered one car.

To determine if train exceeds 100 tons per operative brake, add two zeros to the number of cars having operative brakes. If train has greater trailing tonnage than the resulting figure, train exceeds 100 tons per operative brake. Example: 85 cars with operative brakes plus two zeros equals 8500. An 85 car train with 9182 tons would exceed 8500 and hence would exceed 100 tons per operative brake.

Maximum Speeds Permitted

Freight trains up to 100 Tons/OB	60 MPH.
Trains 100 Tons/OB and over	45 MPH.
Light locomotive consist or caboose hop	50 MPH.
Locomotives equipped with friction bearings	35 MPH.
On sidings	20 MPH.
Trains and engines through turnouts	12 MPH.
On tracks other than main tracks and sidings	10 MPH.
Within Mechanical department limits	5 MPH.
Movements on or off turntables	1 MPH.

Equipment	Main Line	Branch Line
Air dump cars, loaded	45 MPH.	45 MPH.
Ribbon rail cars, (loaded)	45 MPH.	45 MPH.
Bulkhead flat cars, empty **Except**: BN 961302–961361, BN 965846–965945, and center beam flat cars, FC6, FC7, FC8	45 MPH.	45 MPH.
Flat cars, empty, NP 62300–62949, NP 66100–66249	45 MPH.	45 MPH.
Gondolas empty, designated: G1, G2, G3,G4, G5, G6, GC, GE, GF, GS,GS2, MGT, MG5	50 MPH.	50 MPH.
Flat cars, empty, NP 580400–580739	50 MPH.	50 MPH.
Ore cars, BN 98000–98099, BN 99000–99949, BN 551000–551500	45 MPH.	20 MPH.
All other ore cars	40 MPH.	20 MPH.
Clay Cars, RARW 3801–4199	35 MPH.	25 MPH.
Scale test cars, BN 979004, 979006, 979012 (no air brakes)	35 MPH.	25 MPH.
Wedge plow or dozer ,hauled in tow	35 MPH.	25 MPH.
Rotary plow, wrecking derrick, locomotive crane, pile driver, clamshell, shovel, Jordan spreader	30 MPH.	25 MPH.
Log cars not equipped with permanent steel side stakes	30 MPH.	15 MPH.

Except on Main Lines as shown in timetables, locomotives, wrecking derricks and other types of heavy work equipment must not be operated on any subdivision unless authorized by chief dispatcher and roadmaster or covered by specific instructions.

1A. Control of Harmonic Rocking on Jointed Rail–

Under certain conditions, operation of trains between 13 MPH and 21 MPH can cause derailments due to harmonic rocking of cars.Where specified by Individual Subdivision Special Instructions or general order, the following restrictions apply when operating on jointed rail:

Freight trains, other than coal trains, ore trains, or trains consisting entirely of empty equipment, which cannot maintain a minimum speed of 21 MPH, must reduce speed to not exceed 13 MPH until movement can again exceed 21 MPH.

2. Locomotive Restrictions

The number of powered axles in a locomotive consist must not exceed 36, for either power or dynamic braking operation.

All locomotives in consist must be connected for multiple unit operation, if they are equipped.

Hauled-In-Tow

The number of locomotives hauled-in-tow, regardless of placement in train, must not exceed two times the number of locomotives coupled for MU operation.

Locomotives not coupled to the head end, or helper consist, must have the Dead Engine Feature cut in and if possible be placed not more than 15 cars from the head end consist.

Alignment Control Couplers

Some foreign line locomotives and the following BN locomotives are not equipped with alignment control couplers:

5–585, 1000–1004, 1400–1438, 1966–1970, 6100–6237.

Unless otherwise authorized, locomotives not equipped with alignment control couplers must be handled as follows:

Trains of 18 or more powered axles, pulling 5000 or more trailing tons, must have a locomotive with alignment control coupler next to the train. Two locomotives without alignment control couplers must not be coupled to each other.

2A. Manned Helper Operations

Locomotives used in helper service must be equipped with alignment control couplers .

When helpers shove on a caboose, employees are prohibited from occupying that caboose.

Helpers must not shove on a caboose equipped with friction bearings.

Helper Placement–

Unless individual Subdivision Special Instructions specify otherwise, the following placement restrictions apply:

Helpers of 6 powered axles, or less, no placement restrictions.

Helpers of 12 powered axles, or less, may operate behind caboose.

Helpers of more than 12 powered axles must be cut into the train at a position that equals the tonnage rating of the helper consist. Train dispatcher will advise the conductor of the tonnage of the helpers, so the proper placement can be determined.

Helpers of 18 powered axles, used on loaded coal trains may operate behind caboose or last car. When used behind caboose, lock blocks must be inserted in coupler pocket.

Helpers of 24 powered axles is maximum number allowed.

2B. Locomotive Information Chart

Locomotive restrictions indicated in Item 2, Individual Subdivision Special Instructions, are based on locomotive axle count and, when necessary, locomotive weight. Locomotive Information Chart indicates maximum weight for each model. If actual weight cannot be determined, use weight shown in chart.

Locomotive Information Chart

Model	Axles	Horsepower	Maximum Weight (Pounds)
SW1	4	600	198,000
SW10	4	1000	250,000
SW12	4	1200	250,000
SW15	4	1500	262,000
MP15	4	1500	261,000
F9, F9–2	4	2000	241,000
E9	6	2400	338,000
GP5	4	1350	243,000
GP9	4	1750	259,000
GP10	4	1800	260,000
GP15, GP15–1	4	1500	258,000
GP18	4	1800	248,000
GP20	4	2000	261,000
GP35	4	2500	262,000
GP38, GP38–2	4	2000	285,000
GP39, GP39–2	4	2300	261,000
GP40, GP40–2	4	3000	278,000
GP50	4	3600	275,000
SD9 (by unit numbers)			
6100 – 6126	6	1750	346,000
6127 – 6237	6	1750	326,000
6240 – 6247	6	1750	368,000
SD38, SD38–2	6	2000	391,000
SD40, SD40–2	6	3000	420,000
SD42	6	3000	415,000
SD60M	6	3800	401,000
B30–7	4	3000	275,000
B32–8	4	3200	270,000
B39, B39–8	4	3900	280,000
C30–7	6	3000	417,000
U30–C	6	3000	411,000
SD70	6	4000	415,000

3. Equipment Restrictions

The following equipment must be placed next ahead of caboose or at rear of cabooseless trains, except in work trains, or when placed elsewhere by chief dispatcher:

Outfit cars, **EXCEPT** univans.
Scale test cars, **EXCEPT** those without brakes.

Scale test cars BN 979004, BN 979006 and BN 979012 have no brakes and must be placed next ahead of the last car in cabooseless trains.

Pile drivers	Locomotive cranes
Empty ribbon rail cars	Rear end only cars
Jordan spreaders	Rotary snowplows
Wedge plows	Dozers.

When pile drivers, cranes, derricks or similar equipment are being moved on their own wheels or on cars in a train, they must be properly loaded and secured. Booms must be properly secured and, when possible, boom must be trailing. Equipment must be inspected before being moved.

Spreaders and dozers being moved in trains must, when possible, be headed in the direction train is moving and wings must be properly secured.

The conductor and engineer must be notified when such equipment is in their train.

DODX 40000–40100 are cars belonging to the Department of Defense. Handbrakes on these cars must not be used to control movement and must be applied from a ground position while car is standing.

Loaded ribbon rail cars must not be:

1. Coupled to other cars except buffer cars. (Buffer cars will be placed ahead of and behind ribbon rail cars at welding plant).
2. Handled in freight service with other cars.
3. Separated for maintenance or repairs unless under direct supervision of a roadmaster.

3A. Handling 80 Feet or Longer Cars

In trains of 8,000 or more trailing tons, when empty cars 80 foot or longer are coupled to cars 50 feet or shorter, they must be placed in the rear 8,000 tons. This places all long–car to short–car couplings in the safe tonnage area.

When applying these limits, the following 80 feet or longer loaded cars must be treated the same as an 80 foot empty car:

1. Cars weighing less than 50 tons, gross weight .
2. Flat cars with one loaded trailer.
3. Flat cars with empty trailers.

The tonnage chart distribution profile on the bottom of the wheel report designates cars 50 feet or less with an "S" and cars 80 feet or longer with an "L" in the LEN (length) category.

Individual platforms of multi–platform and stack cars are less than 50 feet in length. These cars must be considered a "short car" for the purpose of these restrictions.

Exception– Trains consisting entirely of cars 80 feet and longer, except caboose, are not restricted by this provision.

3B. Multi-Platform and Stack Intermodal Cars

These cars are authorized for movement on tracks with weight limit of 177,000 pounds or more.

Item 3A pertaining to Handling 80 Feet or Longer Cars does not apply to multi–platform or stack cars.

Train Operation

When multi–platform or stack cars have any empty platform(s) and the trailing tonnage of the train does not exceed 4,800 tons, no placement restrictions apply.

When trailing tonnage exceeds 4,800 tons, empty multi–platform or stack cars must be placed in the rear half of the train's trailing tonnage.

When trailing tonnage exceeds 8,500 tons, empty multi–platform or stack cars must be placed in the rear fourth of the train's trailing tonnage.

Blocks of 20 or more loads (100 tons or more per car) must not be handled behind empty multi–platform or stack cars.

3C. Rotary/Rapid Discharge Coal Cars

On the following sets of Rotary/Rapid Discharge coal cars, the dump door line, air hoses, must be coupled or placed in proper receptacle when provided, prior to releasing the train for service:

1. MCHX 30815–31044
2. NSPX 90001–90240 & 90501–90744
3. WCSX 12001–12123

Note: These are the cars that have the trainline on one side of the coupler and the dump door line on the other side, with both hoses being at end sill level.

4. Air Repeater Operation

Air repeater cars BNH 3–14, 20–29, and 30–35 must be operated approximately in the middle of the train.

There are flashing lights on each end of the roof and two lights on either car side, at ground level. Flashing roof light and illuminated side light indicates which end of the car is cut in for repeater operation.The illuminated light, must be the light nearest the controlling locomotive.

If charging in the wrong direction, bring the brake pipe of the air car to zero PSI with an emergency application of the brakes. Then recharge in the normal manner.

Air repeater cars increase the brake pipe pressure by a fixed percentage. Higher brake pipe pressure at the rear of a train will be noticed with this arrangement. It is possible for the brake pipe pressure on the rear car to be greater than the brake pipe pressure setting of the controlling locomotive. This does not constitute an overcharge with the air repeater car operating.

