BNSF Railway Safety Vision

We believe every accident or injury is preventable. Our vision is that BNSF Railway will operate free of accidents and injuries. BNSF Railway will achieve this vision through:

A culture that makes safety our highest priority and provides continuous self-examination as to the effectiveness of our safety process and performance...

A work environment, including the resources and tools, that is safe and accident-free where all known hazards will be eliminated or safe-guarded...

Work practices and training for all employees that make safety essential to the tasks we perform...

An empowered work force, including all employees, that takes responsibility for personal safety, the safety of fellow employees, and the communities in which we serve.

This version contains the following updated and added pages:

December 1, 2023: 15. **January 1, 2024:** 2, 34, 36. **February 1, 2024:** 50. **February 15, 2024:** 55, 57, 59.

Marca 2024: 40, 20

May 1, 2024: 19, 30.

June 1, 2024: 37, 38, 39, 47, 56, 61.

July 1, 2024: 9.

September 1, 2024: 44, 45, 46, 58.

December 1, 2024: 70, 70a (added), 70b (added), 71.

January 1, 2025: 63. March 1, 2025: 24, 25, 54. March 10, 2025: 42, 51, 52. April 1, 2025: 32a (added), 33, 65.

May 1, 2025: 49. June 1, 2025: 29, 40.

July 1, 2025: Title Page, 3, 31, 32, 35, 41, 42, 43, 43a, 43b.



System Special Instructions

All Subdivisions No. 4

In Effect at 0800
Central, Mountain and Pacific
Continental Time
December 1, 2023

(Including updates through July 1, 2025)



A Serious Injury or Fatality (SIF) event is an incident or near miss that has the potential to, or does, result in a fatal or life-altering injury or illness. Where this icon is displayed, it represents a rule that has been identified to mitigate risk of a SIF for all BNSF employees.

12(B). Remote Control Power Switch (RCPS) 28

12(C). Switch Point Monitoring System (SPMS).......... 29

12(D). Independently Controlled Switches (ICS)....... 29 Appendix B - Roadway Signs 69

| 4 System Special Ins | tructions—No. 4—December | 4 2022 | |
|----------------------|--------------------------|---------------------|--|
| TOC Home | tructions—No. 4—December | 1, 2023 | |
| TOCTIONE | | | |
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BNSF Railway — SIGNAL ASPECTS AND INDICATIONS

All signals are subject to modification indicated under individual subdivision special instructions.

DISTANT SIGNALS

Aspects shown in Rules 9.1.3 through 9.1.8 may be displayed with a "D" sign on the signal mast to identify the signal as a distant signal. When a "D" sign is displayed, if train is delayed per Rule 9.9 and Rule 9.9.1 between a distant signal and the next signal, proceed prepared to stop short of the next signal. Absolute signals at automatic switches, outside of block system limits, convey main track distant signal information for the other end of the siding.

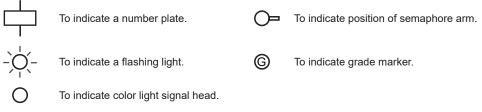
| | BLOCK AND IN Aspects shown in Rules 9.1.3 through 9.1.8 and 9.1.13 n | | | | PTC |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| ule | Aspects of Color Light and Semaphore Signals | Cab Signal Aspects | Name | Indication | Trac Line |
| 1.3 | DARK DARK DARK | | CLEAR | Proceed. | |
| 1.4 | | | APPROACH LIMITED | Proceed prepared to pass next signal not exceeding 60 MPH and be prepared to enter diverging route at prescribed speed. | |
| 1.5 | DARK | | ADVANCE APPROACH | Proceed prepared to pass next signal not exceeding 50 MPH and be prepared to enter diverging route at prescribed speed. | |
| 1.6 | DARK DARK DARK DARK | | APPROACH MEDIUM | Proceed prepared to pass next signal not exceeding 40 MPH and be prepared to enter diverging route at prescribed speed. | |
| 1.7 | LUMAR JUMAR DARK | | APPROACH RESTRICTING | Proceed prepared to pass next signal at restricted speed. Freight trains exceeding 30 MPH immediately reduce to that speed. (Note: Speed is 40 MPH for freight trains in PTC Full Enforcement Mode). | |
| 1.8 | DARK DARK DARK | | APPROACH | Proceed prepared to stop at next signal. Trains exceeding 30 MPH immediately reduce to that speed. (Note: Speed is 40 MPH for passenger and trains in PTC Full Enforcement Mode). | |
| 1.9 | DASK | | DIVERGING CLEAR | Proceed on diverging route not exceeding prescribed speed through turnout. | |
| 1.10 | | | DIVERGING APPROACH DIVERGING | Proceed on diverging route not exceeding prescribed speed through turnout prepared to advance on diverging route at the next signal not exceeding prescribed speed through turnout. | |
| 1.11 | AND | | DIVERGING APPROACH MEDIUM | Proceed on diverging route not exceeding prescribed speed through turnout prepared to pass next signal not exceeding 35 MPH. (Note: Speed is 40 MPH for trains in PTC Full Enforcement Mode.) | |
| 1.12 | BARK | | DIVERGING APPROACH | Proceed on diverging route not exceeding prescribed speed through turnout; approach next signal prepared to stop. Trains exceeding 30 MPH immediately reduce to that speed. (Note: Speed is 40 MPH for passenger and trains in PTC Full Enforcement Mode.) | |
| 1.13 | DARK CHARLES C | | RESTRICTING | Proceed at restricted speed. | |
| .15 | DARK DARK DARK DARK DARK | | STOP 🏶 | Stop. | |