If an air repeater car fails en route, an automatic valve will operate to bypass the repeater equipment making it operate like any other car in the train. It is not necessary to do anything at the air repeater car. The air repeater car diesel engine contains antifreeze and draining of the engine is not required with engine shutdown.

If brakes do not release on the train when the air repeater rack is cut out from the bypass valve, it will be necessary to reduce the overcharged condition.

5. Car Restrictions

Cars that are either shorter than minimum length or are heavier than limits specified in Item 2 of the INDIVIDUAL SUBDIVISION SPECIAL INSTRUCTIONS or in any of the following paragraphs are not permitted without authority of Division Superintendent or BN Clearance Bureau.

6 axle cars listed in Table 5A can weigh up to the indicated weights and still be in compliance with Item 2 of the INDIVIDUAL SUBDIVISION SPECIAL INSTRUCTIONS.

Table 5A–

6 Axle Car Number Series	Maximum Gross Weight of 6 Axle Car If Item 2 Max. Gross Weight of Car Equals			
KCS 700002–700053 CSXT 600908–600910 SOU 50016–50019	143 Tons 185 Tons	138 Tons 178 Tons	136 Tons 175 Tons	134 Tons 172 Tons
CN 672001–673001 CR7 66062–766072,766074, 766145–766150 CSXT 600430 PC 766149	170 Tons	165 Tons	162 Tons	160 Tons
OTHERS	143 Tons	138 Tons	136 Tons	134 Tons

8 axle cars listed in Table 5B can weigh up to the indicated weights and still be in compliance with Item 2 of the INDIVIDUAL SUBDIVISION SPECIAL INSTRUCTIONS.

Table 5B–

8 Axle Car Number Series	Maximum Gross Weight of 8 Axle Car If Item 2 Max. Gross Weight of Car Equals			
	143 Tons	138 Tons	136 Tons	134 Tons
ATSF 90001–90004,90006–90007, 90011–90014,90016 BAWX106–107 BN 631020–631021 CN 674100–674102,675000–675001 CNW 48017–48019 CR 766078,766082–766084,766093, 766164–766172 EL 7600–7601 NS 185522,185523,185550–185553 NW 70100–70102,70104–70112 SOU 50030–50032 UP 50002–50003 QTTX 130500–130501,130550–130556, 130600–130604.130700–130703 VAPX 20000 WP 1601–1602 WPX 100	220 Tons	213 Tons	205 Tons	198 Tons
ATSF 90005,90015 BLE 4606–4610 CN 67002,674000–674003 CNW 48003 CP 309965–309970 CR 766009–766014,766073,766075, 766086–766088,766151, 766164–766172,7660225–7660227 CSXT 600451–600473,600510–600512 600514,600531 NS 185100–185108 NW 202905,202907 PC 766070–766071,766090–766091 766152,766166–766168 SBD 600413 SOU 50088–50089,50092–50096,250050 SP 500605–500606 QTTX 131000–131005,131025–131039	190 Tons	183 Tons	178 Tons	170 Tons
OTHERS	143 Tons	138 Tons	136 Tons	134 Tons

Actual car weight may exceed the maximums by up to 1 ton, due to weighing tolerances.
Cars weighing between 134.01 and 143 tons must be at least 52 feet long.
Cars weighing between 110.01 and 134 tons must be at least 44 feet long.
Cars weighing between 89.01 and 110 tons must be at least 38 feet long.
Cars weighing 89 tons or less must be at least 35 feet long.
Ore cars weighing between 110.01 and 134 tons must be at least 35 feet long
Ore cars weighing 110 tons or less must be at least 24 feet long

Weight and length restrictions indicated in this section and in Item 2 of the INDIVIDUAL SUBDIVISION SPECIAL INSTRUCTIONS do not apply to articulated cars such as trough cars or multiple unit double stack well cars.

6. Instructions to Conductors and Switch Foreman–

When setting out cars on line, the details of activity for each car must be recorded on a copy of the wheel report and submitted to a clerk or agent at the end of each tour of duty. If station or terminal has transferred freight and yard office functions to Ft. Worth Customer Support Center, conductors and switch foreman must then fax all accurately documented wheel reports and switch lists to the Ft. Worth Customer Support Center. After faxing wheel reports or switch list, conductor or switch foreman must call the designated Operation Support Specialist (OSS) that provides service for your respective division or terminal to verify that wheel report or switch list have been received and that documentation is correct.

The following information for wheel reports is to include:

–Exact location where cars are spotted or set out, including track name and location on track (E or W or position).
–Time and date set out.
–If unable to spot cars at proper location, indicate any condition which prevented car(s) from being properly spotted.

This information is necessary to maintain expedient service to our customers and proper records of car movements.

Conductors are required to submit a train delay report with their timeslip whenever operating outside the switching limits of their headquarters. (Also fax train delay report to Ft. Worth Customer Support Center when faxing wheel report).

Switch Lists, Spot and Pull Lists–

In order to maintain an accurate record of all car movements essential to the proper billing of our customers, the following information must be recorded by all conductors and switch foreman on switch list, spot list and pull list:

–Exact location (track or industry) and spot time written on left side margin of the switch list for each car set out and/or spotted. The word "spot" circled to indicate that the car has been spotted.
–Specific industry to which cars are set or for each station.
–Location of cars set out at a station which are not spotted account customer's spot location unable to accept inbound cars. Document on switch list or spot list why car not spotted.
–On pull list, document time car was pulled on left side of margin and circle word "pull" to indicate car was pulled. (If car not pulled, document reason. If industry supervisor gives instruction on not to pull car, document the supervisors name on pull list).

All wheel reports, switch list, spot list and pull list faxed to Ft. Worth Customer Support Center must be followed with a phone call to the respective OSS that serves your division.

7. Dimensional and Special Shipment Restrictions

a. All employees involved in handling dimensional or special shipments must be familiar with and are governed by these instructions.

b. Any dimensional and/or oversize car or special shipment must be accompanied by a movement authorization message issued by BN Clearance Bureau.

c. Before a dimensional or special shipment can be moved in a train, yard forces or employee in charge of station where no yard forces on duty, must obtain permission from the train dispatcher. This does not relieve conductor from complying with Rule 1.47 of the General Code of Operating Rules.

d. Before a dimensional shipment is picked up on line, conductor must obtain permission from the train dispatcher. When dimensional or special shipment is set out on line, conductor must notify train dispatcher promptly as possible.

e. Train dispatcher must issue appropriate track warrant, track bulletin or message when dimensional shipment restricts opposing train and confirm message received.

f. Train with dimensional shipment must not pass or be passed by a train in the same direction unless authorized by the train dispatcher or proper safeguards taken.

g. Following code words are authorized for use involving movement of dimensional or special shipments, and when so used in movement authorization message, trainmen, enginemen and yard forces will be governed by restriction indicated.

RESTRICTIONS APPLICABLE TO CODE WORDS ALPHA THROUGH MIKE INCLUSIVE

Handle cautiously through yards.

When load is handled through turnouts and crossovers, keep adjacent tracks near these turnouts and crossovers clear of other on–track equipment.

CODE	RESTRICTION APPLICABLE
ALPHA	*LOAD WIDTH 11 ft. 1 in. to 11 ft. 8 in. INCLUSIVE* *Load must not pass or be passed by loads over 12 ft. 6 in. wide on 13 ft. track centers and loads over 13 ft. wide on 13 ft. 6 in. track centers. Observe track center restrictions for 11 ft. 6 in. wide loads.*
BRAVO	*LOAD WIDTH 11 ft. 9 in. to 12 ft. 1 in. INCLUSIVE* *Load must not pass or be passed by loads over 12 ft. wide on 13 ft. track centers and loads over 13 ft. wide on 13 ft. 6in. track centers. Observe track center restrictions for 12 ft. wide loads.*
CHARLIE	*LOAD WIDTH 12 ft. 2 in. to 12 ft. 5 in. INCLUSIVE* *Load must not pass or be passed by loads over 11 ft. 8 in.wide on 13 ft. track centers, loads over 12 ft. 8 in. wide on13 ft. 6 in. track centers and loads over 13 ft. wide on 14 ft.track centers. Observe track center restrictions for 12 ft. 4 in.wide loads.*
DELTA	*LOAD WIDTH 12 ft. 6 in. to 12 ft. 9 in. INCLUSIVE* *Load must not pass or be passed by loads over 11 ft. 4 in.wide on 13 ft. track centers, loads over 12 ft. 4 in. wide on 13 ft. 6 in. track centers and loads over 13 ft. wide on 14 ft.track centers. Observe track center restrictions for 12 ft. 8 in. wide loads.*
ECHO	*LOAD WIDTH 12 ft. 10 in. to 13 ft. 2 in. INCLUSIVE* *Load must not pass or be passed by loads over 11 ft. wide on 13 ft. track centers, loads over 12 ft. wide on 13 ft. 6 in.track centers and loads over 13 ft. wide on 14 ft. track centers. Observe track center restrictions for 13 ft. wide loads.*
FOXTROT	*LOAD WIDTH 13 ft. 3 in. to 13 ft. 6 in. INCLUSIVE* *Load must not pass or be passed by loads over 10 ft. 8 in.wide on 13 ft. track centers, loads over 11 ft. 8 in. wide on13 ft. 6 in. track centers and loads over 12 ft. 4 in. wide on14 ft. track centers. Observe track center restrictions for 13 ft. 4 in. wide loads.*
GOLF	*LOAD WIDTH 13 ft. 7 in. to 13 ft.9 in. INCLUSIVE* *Load must not pass or be passed by loads over 10 ft. 4 in.wide on 13 ft. track centers, loads over 11 ft. 4 in. wide on 13 ft. 6 in. track centers and loads over 12 ft. 4 in. wide on 14 ft. track centers. Observe track center restrictions for 13 ft. 8 in. wide loads.*
HOTEL	Reduce speed to 5 MPH or less when passing or meeting moving trains on adjacent tracks. Normal speed may be resumed if other train has stopped.
INDIA	Reduce speed to 5 MPH or less when passing or meeting moving trains on curved portion of adjacent tracks. Normal speed may be resumed if other train has stopped.
JULIET	Reduce speed to 5 MPH or less when meeting trains or cars on adjacent tracks.Observe movement of load and be prepared to stop if necessary. Trains passing or meeting this load must not exceed 5 MPH.
KILOGRAM	Reduce speed to 5 MPH or less when meeting trains or cars on curved portion of adjacent tracks. Observe the movement of load and be prepared to stop if necessary. Trains passing or meeting this load must not exceed 5 MPH.

CODE	RESTRICTION APPLICABLE
LIMA	Load may not clear equipment on adjacent tracks. Adjacent tracks must be clear when necessary and possible. Passing or meeting is permitted only if equipment on adjacent track has stopped and the oversize load has speed reduced to 5 MPH or less. If oversize load cannot be moved past the other train, then other train may attempt to move by such load at 5 MPH or less. Observe the movement of the load at all times and be prepared to stop instantly and arrange to pass safely by switching, if necessary.
MIKE	Load may not clear equipment on curved portion of,adjacent tracks. Adjacent tracks must be kept clear when necessary and possible. Passing or meeting is permitted only if equipment on adjacent track has stopped and the oversize load has speed reduced to 5 MPH or less. If oversize load cannot be moved past the other train, then other train may attempt to move by such load at 5 MPH or less. Observe the movement of the load at all times and be prepared to stop instantly and arrange to pass safely by switching, if necessary.
NOVEMBER	When passing other loads carrying NOVEMBER restriction, do not pass on curved part of adjacent tracks.
OSCAR	Do not pass loads wider than _____ on adjacent parallel tracks.
PAPA	Stop and proceed on hand signals only while watching for very close side or overhead clearance to bridge or structure.
QUEBEC	Reduce speed not to exceed 13 MPH, watching for close side or overhead clearance to bridge or structure.
ROMEO	Give careful handling and keep adjacent track clear at turnouts, crossovers and other sharp curves in yard, interchange or industry tracks. Load may, or may not, clear man on side of car or engine when on adjacent track. Employees on train handling and other trains involved should be notified.
SANDWICH	The above restrictions apply to load(s) of wire mesh securely loaded and fastened down to car so that load cannot shift and exceed loaded measurements given above.
TANGO	Due to extreme high valuation, arrange for proper policing in transit. This shipment must not be humped, switched with motive power detached, or allowed to run free. Do not kick other cars against this shipment.
UNIFORM	Shipment urgently required at destination. Give best handling consistent with safety and restrictions. Do not set out if safe to move.
VICTOR	This shipment must not be detoured or rerouted without further clearances.
WHISKEY	No further restrictions necessary, however, due to nature of shipment, handle with extreme care through all yards, turnouts, switches and at locations where there are close track centers. Protect against other wide loads and equipment on adjacent tracks. Attach copy of restrictions to waybill. Post connecting division. Advise yard forces and train and engine crews handling.

8. Trackside Failed Equipment Detectors (FED)

Failed Equipment Detectors (FED) are devices that detect hot bearings, hot wheels and dragging equipment on cars and locomotives. They are located beside the track at locations shown under Individual Subdivision Special Instructions. in addition, those devices that only identify dragging equipment will also be identified under the Individual Special Instructions. Failed Equipment Detectors providing protection in one direction only will be indicated under the Individual Subdivisions. If no direction is indicated Failed Equipment Detector provides protection in both directions.

Blowing or swirling snow from passing trains can prevent detectors from obtaining a proper reading of wheel or bearing temperature. When these conditions are possible, reduce the trains speed to the extent necessary to allow the detector to scan the train.

Except in emergency, do not use radio when train is within 150 feet of FED until entire message has been received from that detector.

FED equipment will transmit a **Detector Message** immediately after train has passed the detector. Train crew must be alert for and monitor FED radio reports. A four second warning tone is transmitted each time a defect is detected.

The following are examples of messages transmitted by FED equipment and the actions required by the train crew. **Note:** XXX is the axle count from head end of train to the defect indicated and includes locomotive axles. When left or right side is announced, the proper side is determined by looking in the same direction as train movement over the detector.

Detector Message	Train Crew Action
" . . . No Defects"	Proceed
" . . . Integrity failure"	Train may proceed unless other messages require inspection.
". . . . Train to Slow	Train may proceed unless other messages require inspection.
" . . . First hot box right side XXX"	Stop train; inspect near indicated axle.
" . . . First dragging equipment near axle XXX"	Stop train; inspect near indicated axle.
" . . . First hot wheel right/left side from XXX to XXX"	Stop train; inspect near indicated axle.
" . . . (No message or incomplete message)"	Stop and inspect entire train.
" . . . Excessive alarms"	Stop and inspect entire train.

Detector messages may describe more than one defect such as:

" . . . First hot box right side XXX"
" . . . First hot wheel right/left side from XXX to XXX"
" . . . Second hot box right side XXX"

End of message will be indicated by words "Out" or "End of transmission".

When an FED which protects bridge, tunnel or other structure is out of service, including when **Detector Message** is ". . . Integrity failure", or when **Dectector Message** is ". . . .Train to Slow", inspect train in advance of such structure.

Conductor must report to the train dispatcher when **Dectector Message** is "Integrity failure".

When **Detector Message** requires an inspection, be governed as follows:

Only inspect side of train specified in the message; if neither side is specified, inspect both sides.

Location of failed equipment will be determined by counting axles from head end, including locomotive axles. When physically impossible to make a walking inspection of entire train, (as an example, when the train is stopped on a bridge with no walkway or when the conditions would require an employee to be on, under or between any of the equipment), train may be moved at not more than 10 MPH to complete the inspection.

If the inspection does not confirm a defect, inspect at least eight axles to the front and rear of the indicated axle using heat indicating crayon.

FREIGHT TRAINS

If the actual inspection of equipment as required by detector does not reveal a defect or indication of overheated bearing, inspection of train must be made of at least 8 axles on each side of indicated equipment. If no defect or indication of overheating is found, train may proceed, but crew must observe the indicated equipment closely for the next 25 miles or until another inspection by a hot bearing detector has been made.

If overheating or defect on same equipment is detected by two successive hot bearing dectors, the identified equipment must be set out of train. FEDs that are Dragging Equipment Detectors only must not be used when counting successive FEDs.

If FED indicates overheating on the wheel of a caboose having a generator belt attached to the axle, caboose need not be set out if no other mechanical defect is noted.

Connecting crew members, mechanical forces on duty at next terminal, or supervisor must be informed of condition when unable to locate failed equipment on locomotive or caboose.

PASSENGER TRAINS

If failed equipment is not found after inspecting eight axles to the front and rear of the indicated axle, then inspect entire train. If failed equipment is not found during inpection of entire train, train may proceed. Crew members must make frequent observation of that equipment for 25 miles unless the next FED does not give an alarm on the same axle. If the defect is detected on the same passenger equipment by two successive FED's, that equipment must be set out of train. FEDs that are Dragging Equipment Detectors only must not be used when counting successive FEDs.

Heat indicating crayon will be used to check journal bearing temperature. Normally, 200 degree Farenheit crayon will be used; however 163 degree Farenheit crayon will be used when outside temperature is below 32 degrees Farenheit. Where available, hand held infared device will be used instead of crayon to detect excessive journal bearing temperature.

Conductor will report to the train dispatcher when an FED failed to detect an overheated bearing found within 25 miles of detector. Train dispatcher will notify the signal supervisor and the signal maintainer to have the detector inspected.

Radio Tone detectors are FED's that transmit a radio tone only and are shown under Individual Subdivison Special Instructions. An intermittent radio tone will be broadcast immediately after train has passed the detector site to indicate no dragging equipment was detected. When a continuous radio tone is heard while passing through the limits of a Radio Tone detector; inspect entire train for dragging euipment. When an intermittent radio tone is not heard, stop train and inspect for dragging equipment.

9. Amtrak Instructions

Equipment: Unless otherwise provided,
Equipment that cannot be safely operated at maximum speed must be set out at first available location unless train can arrive final destination in less time than would be required to make the set out.

Maximum speed for freight locomotives in Amtrak service is 70 MPH.

Movement with locomotives between cars is prohibited.

Amtrak crews being relieved or helped by BN crews must handle all 480 volt AC power and set up Amtrak locomotives in the trail position when BN crew and BN locomotives are used to handle Amtrak trains. BN crews are prohibitied from handling adjusting or performing work between or under cars when Head End Power (HEP) 480 volt AC is energized.

Departure from originating station with HEP cables short looped is prohibited.

In the event of HEP failure, crew members must determine if train may be handled safely and every effort made to advance train to the next siding or scheduled stop before repairs are made.

All HEP cables must be secured with approved tie down grommets.

Air hoses and HEP cables must be secured no less than 4 inches above top of rail.

Double stretch is required after pick up or set out of cars or locomotives.

Required hand tools and supplies must be available on locomotive.

Train garbage/refuse to be off loaded into FDA approved containers.

When temperatures are below freezing, maximum of 15 cars allowed on HEP.

Dumping Toilets

Except when discharged into appropriate container, dumping of toilets from Amtrak trains is prohibited while:

a. Passing through limits of Track Bulletin Form B.
b. In Nelson Bennett, Seattle, Everett, Cascade and Flathead tunnels.

Train and engine crews will coordinate their efforts to ensure compliance. Train crews are responsible for notification of on board personnel.

Speed Sensor Override Switch must not be placed in DUMP BELOW 25 MPH position except when an employee is in attendence.

Delay Reports

Prior to tieup, Engineer or Conductor must furnish train dispatcher office with official delay report. Such delay reports:

Will indicate all time lost based on station dwell times and best possible run times.

Will show reason for delay over dwell times and all other time lost IE. passengers, baggage, slow order, hot/cold weather restriction, locomotive malfunctions, etc.

Will include car/locomotive initial and number, axle and journal if applicable, reason for inspection and defect, if any found.

Will indicate number of group passengers entraining/detraining with group name and reservation number.

Will indicate number of passengers entrained/detrained at other than final ticketed destination for alternate service.

Will include SD relief numbers authorizing "hold" or "delay".

10. Storage of Cars Within Yard Limits Non-Signaled Territory

Within yard limits in Non–ABS territory, the main track must not be used as a storage track except in case of emergency. When it becomes necessary to leave cars on main track in such territory, they must be protected by track warrant or track bulletin. This does not modify requirements of Rule 6.13.

11. Commodities Insulating Track in CTC and ABS

Employees should be alert for insulating commodities such as clay, chips, oil, etc., on top of rails. This condition could possibly insulate the track and cause loss of train shunt. Such conditions should be promptly reported and trains protected per rules while in CTC and ABS territory.