| SPECIAL ASPECTS WHICH ARE NOT PART OF AUTOMATIC BLOCK, CTC AND INTERLOCKING SYSTEMS | | | |
|-------------------------------------------------------------------------------------|-----------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Rule | Aspects | Name | Indication |
| 9.1.16 | -® | TAKE SIDING INDICATOR | When illuminated, hand operate switch to enter next siding or to leave siding and enter main track. |
| 9.1.22 | LUNAR F | SLIDE FENCE INDICATOR | When illuminated continuously or when not illuminated, slide fence has been activated; proceed at restricted speed. |
| 9.1.23 | - LUNAR F | SLIDE FENCE INDICATOR | When flashing, slide fence has not been activated. |
| 9.1.24 | GREEN | RESUME SPEED | End of slide fence restriction; resume speed. |
| 9.1.25 | RED H | HIGH WATER INDICATOR | When red or not illuminated, high water may be present; proceed at restricted speed through detection limits identified by timetable. |
| 9.1.26 | GREEN | HIGH WATER INDICATOR | When green, no high water has been detected. |

General Signal Instructions

In addition to Rule 9.1 of the General Code of Operating Rules, the following General Signal Instructions apply on BNSF Railway:

- Dwarf signals will display the same aspects and indications as high signals.
- The following symbols are used in diagrams of signal aspects.



Wayside Horn System (WHS)



Flashing - operating as intended.



Steady or not illuminated - not operating as intended.

PTC Display Information

| Track Line | | Track Line Overlays | | | |
|------------|--------|-----------------------------------|---------------------|--------|------------------------------|
| Color | Symbol | Description | Color | Symbol | Description |
| Red | | Unauthorized track | Red-hash overlay | | Stop required |
| Yellow | | Authorized speed restricted track | Yellow-hash Overlay | | Restricted Speed |
| Green | | Authorized track | Blue-hash Overlay | | Work Zone (Form B) Limits |
| Grey | | Non-enforcing or unknown track | | | |

1. Speeds

All speeds are subject to modification by speed restrictions indicated in timetable individual subdivision special instructions.

Passenger trains will be governed by permanent freight train speed if permanent passenger train speed is not specified under timetable individual subdivision special instructions. All temporary Form A Restrictions affecting a Passenger Train will have a speed or "NA" listed in the PSGR column. "NA" in either the PSGR or FRT column of a temporary Form A speed restriction indicates the speed restriction does not apply to that train type.

All trains consisting entirely of passenger equipment as well as locomotives without cars (light engines) will be considered passenger trains and may operate at passenger speeds where provided. This includes Amtrak, commuter trains, business cars and passenger equipment modified to serve as track inspection, track geometry or similar test cars. Refer to 1(B) regarding maximum authorized speed of engines (locomotives).

Amtrak trains operating in Cascade service may observe Talgo speeds. The consist must be entirely Horizon and/ or Amfleet Single Level Passenger Equipment. If the PTC Onboard Consist does not reflect the correct train type, crews may modify their consist to "Tilt" Train Type.

Unless defined differently in the timetable individual subdivision special instruction, tons per operative brake (TOB) is defined as the gross trailing tonnage of the train divided by the total number of control valves.

| | MPH |
|-------------------------------------------------------------------------------------------|-----------|
| Freight trains under 100 TOB | 60 |
| Freight trains 100 TOB and over | 45 |
| Freight trains handling empty cars | 55 |
| Exception: Intermodal Equipment, see SSI 1(C) | |
| Empty coal trains (if train list indicates no speed restricted equipment) | 60 |
| Key trains | 50 |
| Solid consist of military equipment | 55 |
| Trains with welded rail loaded in open end gondolas | 45 |
| Non-signaled territory | 49 |
| Against the current of traffic | 49 |
| Through turnouts | 10 |
| Tracks governed by GCOR / MWOR 6.28 | 10 |
| Tracks governed by GCOR / MWOR 6.28 where timetable indicates a speed greater than 20 MPH | 20 HER |
| Within Mechanical Department limits | 5 |
| Movements on or off turntables and droptables | 1 |

Foreign railroad locomotives - Speed restrictions posted inside the locomotive cab of foreign railroad locomotives which are less than that listed above only apply when locomotive is utilized as a lead, controlling locomotive.

| Equipment | | Main | Branch |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|
| Side dump ballast cars, BN | ISF car kind YHA and | 45 | 45 |
| YHH, loaded | | | |
| AMTK 1400-1569 (materia | | 60 | 60 |
| Balfour Beatty machines, F 467, 476, 3005 | RKCX 103, 104, 105, 106, | 45 | 45 |
| Boeing cars, loaded: BNSF | | 45 | 45 |
| 800100-800107, 8001 800117, 800119, 8007 800133 MTTX | | | |
| 978311, 978596, 9786 979264, 980855, 9809 TBCX 737001-737066 | | | |
| Clay cars, RARW 3801-41 | 99 | 45 | 45 |
| Flatcars, empty, NP 58040 | | 50 | 50 |
| Flatcars, empty, bulkhead | | 45 | 45 |
| BN 616475-616674, CS DJTX 9300-9398, SOU | 616375-616474 | | |
| Flatcars, empty, bulkhead, Picked up enroute and n report or work order | not on conductor's wheel | 45 | 45 |
| Flatcars, empty or loaded, 97861, 97914, 97920 | OTTX 93561, 97852, | 45 | 45 |
| Flatcars, loaded with track 209144, 209149 | panels, ATSF 190298, | 35 | 35 |
| Gondolas, empty, KCS 801 CR 576026-579245 | 1011-802930, | 45 | 45 |
| Gondolas, empty, Picked up enroute and not on conductor's wheel report or work order | | 50 | 50 |
| Gondolas, empty or loaded CR 598500-598990, SP | | 45 | 45 |
| Herzog clip cars, HZGX 15 | 3, 154, 155 | 50 | 50 |
| Herzog MPM Machines, designated to be placed next ahead of caboose or at rear of cabooseless trains. | | 55 | 55 |
| Hopper cars, covered, emprestriction is indicated by tr | | 45 | 45 |
| ASGX 1-50, BCAX 50-149, CGLX 4200-4249, CRDX 3000-3014, CRDX 9905-9989, CRDX 20100-20199, CRDX 20200-20209, CRDX 20300-20324, CRDX 20525-20724, CSXT 242000-242299, DME 29000-29324, DJLX 97300-97319, FLOX 3200-3241, FLOX 383400-983414, GACX 3000-3139, GACX 3150-3196, GACX 3202-3359, GACX 3486-3510, GACX 7959-8008, GCCX 55000-55099, | LCEX 801-820, LCEX 824-898, NAHX 21000-21054, NAHX 29700-29867, NAHX 320000-320399, NCUX 20001-20050, NCUX 20106-20130, NRLX 32500-32605, NRLX 32706-32725, NVCX 9500-9619, NS 294220-294319, RGCX 650-899, RGCX 902-1067, RGCX 1069-1142, RGCX 1183-1222, SDWX 9700-9919, SDWX 10000-10333, SDWX 11000, SHPX 432118-432137, SHPX 432057-432116, WW 7001-7300 | | |