12. In Effect on Burlington Northern Railroad

-General Code of Operating Rules, THIRD EDITION, effective April 10, 1994
Pages 15–14 of the General Code of Operating Rules, Third Edition, may be missing due to a printing error. Therefore all employees governed by the GCOR must replace page 15–13 with reprinted pages 15–13 and 15–14 in order to have a complete rule book.
-Air Brake and Train Handling Rules, Form 15338.
-Train Dispatcher's Manual, Form 51545, Revised 4/10/94.
-Operator's Manual, Form 15472, Revised 4/10/94.
-Maintenance of Way Rules, Form 15125, Revised 4/10/94.
-Safety Rules and General Rules, Form 15001, Revised 4/10/94
-Emergency Response Guidebook, DOT Form P 5800.6.

13. General Code of Operating Rules Changes and Additions

The following rules apply only on Burlington Northern Railroad.

Turnouts Equipped with Two Switch Machines (Moveable Point Frogs)–

Locations where turnouts are equipped with two switch machines will be identified under Individual Subdivision Special Instructions.

When dual control switches equipped with two switch machines are operated by hand, the switch machine which operates the switch points and the switch machine which operates the moveable point frog must both be operational.

When turnouts are equipped with crank operated machines the hand crank must be turned an additional 10 revolutions after the switch points are in the desired position to insure sufficient closure tension at the switch points.

Rules 9.13.1 apply at all locations where turnouts are equipped with two switch machines (moveable point frogs).

Rule 1.30 Riding Engine– the following paragraph is added:

In conductor only train operations during over the road movements the conductor will occupy the controlling locomotive.

Rule 1.33 Inspection of Freight Cars– the the last paragraph that reads, "A freight car with three bad order tags indicating that the car is safe to move may be moved to the nearest car repair point. The conductor will remove one bad order tag from the side with two tags. The conductor will use this written information from the tag to inform other crew members of the restriction."

Is changed to read:

Freight car with bad order tags indicating that car is safe to move may be handled to nearest repair point.

Rule 1.48–Getting On and Off Moving Equipment–New rule added:

Getting on or off moving engines or cars is prohibited except where otherwise specified by Special Instructions or in cases of emergency.

Rule 2.17 Radio Testing–the following paragraph is added:

All road trains must have an operable locomotive radio in the controlling locomotive. If the radio should fail enroute, the locomotive may continue as the controlling locomotive only if no other locomotive is available to be picked up or switched to the controlling position, and then, only to the next radio repair facility.

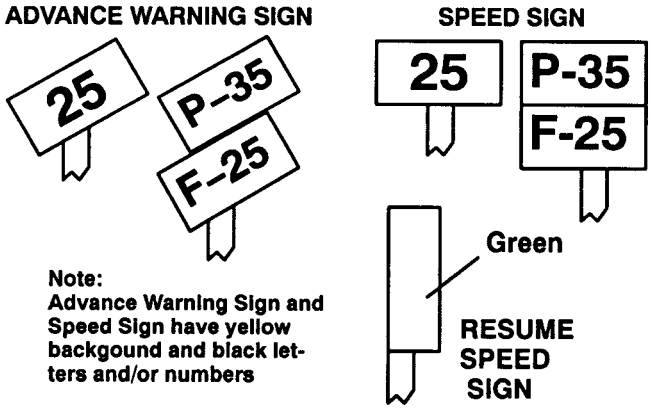
Rule 5.5 - following paragraphs are added:

Reduce speed limits are designated by Advance Warning Sign (diagonally upward), Reduce Speed Sign (rectangle) and Resume Speed Sign (vertical).

The Advance Warning Sign will be placed two miles in advance of the location where the lower speed takes effect. At the point where the reduced speed applies, a speed sign will repeat the permissible speed. The lower speed will be in effect until a Resume Speed Sign or another Speed Sign is displayed.

At the end of a reduced speed zone, a train or engine will be governed by a Speed Sign displaying a higher speed or a Resume Speed Sign which will authorize the maximum permissible speed on that subdivision. In either case, the speed must not be increased until the entire train has passed the sign displayed.

Locations where reduced speeds are required, but which are not indicated by signs, are listed in the special instructions for each subdivision.



These signs as illustrated, apply to train and engine movements as follows:
Figures preceded by letter P apply to passenger trains.
Figures preceded by letter F apply to freight trains.
Figures not preceded by a letter apply to all trains.

Rule 5.17 Utility Employees–

A utility employee is a railroad employee assigned to and functioning as a temporary member of a train or yard crew whose primary function is to assist the train or yard crew in the assembly, diassembly or classification of rail cars, or operation of trains.

The utility employee shall perform service as a member of only one train or yard crew at any given time. Service with more than one crew may occur during the same shift or tour of duty, but may not occur at the same time. No more than three utility employees may be attached to one train or yard crew at any given time.

The utility employee may be assigned to and serve as member of a train or yard crew without blue signal protection only under the following conditions:

- The train or yard crew is assigned a controlling locomotive that is under the actual control of the assigned engineer of that crew.
- The engineer is in the cab of the controlling locomotive. However, when the locomotive is stationary, the engineer may be replaced by another member of the same crew.
- The utility employee establishes communication with the crew by contacting the ranking crew member of the train or yard crew before commencing any duties with the crew.
- Before each utility employee commences duties, the ranking crew member shall provide notice to each crew member of the presence and indentity of the utility employee. Once all crew members have acknowledged this notice, the ranking crew member will advise the utility employee that he is authorized to work as part of the crew. Thereafter, communication shall be maintained in such a manner that each member of the crew understands the duties to be performed and whether any of those duties will cause any crew member to be on, under or between rolling equipment.
- The utility employee is performing one or more of the following functions:
  - Set or release hand brakes.
  - Couple or uncouple air hoses and other electrical or mechanical connections.
  - Prepare rail cars for coupling.
  - Set wheel blocks or wheel chains.
  - Conduct air brake tests, including cutting air brake components in or out and positioning retaining valves.

  OR
  - Inspect, test, install, remove, or replace a rear end marking device or end of train device.

When the utility employee has ceased all work in connection with that train or yard crew and is no longer on, under, or between the equipment, the utility employee shall notify the ranking crew member. The ranking crew member shall than provide notice to each crew member that the utility employee is being released from the crew. Once each crew member has acknowledged the notice, the ranking crew member shall than notify the utility employee that he is released from the train or yard crew.

Communications required by this instruction shall be conducted between the utility employee and the ranking crew member either through direct verbal contact or by radio.

Any employee who is not assigned to a train or yard crew or authorized to work with a crew under the conditions outlined above must be protected by blue signal when working on, under, or between rolling equipment.

Rule 6.1.1 Direction and Numbers–new rule added:

When requesting or repeating track and time limits, track warrants, track bulletins, train location lineups and OCS, observe the following guidelines:

Directions–Directions (North, South, East, West) must be pronounced, then spelled.

Numbers–When the figure has more than one number:

1. State the number in words. (Example: Three–hundred sixty five)
2. State each figure in the number. (Example: Three, six, five)

When the figure has only one number:

1. State the number. (Example: Three)
2. Spell the word. (Example: T, H, R, E, E)

Rule 6.3 Main Track Authorization–following last paragraph is added:

Requesting Authority

The employee requesting authority must be qualified on these rules and must tell the train dispatcher or control operator exactly where the main track will be entered. Employees and equipment must not enter the main track at any other point unless otherwise authorized.

Rule 10.3–The instructions inside the box are changed to read:
Track and time does not authorize trains to occupy the main track within automatic interlocking limits.

Rule 10.3A Passing Signal Displaying Stop or Stop and Proceed Indication–
First line is changed to read:

Except at automatic interlockings, trains granted track and time.

Rule 10.3C Track and Time Release Within the Limits– Following is added:

Employees releasing track and time limits must state the following:
- Their name
- The track and time limit number being released
- The authorized track limits being released

Rule 14.10 Track Warrant in Effect- Following is added:

An employee releasing a track warrant must state the following:
- Their name
- The track warrant number being released
- The authorized track limits authorized.

Rule 17.0–Occupancy Control System (OCS)

Rule 17.1–OCS for Trains and Engines–

In addition to GCOR Rule 6.13 (Yard limits), the following also applies at locations designated under the individual subdivision special instructions:

Occupy the Main Track–

Before occupying the main track, trains or engines must receive permission from the train dispatcher.

When requesting permission give the following:
- –Engine number
- –Direction if applicable
- –Location
- –Track or tracks to be used

When permission is granted, write the instructions down and repeat them to the train dispatcher, who will check them and, if correct, will say "Okay," and give time and his initials.

OCS does not relieve a train or engine from complying with restricted speed in non signaled territory.

All trains or engines clearing the main track at other than control points must advise the train dispatcher when they are clear of the limits.

Designated Limits–

OCS limits must be designated by specifying track, where required, and exact points such as switches, mile posts, or other identifiable points.

Direction of Movement–

When trains or engines receive permission to proceed from one point to another, they must only move in the direction specified.

When trains or engines receive permission to work between to specific points, they may move in either direction between those points.

Same Limits with a Train or Engine–

Before a train or engine receives permission to occupy the same limits with a train or engine working between two locations, a crew member of each train or engine must be notified. When notified, all movements must be made at restricted speed.

Same Limits with Men or Equipment–

Before a train or engine receives permission to occupy the same limits with men or equipment, the maintenance of way employee in charge and a crew member of the train or engine must be notified. When notified, all movements must be made at restricted speed.

Permission Expired–

When unable to contact the train dispatcher and OCS permission expires, permission is extended until the train dispatcher can be contacted.

OCS Form–

The following is an example of the OCS form:

"OCS" Occupancy Control System

No._____ _____ 19____

To: _____ At:_____

A. ☐ OCS No. _____ is cancelled.
B.1 ☐ Proceed from _____ to _____ on _____ track.
B.2 ☐ Proceed from _____ to _____ on _____ track.
C. ☐ Work between _____ and _____ on _____ track.
D. ☐ Do not proceed until _____ arrives at _____ .
E. ☐ Following _____ .
F. ☐ Limits occupied by train or engine between _____ and _____ .
G. ☐ Limits occupied by men or equipment between _____ and _____ .
J. ☐ This permission expires at _____ .
K. ☐ Do not exceed _____ MPH between _____ and _____ .
L. ☐ Other specific instructions _____

OK _____ Issued by _____ Limits reported clear at _____

(Mark X in box of each item instructed.)

Several rules in the General Code of Operating Rules allow and/or require that supplemental instructions be carried in the timetable or special instructions. Following find the supplemental instructions that apply to Burlington Northern Railroad.

Rule 3.3 Time Signals–

Time signals received from WWV TIME may be used to set watches and clocks to correct time. The hours are given in Coordinated Universal Time; therefore, only the minutes and seconds may be used. Telephone number for WWV TIME is 8–998–8463 (8–WWV–TIME)

Rule 4.3 Timetable Characters–

A – Automatic Interlocking (actuated automatically by the approach of a train).
B – General orders, notices, and circulars.
I – Manual Interlocking (operated by a control operator).
J – Junction.
K – Standard clock.
M – Railroad crossing protected by signals or gates.
T – Turntable or wye.
U – Railroad crossing not protected by signals or gates.
X – Crossover.
X(2) – Multiple crossovers.
Y – Yard limits.

Rule 6.23 Emergency Stop of Severe Slack Action–
Inspection of Cars and Units–

When a train or engine is stopped by an emergency application of the brakes or severe slack action occurs while stopping, the train involved must not proceed or flagman be recalled until it has been determined that it is safe to do so by visual inspection of the train. If known that the train brake pipe pressure is being restored by observing caboose gauge, rear of train device or telemetry device in engine cab, train may be moved at not more than 10 MPH until inspection can be made. If there is any reason to suspect that it is not safe for train to proceed, a walking inspection of the train and track must be made on each side of all cars and units to determine that equipment and track are in safe condition.

In cabooseless train operation, the initial and number of the car on which the rear of train device or marker is applied must be ascertained by the conductor. If rear of train device or marker is missing, it must be determined that the train is complete before proceeding.

Rule 6.26 Use of Multiple Main Tracks–

When using main tracks, except double track, in westward or southward timetable direction, they will be numbered consecutively from right to left beginning from Main 1. When using in eastward or northward timetable direction, they will be numbered from left to right beginning with Main 1.

Rule 9.12.3 Automatic Interlockings–

At a signal displaying a Stop indication, in addition to complying with the instructions in the release box, the following must be complied with:

If signal does not change its indication at expiration of time release interval, train may then proceed on hand signal from a member of the crew at the crossing if there is no train approaching on conflicting routes.

If a train is approaching on a conflicting route, hand proceed signal must not be given until such movement has been completed over the crossing, or has come to a stop at the governing signal.

If a train is standing between the absolute signals on a conflicting route, the proceed signal must not be given until after thorough understanding has been had with the crew of the train on the conflicting route.

15. Maintenance of Way Operating Rules Changes and Additions

Rule 3.3 Time Signals–

Time signals received from WWV TIME may be used to set watches and clocks to correct time. The hours are given in Coordinated Universal Time; therefore, only the minutes and seconds may be used. Telephone number for WWV TIME is 8–998–8463 (8–WWV–TIME)

Rule 4.3 Explanation of characters:

A–Automatic Interlocking (actuated automatically by the approach of a train).
B–General orders, notices, and circulars.
I–Manual Interlocking (operated by a control operator).
J–Junction.
K –Standard clock.
M–Railroad crossing protected by signals or gates.
T–Turntable or wye.
U–Railroad crossing not protected by signals or gates.
X–Crossover.
X(2)–Multiple crossovers.
Y–Yard limits.

Rule 6.3.2–

The following EXCEPTION is added:
Employees may clean switches on other than a main track, controlled siding, or bowl track when hearing is impaired, without other protection, when a lookout is assigned. The lookout must be qualified on the Maintenance of Way Operating Rules and is responsible for stopping train and engine movements short of the unprotected employees.

16. Air Brake and Train Handling Rules Changes and Additions.

Rule 106 (C) - new rule added:

106 (C). When cars are picked up on line or at interchange where mechanical forces are not on duty, train crew must open friction bearing box lids and check for missing or displaced components, contamination and visible free oil before departing.

Rule 106 (D) - new rule added:

106 (D). When train stops enroute, train crew member must examine friction bearing boxes for signs of distress as time will permit.

Rule 115 - is changed to read:

Brake shoes must not be worn to the point that will allow the backing plate to come in contact with the wheel tread when the brakes are applied.

Rule 119(F)–is changed to read:

F. Locomotive high voltage cabinet doors must be kept closed during operation. DC locomotives must be isolated and AC locomotives must be properly discharged before any electrical cabinet door bearing the sign "DANGER" is opened.

Rule 119 H - is canceled.

Rule 123 A - is changed to read:

A. Each locomotive in use must be inspected at least once during each calendar day. A written report of the inspection shall be made on Form 16450-N, Locomotive Inspection Report, for each locomotive requiring the inspection.

Rule 203 - new rule:

203. Brake pipe maintaining feature.

When the controlling locomotive or yard air brake testing device is equipped with a maintaining feature, this feature must be cut out during brake pipe leakage tests after the required brake pipe reduction has been made.

Rule 204 B - is changed to read:

B. The locomotive must be equipped with an Air Flow Indicator. This indicator must either be equipped with an orange or red calibration mark or display a direct reading of air flow, in cubic feet per minute (CFM), in 10 CFM increments from 10 to 80.

Rule 204 D - is changed to read:

D. The train brake system must be charged to within 15 psi of the regulating valve setting, and the air flow pointer must be to the left of the calibration mark or not exceed 60 CFM.

Rule 210 - new rule:

210. Service Track Locomotive Air Brake Test

A. Before locomotives are offered for service from a mechanical facility, the following tests must be made to ensure the safe operation of the brake system:

1. Ensure brake pipe is set to the prescribed pressure.
2. Apply independent brake fully and observe brakes apply on each locomotive. Release independent brake and observe brakes release on each locomotive.
3. With equipment fully charged, using the automatic brake valve, make a 10 psi brake pipe reduction and observe brakes apply on each locomotive.
4. On 26L equipment, move automatic brake valve cutout valve to OUT position. On 24RL and No. 6 equipment, move automatic brake valve handle to LAP.
5. Observe brake pipe gauge and note leakage does not exceed 5 pounds per minute.
6. Observe equalizing reservoir gauge and note zero leakage.
7. On 26L equipment only, move automatic brake valve handle to Minimum Reduction position, and observe equalizing reservior gauge does not rise.
8. Actuate, observe brake release on each locomotive, and place automatic brake valve, cutout valve, in IN position.
9. Using the automatic brake valve, make a 20 psi brake pipe reduction, observe brakes apply on each locomotive. Release automatic brake and observe brakes release on each locomotive.
10. Move independent brake valve to full application position.

Rule 311 (F) is cancelled.

Rule 344 (F)- is changed to read:

344 (F). Cresting Grade

Cresting grade is defined as a long ascending grade which changes to a long decending grade, both grades being of sufficient magnitude to require a change in train handling procedures as the grade is being topped.

1. Reduce the throttle just before the locomotive crests the grade.
2. Continue to reduce throttle to a position that will prevent speed increase until at least one half the train has crested the grade.

*Utilizing this method will reduce the additional draft force created by the weight of the locomotive and cars as they crest the grade.

*In curve territory, this method will reduce the lateral forces transmitted to the track structure.

Rule 503 - is changed to read:

503. Unusual Conditions

A. If the engineer becomes aware of abnormal changes or loss of brake pipe pressure with the train brakes released and a true gradient established, or if a brake application cannot be transmitted, stop and secure the train.

B. Any train experiencing air brake problems must immediately notify the train dispatcher. The dispatcher must then notify the Trainmaster, Manager Operating Practices or Superintendent, who will make the determination if the train can be safely moved or held for inspection.

C.If a train qualified by the Air Flow Method experiences an increase in brake pipe air flow and/or an increase in brake pipe gradient and the air flow pointer does not return to the limits established in the initial terminal air brake test within the time limits established in the maximum charging time chart in this section, the train crew shall stop and repair leaks if possible. If unable to make repairs, train may proceed with cautuion only if the rear brake pipe pressure is greater than 60 PSI.

Rule 526–is cancelled and reissued to read as follows:

526 Locomotive Engineer Qualification

A. In accordance with federal regulations and the Burlington Northern certification program, locomotive engineers must be certified in the appropriate class of service in order to operate a locomotive (49 CFR 240). Engineers must have a locomotive engineer certificate in their posession while operating a locomotive and must display that certificate when requested by a company officer or FRA representative.

B. Only certified train service locomotive engineers are permitted to operate locomotives outside the confines of a locomotive servicing track area, except certified locomotive servicing engineers may operate locomotives within yard or terminal area for hostling purposes. Locomotive servicing engineers must not operate locomotives coupled to cars.

C. Certified student engineers are permitted to operate locomotives under the close supervision of a certified train service engineer or locomotive servicing engineer, governed by any limitations of the class of service.

D. A certified train service engineer may be assigned to run without making familiarization trip(s) if he or she has worked over the territory during the preceding twelve months as either a train service engineer, student engineer or trainman on board the controlling locomotive. No familiarization trips are required for yard or mechanical department assignments.

E. An engineer who fails to meet the criteria established in paragraph D above, must make familiarization trip(s) with a certified train service engineer pilot who is qualified on the territory. A trainman assigned to work on board the controlling locomotive may serve as a pilot provided they are currently certified as a train service engineer, and qualified on the territory. A Supervisor of Locomotive Engineers will determine the number of familiarization trips needed and will conclude when and if an engineer is qualified. Foreign line certified engineers must be qualified on Burlington Northern operating rules before operating without a pilot.

Rule 527 B - is changed to read:

B.When helper locomotives are added to other than the head end of train, after the helpers are coupled and before the angle cocks are opened to prevent an undesired release of the brakes on the train being handled:

1. Helper engineer must make an automatic brake pipe reduction down to the same pressure as the rear brake pipe pressure of the train being handled. If the rear brake pipe pressure is not known, helper engineer must make a 10 psi automatic brake pipe reduction.
2. Move the automatic brake valve cutout valve to the OUT position.
3. Move the automatic brake valve handle to CONTINUOUS SERVICE position and ensure equalizing reservior pressure is reduced to zero (0).
4. Angle cocks may now be opened.

*If the train being handled does not have a brake application in effect, step 1 is not necessary.