TOC Home

| | , | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|
| Equipment | Main | Branch |
| Hopper cars, empty, WFAX 84654-84700 TUGX 36001-36125 | 45 | 45 |
| Loram, 400 and 300 series and Harsco rail grinder, traveling (not in work mode) as a train on its own power with a conductor or engineer pilot | 50 | 50 |
| Loram, 400 series and Harsco rail grinder, when controlling movement from the rear control cab in the lead. | 50 | 50 |
| Loram, 300 series rail grinder, when controlling movement from rear control cab in the lead | 40 | 40 |
| Refer to manufacturer's maximum operating speeds when operating on descending grades. | | |
| Loram, LMIX 409, 410, 412, 414, 415, 417, KMUX 110, 750 Loram, LMIX 418, when moving coupled with MW tool cars, must remain coupled to such cars. No shoving movements are to be made with the above Loram equipment in a train consist. | 50 | 45 |
| Loram, LMIX 203, 204 No shoving movements are to be made with the above Loram equipment in a train consist. | 55 | 55 |
| Ore cars, empty, 35 ft., OLB 1000-1099 | 50 | 50 |
| Ore cars, loaded, 35 ft., OLB 1000-1099 | 45 | 45 |
| P811, BNSF 922999 | 50 | 50 |
| Plasser machines,PACX 293, 2630, 2645, 3024,4656, 4657, 4774, 4775 | 45 | 45 |
| Plasser THS 2000, tie gang consist | 30 | 30 |
| Plasser 08 & 09 Tampers, PTS 61, 62 & 90 Stabilizers, BDS 100 & 200 Ballast machines, MFS40 & 60 cars and ULS3000 conveyor cars (traveling in a train or under own power with a conductor or engineer pilot) | 50 | 50 |
| Ribbon rail cars, empty (excluding BNSF 919900 - 919905) | 45 | 45 |
| Ribbon rail cars, loaded (excluding BNSF 919900 - 919905) | 35 | 25 |
| Ribbon rail loading and unloading cars | 45 | 45 |
| Roadrailer equipment (empty or loaded) | 60 | 60 |
| Rotary plow, wrecking derrick, locomotive crane, pile driver or Jordan spreader handled in trains | 30 | 25 |
| Exception: Locomotive cranes/pile drivers with booms removed and secured to a leads car with the counterweight properly secured to the locomotive crane/pile drive car body, billed as empty car. | 45 | 25 |
| Exception: Jordan spreader, BNSF 939800 - 939804 | 50 | 50 |

Trains and engines handling this and similar equipment which is moving on its own running gear must operate through the curved side of turnouts at a speed not exceeding one-half the maximum authorized speed for that turnout.

Locomotive cranes, wrecking derricks and other types of heavy work equipment must not be operated on any subdivision designated as a Branch Line unless authorized by roadmaster or covered by specific instructions.

| Equipment | Main | Branch |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|
| Scale test cars Exception: cars listed below have a minimum gross weight of 100,000 lbs. and may move in any position in the train and at maximum authorized speed for which the train is qualified. BN 979020-979024, BN 979026, BNSF 979019, FGWX 100000-700000, MP 15507, MP 15510-15512, UP 167579, UP 900700, UP 903600, WWBX 199917-199919 | 35 | 25 |
| Schnabel type cars, empty. Cars must be handled on or near the rear of trains not exceeding 100 cars in length, must not be handled in trains requiring pusher service and must not be humped or switched with motive power detached | 45 | 45 |
| Exception: GEGX 21154, GEGX 21155, GEX 80000, GEX 80002, MAMX 1001 | 40 | 40 |
| Exception: KRL 3600, KRL 3601, GEX 80003, HEPX 200, PTDX 202 | 25 | 25 |
| Tank cars, ACFX 17451-17495, NATX 10841-10865 | 45 | 45 |
| Tank cars, DVLX 4001-4190, UTLX 76517, 76539, 76556, 76558, 76568, 76595, 76649, 76656, 76696, 76733, 76736-76738, 76742-76745, 76747, 76748, 76750, 76751, 78256-78269, 78272, 78274, 78278, 78281, 78285, 78287-78293, 78326, 78328-78333, 78336-78340, 78343, 78344, 78347, 78348, 78350. 78353 | 40 | 40 |
| Tank cars, empty, CORX | 50 | 50 |
| Tank cars, loaded, CELX 6400-6455, 10400-10443 (must not be handled nearer than 6 cars from locomotive when loaded) | 45 | 45 |
| Wedge plow or dozer, hauled in tow | 35 | 25 |

1(A). 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 timetable 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 13 MPH or less until movement can again exceed 21 MPH.