17. Safety Rule Addition_
Vehicles above 10 feet in height must have a height marked on outside and on dash of vehicle.

18. Automatic Cab Signals
Cab signal equipment must be cut out on all portions of Burlington Northern Railroad except on suburban equipment on Chicago Division.

19. Verification of Rules Examination
Employees required to pass rules examination must have a current rules examination card in their possession while on duty.

20. FRA Random Drug Testing–
TY & E employees selected for FRA Random Drug Testing must show the start time of the RDT in the remarks column of their timeslip. Start time of RDT begins when a supervisor hands the employee a letter advising him/her that they are selected for RDT. A stop time on RDT is necessary only if different from their off duty time.

21. Policy for Use of Mobile Radio Access System (MRAS)
The Mobile Radio Access System is a radio system and all radio rules contained in the General Code of Operating Rules, Maintenance of Way Operating Rules, and Safety Rules and General Rules, apply. Mobile radios and base station radios must be identified and the use of "over" and "out" is required.

The Mobile Radio Access System is not to be used for personal business which includes phone calls to home or access to tape recorded crew line up information.

22. Key Trains–
A train may be designated as a "key train" depending on the type and number of hazardous material cars they are handling in the consist. When notified that a train is designated as a "key train", train crew and train dispatcher will be governed as follows:

Train Crew Responsibility–

–Speed must not exceed 50 MPH.

–Unless notification was made by the train dispatcher, verify that the train dispatcher is aware that your train is designated as a "key train".

–When a key train is met or passed where the speed on the siding or adjacent track is 10 MPH or less, one of the trains must be stopped before the other train passes.

– If Failed Equipment Detector requires an inspection and no defect or indication of overheating is found, speed must not exceed 30 MPH until another inspection by a hot bearing detector has been made.

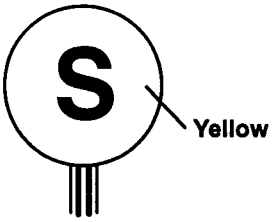
Train Dispatcher Responsibility–

–Unless notification is made by the train crew, verify that the train crew is aware that their train is designated as a "key train".

–The "key train" will hold the main track at all meeting and passing points where the speed on the siding is 10 MPH or less whenever possible.

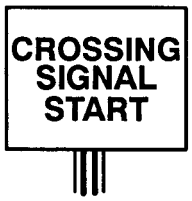
–When a key train is met or passes where the speed on the siding or adjacent track is 10 MPH or less, one of the trains must be stopped before the other train passes.

23. Roadway Signs - Except as shown, the following roadway signs have white background and black letters and/or numbers

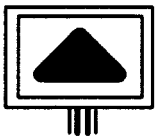


Spring Switch
Rule 8.9

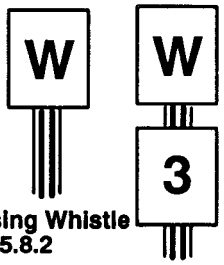
One Mile Switch



Crossing Signal Start
Rule 6.32.2



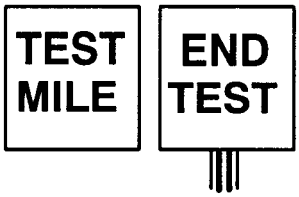
Crest of Grade
Air Brake Rule 344 (f)
Black on yellow reflective background. Some locations were Rule 344(F) applies may not be identified with this sign.



Crossing Whistle
Rule 5.8.2

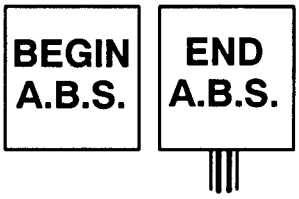
Numeral when attached, denotes the number of crossings less than 1,320 feet apart.

Derail
Rule 8.20

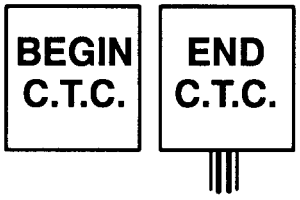


Begin Test Mile and End Test Mile

Westward Siding or
Eastward Siding
Rule 6.28.1

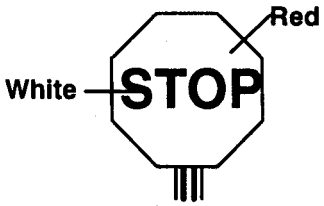


Begin and End A.B.S.

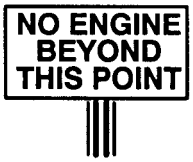


Begin and End C.T.C.

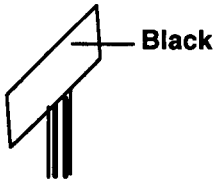
23. Roadway Signs (Cont.)



Stop
Rules 6.16 and 6.18



No Engine Beyond
This Point

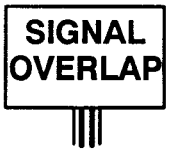


FLANGER

White letters on reflective red background, or black letters on white background.
Rule 6.32.2

Stop

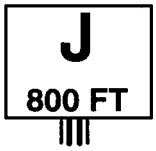
End Double Track



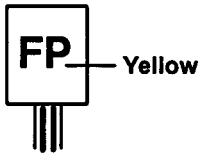
Signal Overlap
Rule 9.21

End of Overlap
Rule 9.21

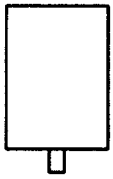
Railroad Crossing
Rules 6.16 and 6.18



Junction
Rule 6.18

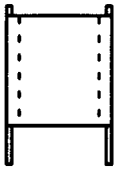


Fouling Point



Track Flag

Yellow–Rule 5.4.2
Yellow–Red Rule 5.4.3
Red–Rule 5.4.7 or
Green–Rule 5.4.5



Track Flag

Yard Limit
Rule 6.13

One Mile Draw Span
Rule 6.16

No Clearance

24. Tonnage Profile Chart

A "Tonnage Chart Profile", as shown in the following example, may be included on the bottom of the conductor's wheel report. This profile will give you the following information in a "snapshot" type view of train.

```
TONNANGE PROFILE OF TRAIN 808    15 – JAN – 91  22:42

a. * * * SPEED RESTRICTION EXISTS ON THIS TRAIN * * *

b. STATION  LDS   MTYS   TONS   FEET
   TOTALS   52    11     6452   3736      63 CARS     1 CABS     2 ENGS

c. 102 TONS/OP. BRAKE

d. TON
   150  ..                                                                    .
   140  ..                                                                    .
   130  .. X                    X XXXXX       XXXX  X XX  XXXXXX             .
   120  .. X X    X             X XXXXXXXXXX  XXXX  X XX  XXXXXX   X         X X  .
   110  .. X X    XX  XXXXXX    X XXXXXXXXXX  XXXX  X XX  XXXXXXXXXX XX X XXX  XXXX .
   100  EEX X     XX  XXXXXXX   X XXXXXXXXXX  XXXX  X XX  XXXXXXXXXX XXXXXXXX  XXXXC
    90  NNX X     XX  XXXXXXX   X XXXXXXXXXX  XXXX  X XX  XXXXXXXXXX XXXXXXXX  XXXXA
    80  GGX X     XX  XXXXXXX   X XXXXXXXXXX  XXXX  X XX  XXXXXXXXXX XXXXXXXX  XXXXB
    70  .. X X    XX  XXXXXXX   X XXXXXXXXXX  XXXX  X XX  XXXXXXXXXX XXXXXXXX  XXXX .
    60  .. X X    XX  XXXXXXXXX X XXXXXXXXXX  XXXXX X XX  XXXXXXXXXX XXXXXXXXX XXXX .
    50  .. X X    XX  XXXXXXXXX X XXXXXXXXXX  XXXXXXX XX  XXXXXXXXXX XXXXXXXXX XXXX .
    40  .. X XX   XX  XXXXXXXXX X XXXXXXXXXX  XXXXXXX XX  XXXXXXXXXX XXXXXXXXX XXXX .
    30  .. XXXXXXXX XXXXXXXXX X XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX XXXXXXXXX XXXX .
    20  .. XXXXXXXX XXXXXXXXX X XXXXXXXXXX  XXXXXXXXXX  XXXXXXXXXX XXXXXXXXX XXXX .

e. LEN                          S S   SSS SS       LL   S        S              LL     LSS
      S
f. SPH          D#                                  D            ################
 D=DAN E=EXP H=HWI P=POG R=RM #=ALL OTHER SPHDLG CODES
```

24. Tonnage Profile Chart (Cont.)
NOTES:

a. ***SPEED RESTRICTION EXISTS ON THIS TRAIN*** will print if a car on the wheel report has "SPD" in Special Handling Field.
b. Number of loads, empties, tons, feet, length of train, number of cars, caboose(s) and engines as shown on wheel report. Engines are not included in any of these totals except "ENGS" total.
c. Tons per operative brake – per Timetable System Special Instructions. Engines are not included.
d. Tonnage indicator (20 to 150 tons) – cars are listed vertically using X's to indicate amount of tonnage per car. For example: First car behind engine weighs 130 tons and the 62nd car weighs 110 tons. Engines will be indicated by "ENG". Caboose will be indicated by "CAB".
e. "LEN" represents car length – "S" = Short car 50 feet or shorter.
"L" = Long car 80 feet or longer.
f. "SPH" represents special handling – "SPH" codes are listed at bottom of chart.

This chart should assist in train handling decisions and provide for a safer train operation.

Special Handling Codes shown on wheel report.