1(B). Maximum Speed of Passenger Trains/Engines

| | MPH |
|-------------------------|-----|
| Amtrak | 90* |
| Metrolink | 90* |
| Metra | 79* |
| Sounder (Sound Transit) | 79* |
| Northstar | 79* |
| All other classes | 70 |

Exception:

When the controlling locomotive is a car body type or has a desktop control stand and is being operated long hood forward, maximum speed is 45 MPH.

* Engine without cars must not exceed 70 MPH.

1(C). Multiplatform Equipment Intermodal Equipment

| TSS Car Kind Codes | Car Description | Units or Segments | Axle Count | Control Valves and/or Car Count | Trailers=T Containers=C Either=T/C |
|--------------------------|--------------------|----------------------|---------------|---------------------------------------|------------------------------------------|
| | | Articulate | ed cars | | |
| QY | Doublestack | 5 | 12 | 3 | С |
| QV | Doublestack | 3 | 8 | 2 | T/C |
| QM | Spine Car | 3 | 8 | 2 | T/C |
| QC | Spine Car | 3 | 8 | 2 | Т |
| QO | Spine Car | 5 | 12 | 3 | T/C |
| Q5 | Spine Car | 5 | 12 | 3 | С |
| QE | Spine Car | 5 | 12 | 3 | Т |
| FM | Twin Flat | 2 | 6 | 2 | С |
| M2D M3D M2F M3F | Automax | 2 | 6 | 2 | |
| | | Non-Articula | ated Car | s | |
| QW | Doublestack | 3 | 12 | 3 | T/C |
| QX | Doublestack | 4 | 16 | 4 | T/C |
| QT | Doublestack | 5 | 20 | 5 | С |
| QB QD | Twin Flats | 2 | 8 | 2 | Т |
| QL | Twin Flats | 2 | 8 | 2 | T/C |
| | S | ingle Unit Inte | rmodal C | Cars | |
| QU | Doublestack | 1 | 4 | 1 | T/C |
| QK | Doublestack | 1 | 4 | 1 | T/C |

Car Kind Codes for Intermodal Equipment

In addition to the intermodal equipment listed above, all car kind codes beginning with the letter M, P or Q are considered intermodal equipment. On cars shown above, only the first two characters are required to identify car type, with the exception of those identifying Automax cars. However, train lists may use more than two characters to identify a given car type.

Definitions of Multiple-Unit Equipment

Articulated—Refers to cars with multiple units (segments) that are connected with articulated couplings that share a common truck

Non-Articulated—Refers to cars with multiple units (segments) that are connected with solid drawbars. Each unit is a standalone unit and does not share a common truck with another unit.

Tons Per Operative Brake (TOB)

Tons per operative brake on cars above is determined by dividing the number of control valves/car count into the weight of the car. This can be determined without inspection as follows:

Articulated cars = total number of units divided by two, rounded up to next number divided into total weight of the car.

(Example: five unit doublestack, Car kind code QY=3 by car count)

Non-articulated cars = total number of units divided into weight of car.

(Example: Four Unit doublestack Car Kind Code QX=4 by car count)

Speed

In order to limit truck hunting, trains must not exceed 55 MPH unless all cars in train are loads. Cabooses and any car loaded with container chassis are considered loads for the purpose of the rule

Exception: Intermodal equipment with empty units/platforms are restricted to 55 MPH only if not equipped with constant contact side bearings (CCSB). BNSF train documentation now provides guidance on this empty unit restriction as it applies to the intermodal cars listed above. When handling all intermodal equipment, train documentation will provide one of three messages as follows:

- Train does not contain any intermodal equipment with empty units without CCSB.
- Train is restricted to 55 MPH due to intermodal equipment with empty units without CCSB.
- Train may be restricted to 55 MPH due to possibility of intermodal equipment having empty units without CCSB -Inspect to Verify.

In the event message 3 above is on train documentation, if train is otherwise authorized to exceed 55 MPH, a visual inspection must be made to determine the loaded status of units/platforms on car(s) listed. The inspection results must be noted on train list for relieving crews' guidance on train's maximum authorized speed.

When adding intermodal equipment enroute, train documentation may not have been generated. When this occurs, consider such car(s) to be restricted to 55 MPH if any units/platforms are empty. Subsequent train lists produced for crews after a pick up enroute will provide speed information on cars based on if CCSB-equipped.

This does not apply to trains that are otherwise restricted to 55 MPH or less such as when handling cars not listed above that are empty, other equipment speed restrictions, fuel conservation speed limits, etc.

2. Locomotive and ETD Information

Locomotives coupled together in multiple-unit configuration must be limited to 12 locomotives.

2(A). 2-Way ETD Grade Reference Chart for 2-mile / 2% Grades

Trains operating on the following grades listed must be equipped with an operable 2-way end-of-train telemetry device (ETD and HTD) or equivalent device. However, passenger trains do not require a 2-way EOT or equivalent device.

| Cajon Sub | . MP 56.6 to MP 80, all tracks |
|----------------|-----------------------------------|
| Raton Sub | . MP 639 to MP 660 |
| Glorieta Sub | . MP 775 to MP 810 |
| Glorieta Sub | . MP 818 to MP 842 |
| Pikes Peak Sub | . MP 52 to MP 66 |
| Hi Line Sub | . MP 1151 to MP 1166, both tracks |
| MRL Second Sub | . MP 115.4 to MP 140.0 |
| MRL Third Sub | MP 5.1 to MP 21.0 |
| MRL Fifth Sub | . MP 42.0 to MP 47.5 |
| MRL Tenth Sub | . MP 1.0 to MP 22.0 |
| Midway Sub | . MP 0.5 to MP 2, both tracks |
| Phoenix Sub | |
| St. Paul Sub | . MP 430 to MP 5, both tracks |
| Scenic Sub | . MP 1694.5 to MP 1731.3 |
| Stampede Sub | |
| | MP 250 to MP 255 (NCTC) |
| Gateway Sub | . MP 178.0 to MP 188.0 |

On UP Railroad:

| Mojave Sub | MP | 331.3 to MP 381.3 |
|-------------------|----|-------------------|
| Moffat Tunnel Sub | MP | 19 to MP 50 |
| Moffat Tunnel Sub | MP | 58.1 to MP 61.7 |

TOC Home

2(B). Locomotive Data Tables

| DC Traction Locomotives | | | | | | | |
|-------------------------|---------------------|------------------------------|---------------------------|---------------|--|--|--|
| Model | Rated Powered Axles | Rated Dynamic Brake Axles | Tractive Horsepower (THP) | Weight (Tons) | | | |
| SW10 | 4 | 0 | 1,000 | 125 | | | |
| SW15 | 4 | 0 | 1,500 | 131 | | | |
| GP28 M/P | 4 | 4BF | 1,800 | 130 | | | |
| GP30 | 4 | 4BT | 2,500 | 131 | | | |
| GP35 | 4 | 4BT | 2,500 | 133 | | | |
| GP38,GP38-2 | 4 | 4ET | 2,000 | 143 | | | |
| GP39, GP39-2, GP39-3Q | 4 | 4EF# | 2,300 | 135 | | | |
| GP40 M,E,-2 | 4 | 4BF | 3,000 | 139 | | | |
| GP40X | 4 | 4BF | 3,000 | 139 | | | |
| GP50, GP25 | 4 | 4EF | 3,600 | 138 | | | |
| GP60M/M-3 | 5+ | 5EF+ | 3,800 | 137 | | | |
| GP60 | 5+ | 5EF+ | 3,800 | 137 | | | |
| GP60B | 5+ | 5EF+ | 3,800 | 135 | | | |
| B-40-8 | 6+ | 5EF+ | 4,000 | 142 | | | |
| SD38-2 | 6 | 6 * # | 2,000 | 184 | | | |
| SC38P | 6 | 6BF | 2,000 | 196 | | | |
| SD40, SD40-2 | 6 | 6EF * # | 3,000 | 196 | | | |
| SD45, SD45-2 | 6 | 6ET | 3,600 | 198 | | | |
| SD50 | 6 | 6EF | 3,600 | 194 | | | |
| SD60, SD60M | 7+ | 8EF+ | 3,800 | 201 | | | |
| SD70M | 7+ | 9EF+ | 4,000 | 200 | | | |
| SD70M-2 | 7+ | 9EF+ | 4,300 | 200 | | | |
| SD75M | 7+ | 9EF+ | 4,300 | 197 | | | |
| C40-8 | 7+ | 8EF+ | 4,135 | 197 | | | |
| C44-9W | 8+ | 8EF+ | 4,400 | 196/210 | | | |
| ES44DC | 8+ | 8EF+ | 4,400 | 210 | | | |