CCR	Customer Chassis Required
COM	Combustible
CRO	Circus Ramp
DAN	Dangerous
DNH	Do Not Hump
EHI	Excessive Height or Weight Not Being Handled as a Hi–Wide or Overload
EPG	Explosives and Poison Gas
EXP	Explosives
HFR	Home For Repair
HIV	High Value Load
HWI	High Wide
INB	In Bond
MIC	Person in Charge of Car
MRE	Mechanical Refrigeration
NPR	No Placard Required
ORM	Other Regulated Material
PBC	Perishable in Boxcar
POG	Poison Gas
RAM	Radioactive Material
RE	Rear Ender
RII	Rejected in Interchange
RSS	Rail Surveillance Service
R90	Rejected Interchange Rule 90
SPD	Speed Restricted
Sxx	Speed in Miles Per Hour (xx is MPH)
TSS	Tank Surveillance Service
UOS	Unload From One Side Only
ZIP	Expeditor Trains Only

PERFORM SWITCHING IN A MANNER WHICH WILL AVOID DAMAGE TO CONTENTS OF CARS AND EQUIPMENT

Safe Coupling Speed (MPH)	Impact Force
1	1
2	4
3	9
4	16
Damaging Coupling Speed (MPH)	**Damaging Force**
5	25
6	36
7	49
8	64
9	81
10	100

SPEED TABLE

Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour
Minutes	Seconds		Minutes	Seconds	
0	45	80.0	1	12	50.0
0	46	78.3	1	15	48.0
0	47	76.6	1	20	45.0
0	48	75.0	1	25	42.3
0	49	73.5	1	30	40.0
0	50	72.0	1	40	36.0
0	51	70.6	1	45	34.3
0	52	69.2	1	50	32.7
0	53	67.9	2	...	30.0
0	54	66.6	2	10	27.6
0	55	65.4	2	15	26.6
0	56	64.2	2	20	25.7
0	57	63.1	2	30	24.0
0	58	62.0	2	40	22.5
0	59	61.0	2	45	21.8
1	...	60.0	2	50	21.2
1	1	59.0	3	...	20.0
1	2	58.0	3	9	19.0
1	3	57.1	3	20	18.0
1	4	56.2	3	31	17.0
1	5	55.3	3	45	16.0
1	6	54.5	4	...	15.0
1	7	53.7	5	...	12.0
1	8	52.9	6	...	10.0
1	9	52.1	7	30	8.0
1	10	51.4	10	...	6.0

Thomas V. Mears, M.D., Vice President. Occupational Health and Safety, Ft. Worth,Texas
Hi E. Newby, M.D., Corporate Medical Director, Ft. Worth, Texas
Frank M. Crast, M.D., Corporate Medical Director, Ft. Worth, Texas

BURLINGTON NORTHERN MEDICAL EXAMINERS

*Family Health Center	Aberdeen
Dr. Arlin Myrmoe	Aberdeen
*Family Care Center	Aberdeen
Dr. Bobby Estes (Family Practice & Assoc)	Abilene
*Drs Steve/Joan Carpenter	Ada
Dr. D. N. Orelup	Albia
*Alexandria Clinic	Alexandria
*Alliance Medical Center	Alliance
*Box Butte Medical Center	Alliance
Copsey Clinic	Alliance
Community Clinic	Alma
Dr. D. A. Frank	Amarillo
Dr. Woolworth Russel	Amarillo
Amarillo Industrial Health Center	Amarillo
Dr. W. E. Yoe (Family Medicine)	Amory
Dr. James Nettles	Arlington, AL
Occupational Health Centers	Arlington, TX
*Medical Dental Center	Astoria
Dr. P. M. Scott (Auburn Clinic)	Auburn
*Doctors Clinic Assoc.	Auburn, OR
Memorial Health Clinic	Aurora, NE
* Dreyer Medical Clinic	Aurora, IL
*Beardstown Clinic	Beardstown
Beatrice Medical Center	Beatrice
*Clearing Industrial Clinic	Bedford Park
Dr. Peter Ambrose	Bellingham
*Bemidji Clinic Merit Care	Bemidji
Dr. Kenneth Stout	Benkelman
Bend Memorial Clinic	Bend
*Benson Medical Center	Benson
*Billings Clinic	Billings
*Billings West Medical Cneter	Billings
*Thuss Clinic	Birmingham
*Carraway Industrial Medicine	Birmingham
*Surgeons Group	Birmingham
Mid Dakota Clinic	Bismarck
Quain & Ramstad Clinic	Bismarck
Dr. R. D. Smith	Blytheville
Dr. C. J. Edwards	Bonners Ferry
*Gallatin Internal Medicine	Bozeman
Brainerd Clinic	Brainerd
Post Medical Clinic	Bridgeport
Dr. B. D. Howell	Brookfield
*Central Nebraska Medical Clinic	Broken Bow
Broken Bow Clinic	Broken Bow
Medical Surgical Clinic	Bowie
*Surgeons Inc.	Burlington
Dr. Marvin Lemke	Burnaby, B.C
Community Health Center	Butte
Dr. George M. Gilboy	Butte
*Rocky Mountain Service Group	Butte
*Silver Bow Surgical	Butte
Professional Medical Assoc.	Cambridge
*Coleman Clinic	Canton

*Family Physicians Group ..... Cape Girardeau
*Cashmere Medical Center ..... Cashmere
Dr. Don Grinstead ..... Casper
M. A. Junidi ..... Centralia
Chadron Medical Clinic ..... Chadron
* L.G. Steck Memorial Clinic ..... Chehalis
Dr. S. Elloway ..... Chehalis
*Triangle Health Care/Health Planning Inc. ..... Chester
*Cheyenne Internal Medicine & Neurology ..... Cheyenne
Dr. D. E. Balquiedra ..... Chicago
Dr. Claudia Weddaburne (Mercyworks Occ. Medicine Clinic) ..... Chicago
Fox Rural Health Center ..... Childress
Sweet Medical Clinic ..... Chinook
Su Salud Medical Center ..... Cicero
Dr. P. W. Lambert ..... Clarkston
Clay Center Medical Center ..... Clay Center
Dr. Mark Van Wormer ..... Clayton, NM
*Medical Associates ..... Clinton
Dr. J. Kennedy ..... Colorado Springs
Dr. Douglas J. Pitman (Columbia Falls Clinic) ..... Columbia Falls
Dr. Phil Hoversten (Columbia Park Clinic) ..... Columbia Heights
Colville Medical Group ..... Colville
Dr. D. H. Linedman ..... Colville
Coon Rapids Medical Center ..... Coon Rapids
Rosary Medical Center ..... Corning
Medical Arts Clinic ..... Corsicana
*Cogley Medical Associates ..... Council Bluffs
Dr. Edward A. Metz (First Care) ..... Crawford, NE
*Creston Medical Clinic ..... Creston
Crete Medical Clinic ..... Crete
*Northwestern Clinic ..... Crookston
Crosby Clinic ..... Crosby
Mercy Medical ..... Cuba
Curtis Medical Center ..... Curtis
*Family Health Care ..... Custer
Cut Bank Medical Center ..... Cut Bank
Dr. Francis Bertoglia (Deer Lodge Clinic) ..... Deer Lodge
Dr. Larry Thead ..... Demopolis
Dr. J. F. Prinzing ..... Denver
West Evans Associates ..... Denver
Dr. Mangil Seo ..... Des Moines
MeritCare Clinic ..... Detroit Lakes
*Dakota Clinic ..... Detroit Lakes
*Lake Region Clinic ..... Devils Lake
*Dickinson Clinic ..... Dickinson
Goodman Medical Center ..... Dixon
Dr. Robert Kaplan ..... Douglas
*Medical Associates ..... Dubuque
*Duluth Clinic West/Main ..... Duluth
Edina Family Physicians ..... Edina
Dr. Dennis Walker ..... Enid
*Enumclaw Medical Center ..... Enumclaw
Dr. Paul J. Kinney (Ephrata Med Center) ..... Ephrata
Dr. E. C. Bond ..... Everett
Everett Clinic/Dr. George Vasil ..... Everett
Providence Occup. Medicine Center ..... Everett
Medical Arts Clinic ..... Fairfield
Dr. David E. Borg ..... Falls City
*Family Practice Center ..... Falls City
Dr. E. R. Mendoza ..... Fargo
*MeritCare Clinic ..... Fargo

*MeritCare Clinic SW Branch ..... Fargo
*Healthline Corporate Health Services ..... Fenton
*Barnes Care ..... Fenton
Dr. Daniel L. Lembcke (Fergus Falls Medical Group) ..... Fergus Falls
Dr. William C. Anderson (Forsyth Family Medical) ..... Forsyth
Dr. Richard Klinger ..... Forsyth
Dr. R. H. Pike ..... Ft. Collins
*Drs. Arthur Sands/H arold Dupper ..... Ft. Collins
*Dr.. M. McKenna ..... Ft. Scott
*Holt-Krock Clinic ..... Ft. Smith
Hoge Professional Association ..... Ft. Smith
Dr. Paul Goldman ..... Ft. Worth
Dr. M. Dwain McDonald ..... Ft. Worth
Dr. Donald Hopkins ..... Ft. Worth
Dr. R. E. Snyder ..... Ft. Worth
Advanced Occupational Health Care (Formerly Medical & Surgical Clinic)
(2 locations) ..... Ft. Worth
*Valley Clinic ..... Ft. Madison
*Family Prctice Clinic ..... Ft. Morgan
Fosston Clinic ..... Fosston
Dr. Milo Anderson ..... Fremont
Dr. Robert Hart (Fridley Plaza Clinic) ..... Fridley
Galesburg Medical Arts Clinic ..... Galesburg
Galesburg Clinic ..... Galesburg
Dr. J.C. Bhalerao (Galesburg Medical Assoc.) ..... Galesburg
Dr. C. F. Ashby ..... Geneva
*Family Medical Care ..... Gillette
*Glasgow Clinic ..... Glasgow
Dr. Joseph Leal ..... Glendive
Dr. Richard Chambers ..... Glendive
Dr. Robert Fryzek ..... Glenwood
*Goldendale Medical Clinic ..... Goldendale
Dr. M. W. Scheflo ..... Grafton
Dr. W. P. Teevens ..... Grafton
*Grand Forks Fmly Pratice Cntr/Wm Mann ..... Grand Forks
*Valley Medical Association ..... Grand Forks
Dr. Gordon D. Fancis ..... Grand Island
Grand Rapids Medical Associates (2 loc.) ..... Grand Rapids
Dr. K. R. Carter ..... Granite Falls
*Great Falls Clinic ..... Great Falls
Dr. Melchisdek L. Margaris ..... Great Falls
Dr. John Margaris ..... Great Falls
Dr. John Ross ..... Great Falls
Dr. Benjamin Mills (Big Horn Family Medicine) ..... Greybull
Bitterroot ..... Hamilton
Dr. E. L. Rapp ..... Hannibal
Dr. R. D. Warren ..... Hanover, KS
*Physicians Building Family Practice ..... Hastings
Dr. Mark Ward ..... Havre
*Havre Clinic ..... Havre
*Dr. James Kelly ..... Havre
Dr. Bruce Richardson ..... Havre
Ruben Lopez ..... Hayti
*Healthline Corporate Health Services ..... Hazelwood
Dr. John J. Ruffing, Jr. ..... Hemingford
Dr. Leroy Schaffner ..... Henrietta
*Helena Family Physicians ..... Helena
Dr. R. C. Hendricks ..... Herrin
*Hettinger Clinic ..... Hettinger
*Adams Clinic ..... Hibbing
*Hillsboro Merit Care Clinic ..... Hillsboro