| | AC Traction Locomotives | | | | | | | | |
|--------------------|-------------------------|------------------------------|-----------------------------------------------------------------|------------------|---------------------------------------------------------------------------------|---------------|--|--|--|
| Model | Rated Powered Axles | Rated Dynamic Brake Axles | Tractive Horsepower (THP) When on Z, Q or D Train Only | Consist (AC & DC | Tractive Horsepower (THP) in a Consist of All AC-6 Axle Locomotives | Weight (Tons) | | | |
| ET44ACH ES44ACH | 8+ | 10EF+ | 4,400 | 5,100 | 5,500 | 218 | | | |
| 1TM c/o | 8+ | 10EF+ | | | | | | | |
| 2TM c/o | 8+ | 8EF+ | | | | | | | |
| 3TM c/o | 6 | 6EF | | | | | | | |
| 4TM c/o | 4 | 4EF | | | | | | | |

| | | | | Tractive | Tractive | |
|---------------------------------------------------------------------------------------------|------------------------|------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------|--------------|
| Model | Rated Powered Axles | Rated Dynamic Brake Axles | Tractive Horsepower (THP) When on Z, Q or D Train Only | Horsepower (THP) in a Mixed Consist (AC & DC together) | Horsepower (THP) in a Consist of All AC-6 Axle Locomotives | Weight (Tons |
| 5TM c/o | 2 | 2EF | | | | |
| C44AC ¹ AC4400CW ¹ AC4400EV ¹ CW44AC ¹ | 8+ | 10EF+ | 4,400 | 5,100 | 5,100 | 210 |
| 1TM c/o | 8+ | 8EF+ | | | | |
| 2TM c/o | 6 | 6EF | | | | |
| 3TM c/o | 4 | 5EF | | | | |
| 4TM c/o | 3 | 3EF | | | | |
| 5TM c/o | 2 | 2EF | | | | |
| C60 ¹ C60AC ¹ | 8+ | 12EF+ | 6,000 | 6,000 | 6,000 | 210 |
| 1TM c/o | 8+ | 10EF+ | | | | |
| 2TM c/o | 8+ | 8EF+ | | | | |
| 3TM c/o | 6 | 6EF | | | | |
| 4TM c/o | 4 | 4EF | | | | |
| 5TM c/o | 2 | 2EF | | | | |
| ES44AC1 | 8+ | 10EF+ | 4,400 | 5,100 | 5,100 | 208 |
| 1TM c/o | 8+ | 10EF+ | | | | |
| 2TM c/o | 8+ | 8EF+ | | | | |
| 3TM c/o | 6 | 6EF | | | | |
| 4TM c/o | 4 | 4EF | | | | |
| 5TM c/o | 2 | 2EF | | | | |
| SD70MACE | 8+ | 8EF | 4,000 | 4,400 | 5,100 | 208 |
| 1-3TM c/o Same Truck | 4 | 6EF | | | | |
| 2TM separate truck c/o | 0 | 6EF | | | | |
| SD70MAC | 8+ | 8EF | 4,000 | 4,400 | 5,100 | 208 |
| 1-3TM c/o Same Truck | 4 | 6EF | | | | |
| 2TM separate truck c/o | 0 | 6EF | | | | |
| SD70ACE | 8+ | 10EF+ | 4,300 | 5,300 | 5,500 | 208 |
| 1-3TM c/o Same Truck | 4 | 6EF | | | | |
| 2TM separate truck c/o | 0 | 6EF | | | | |
| SD70ACE4(1) | 8+ | 8EF+ | 4,300 | 4,700 | 0 | 210 |
| 1 TM c/o | 3 | 6EF | | | | |
| 2 TM c/o | 2 | 4EF | | | | |
| 3 TM c/o | 1 | 2EF | | | | |
| SD70ACT4(1) | 8+ | 8EF+ | 4,300 | 4,700 | 0 | 210 |
| 1 TM c/o | 6 | 6EF | | | | |
| 2 TM c/o | 4 | 4EF | | | | |