Myrlen Chestnut, D.O. ..... Holyoke
Dr. T. R. Jacobson ..... Hot Springs
*Southern Hills Family Physicians ..... Hot Springs
Dr. Newton A. Kilgore ..... Houston
*Dakota Clinic ..... Jamestown
*Midwest Merit Care Clinic ..... Jamestown
Dr. N.T. Camp ..... Jasper
Family Medicine Clinic ..... Jonesboro
Dr. Dennis W. Smith ..... Joplin
Family Health Care ..... Kalispell
*Klamath Falls Family Practice ..... Klamath Falls
*Dr. C. E. Link (Family Practice Clinic) ..... LaCrosse
Gunderson Clinic ..... LaCrosse
Franciscan–Skemp Clinic ..... LaCrosse
*Cavalier County Clinic ..... Langdon
Laurel Medical Center ..... Laurel
Decatur Medical Services ..... Leon
Libby Clinic ..... Libby
Dr. Thomas C. Thomas ..... Liberty, MO
Central Park Family Phycians ..... Lincoln
South Lincoln Family Physicians ..... Lincoln
*Drs. Michael McCoy/ D.G. Rutz (E. Lincoln Family Prof.) ..... Lincoln
Dr. Thomas Rowe ..... Livingston
Dr. J. C. Freudenburg (Longmont Clinic) ..... Longmont
Dr. Domingo Bernardez ..... Longview
Dr. G. O. Polo ..... Longview
*Dr. James Mathews ..... Lubbock
Dr. Everett P.Stewart ..... Lubbock
Macon Medical Clinic ..... Macon
Dr. Joe L. Potter ..... Madill
Dr. Harry Kelly ..... Mammoth Springs
Quain & Ramstad ..... Mandan
Dr. Paul Martin ..... Marshall
Mayville Clinic ..... Mayville
*McCook Clinic ..... McCook
Dr. Howard T. Akers ..... Memphis, TN
Dr. Robert Clark III ..... Memphis, TX
*Dr. Crawford Allison ..... Mexia
Fred A. Ray ..... Miami
Garberson Clinic ..... Miles City
Family Medical Center ..... Minden, NE
Dr. Azam Ansari ..... Minneapolis
*Parkside Family Physicians ..... Minneapolis
*Milaca Medical Services ..... Milaca
Milbank Medical Center ..... Milbank
*Medical Arts Clinic ..... Minot
Dr. J. A. Evert (Missoula Medical Plaza) ..... Missoula
Dr. J. E. Gouaux ..... Missoula
Dr. Michael Priddy ..... Missoula
*Dr. Michael Haley (Dakota Med. Spec. Clinic) ..... Mitchell, SD
*Industrial Medical Clinic of Mobile ..... Mobile
Dr. L. M. Linde-Mobridge Clinic ..... Mobridge
*Dr. C. J. Dyke Jr (Exeper Yale Cornell Clinic). ..... Moline
Dr. S. Cruz ..... Monett
Dr. Norman Staley ..... Montesano
Morris Medical Center ..... Morris
Northwest Health Services ..... Mound City
Nelson Medical Associate Clinic–Dr. BrianHenshaw ..... Nelson, B.C.
Dr. F. A. Moorhead ..... Neodesha
Cedar Hills Family Clinic ..... Newcastle
*St. Lukes Occupational Medicine and North Clinic ..... N Kansas City

Dr. Robert H. Delano (Northwood Clinic) ..... Northwood
McBride Clinic ..... Oklahoma City
Dr. Clinton A. Winslow ..... Oklahoma City
Dr. Cornelia O. Mertz (Meyers Clinic) ..... Okmulgee
Dr. E. K. Conners ..... Omaha
Dr R. O. Forsman ..... Omaha
*Physicians Clinic ..... Omaha
Warmolts Clinic ..... Oregon
Dr. Maurice Masar ..... Orofino
Dr. Robert Ross (Northside Med. Center) ..... Ortonville
*Osseo Clinic ..... Osseo
Dr. D. D. Emerson ..... Ottumwa
Dr. Richard Dailey (Wycliff Family Care) ..... Overland Park
Dr. Larry Walker ..... Paris
Dr. W. T. Cooper ..... Pasco
Dr. Jack Guy (Paynesville Med. Center) ..... Paynesville
Dr. H. L. Simpson, Jr. ..... Pensacola
Rittenour Medical Clinic ..... Plains
*Plainview Medical Clinic ..... Plainview
*Internal Medical Assoc. ..... Plattsmouth
Dr. E. D. Coriell (Polson Family Med. Clinic) ..... Polson
*The Portland Clinic ..... Portland
*Marquam Medical Center ..... Portland
*Gunderson/Farrell Clinic ..... Prairie du Chien
*Dr. Martin F. Faber ..... Princeton
*Family Medical Center ..... Pueblo
Dr. J. K. Symonds (Willows Med. Center) ..... Puyallup
*Quanah Clinic ..... Quanah
*Family Medicine Association ..... Quincy
Physicians and Surgeons Clinic ..... Quincy
Dr. Edward Pillar ..... Red Oak
Interstate Medical Center ..... Red Wing
Family Medical ..... Rockport
*Brookside Medical Group ..... Rockford
*Ronan Medical Clinic ..... Ronan, MT
Dr. O. I. Lowry ..... Rosalia
Dr. R. H. Herseth (Roseau Med. Clinic) ..... Roseau
*Johnson Clinic ..... Rugby
Central Minnesota Surgeons ..... St. Cloud
Dr. J. J. McMillan ..... St. Joseph
*Med–Clinic (2 locations) ..... St. Joseph
*Barnes Care ..... St. Louis
*Macon Medical Center ..... St. Louis
Internal Medicine Inc. ..... St. Louis
Dr. C. D. Meadows ..... St. Louis
Healthline Corp. Health Center (4 locations) ..... St. Louis
*Central Internal Medicine Associates ..... St. Paul, MN
*Dr. J. E. Brown ..... St. Paul, MN
Dr. R. Hanisch ..... St. Paul, NE
Dr. Franz H. Siemsen ..... Sandpoint
*Sauk Centre Clinic ..... Sauk Centre
Dr. Basilios Lambos (Family Practice) ..... Savanna
Dr. Milton Johnson (Bluffs Medical Clinic) ..... Scottsbluff
Dr. Les Berenson ..... Seattle
Dr. H. G. Plut ..... Seattle
Dr. Joel C. Konikow ..... Seattle
Dr. G. A. Mozaffarian ..... Seattle
*Polyclinic Dr. Stimson ..... Seattle
Fein, Woo and Shiota ..... Seattle
Dr. Dean Dietrich ..... Sedro Woolley
Dr. J. Willoughby ..... Sheridan

Dr. Michael Strahan ..... Sheridan
Dr. William M. Williams ..... Sheridan
Toole County Health ..... Shelby
Dr. Michael Jung (Family Practice Center) ..... Sioux City
*Central Plains Clinic ..... Sioux Falls
*Snoqualmie Family Clinic ..... Snoqualmie
*Valley View Family Medicine ..... Snoqualmie
*Family Urgent Care Center ..... Spokane
Dr. Wm. L. Gray ..... Spokane
*All Valley Medical ..... Spokane
*Southhill Medical Center ..... Spokane
Northside Medical Center ..... Spokane
Regional Occupational Medicine Group ..... Springfield
Drs. Menchetti and Schroff ..... Springfield
Dr. F. James Beckner ..... Stanwood
*Lakewood Clinic ..... Staples
Dr. James Scott ..... Streator
Dr. R. J. Fillion ..... Sterling
St. Croix Valley Clinic ..... Stillwater
*Sumas Family Health Center ..... Sumas
*Superior Clinic ..... Superior
*Mariner Medical Clinic ..... Superior
Dr. R. D. Rivera ..... Tacoma
Dr. Craig Romney ..... Tacoma
Soundview Medical Plaza–Dr. T.H. Skrinar ..... Tacoma
Dr. Kieth W. Shuey ..... Tecumseh
Dr. Glen Gillean ..... Texarkana
*Dr. J. W. Phillips ..... Thayer
*The Dalles Clinic ..... The Dalles, OR
Dr. H. T. Wilson ..... Thermopolis
Dr. Peter Johnson (Falls Clinic) ..... Thief River Falls
Dr. N. E. Graham ..... Tomball
*Torrington Medical Group ..... Torrington
Dr. D. McFarlane ..... Trinidad
Dr. F. Visconti ..... Trinidad
Dr. Joseph Jiminez ..... Trinidad
Dr. Sally Fabec ..... Trinidad
*Trinidad Medical Center ..... Trinidad
*Occupational Medical Group ..... Tulsa
Dr. R. B. Beithon ..... Twin Bridges
L. B. Reimer (Satellite Clinic–Newcastle) ..... Upton, WY
*Merit Care Valley City ..... Valley City
Dr. Malcom Rondeau ..... Vancouver, B.C.
*Family Physicians Group ..... Vancouver, WA
*Vancouver Clinic ..... Vancouver, WA
Dr. John B. Hardin ..... Vernon
*Community Clinic ..... Wabasha
Wadena Medical Center ..... Wadena
MeritCare Clinic ..... Wahpeton
*Wahpeton Clinic ..... Wahpeton
Dr. S. R. Hevel ..... Waitsburg
Dr. Joseph Villalon ..... Walsenburg
*Wapato Medical Center ..... Wapato
Dr. G. Robert Barton ..... Watertown, SD
Dr. James B. Johnson ..... Wenatchee
*Wenatchee Family Clinic ..... Wenatchee
Burton Creek Clinic ..... West Plains
*Wheatland Medical Clinic ..... Wheatland
*Family Physician Clinic– ..... Whitefish
Whitefish Clinic/Dr F.M. Ricker ..... Whitefish
*Whitehall Medical Clinic ..... Whitehall

*Wichita Falls Clinic ..... Wichita Falls
*Craven–Hagan Clinic ..... Williston
Dr. Michael T. Anderson (Affiliated Medical Center) ..... Willmar
Dr. Fred DuVal ..... Winnipeg
*York Medical Clinic ..... York

***Indicates that two or more physicians are authorized to perform Burlington Northern industrial examinations.**