| | AC Traction Locomotives | | | | | | | |
|---------------------------------------------|-------------------------|------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------|--|--|
| Model | Rated Powered Axles | Rated Dynamic Brake Axles | Tractive Horsepower (THP) When on Z, Q or D Train Only | Tractive Horsepower (THP) in a Mixed Consist (AC & DC together) | Tractive Horsepower (THP) in a Consist of All AC-6 Axle Locomotives | Weight (Tons) | | |
| 3 TM c/o | 2 | 2EF | | | | | | |
| SD80MAC | 8+ | 10EF | 5,000 | 5,000 | 5,000 | 210 | | |
| 1 Truck c/o | 5+ | 5EF | | | | | | |
| SD90/43MAC | 8+ | 10EF | 4,300 | 4,300 | 4,300 | 208 | | |
| 1 Truck c/o | 4 | 6EF | | | | | | |
| ES44C4 ¹ AC44C4M ¹ | 8+ | 8EF+ | 4,400 | 4,400 | 4,400 | 208 | | |
| 1 TM c/o | 6 | 6EF | | | | | | |
| 2 TM c/o | 4 | 4EF | | | | | | |
| 3 TM c/o | 2 | 2EF | | | | | | |
| ET44C4 ¹ | 8+ | 8EF+ | 4,400 | 4,400 | 4,400 | 214 | | |
| 1 TM c/o | 6 | 6EF | | | | | | |
| 2 TM c/o | 4 | 4EF | | | | | | |
| 3 TM c/o | 2 | 2EF | | | | | | |

Note:

Solid AC6 consists with units isolated may reflect zero or no THP value in the train profile and/or work order. Refer to the AC Traction Locomotives table to determine the appropriate THP value for that locomotive. Any units with a defect resulting in DEAD status will continue to indicate DEAD for the outbound status.

Dynamic braking is operational with Inverters/Traction motors cut out on AC locomotives.

- Power or dynamic brake axle rating exceeds actual axles
- GE/EMD Locomotives (C44AC, C60AC, SD70ACT4, etc.) have one inverter per axle and can have individual traction motors cut out as with DC locomotives.
- PTC Equipped
- May not be equipped with dynamic brakes
- May be equipped with standard range dynamic brakes
- Ε Extended dynamic brake range
- Basic dynamic brake range
- Flat dynamic brake system

Т Tapered dynamic brake system

3. **Equipment Restrictions**

The following equipment must be placed next ahead of caboose or at rear of cabooseless trains, except in work trains, unless otherwise indicated in timetable individual subdivision special instructions.

| Balfour Beatty machines, RKCX 103, 104, 105, 106, 467, 476, 3005 |
|---------------------------------------------------------------------------------------------------------|
| Dozers |
| Empty ribbon rail cars (if moving with no train list or if identified as "Rear End Only" on train list) |
| Herzog clip cars: HZGX 153, 154, 155 |
| Herzog MPM: HZGX 194, 1940, 19400 |

Jordan spreaders Locomotive cranes

199, 1990, 19900

Except as provided in Item 1, scale test cars must be placed ahead of caboose or, on cabooseless trains, ahead of the last

Scale test cars must not be humped.

Loram, LMIX 203, 204, 409, 410, 412, 414, 415, 417, KMUX 110, 750

Loram, LMIX 418, when moving coupled with MW tool cars, must remain coupled to such cars

Outfit cars (Exception: Univans may be placed anywhere in the train.)

P811, BNSF 922999

Pile drivers

Plasser machines, PACX 293, 2630, 2645, 3024, 4656, 4657, 4774, 4775

Plasser THS 2000, tie gang consist

Rear end only cars

Ribbon rail loading and unloading cars

Rotary snowplows Wedge plows

When locomotive cranes/pile drivers, wrecking derricks or similar equipment are being moved on their own wheels or on cars in a train, they will be handled on the rear of the train only.

Locomotive cranes/pile drivers, wrecking derricks or similar equipment 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. Such equipment is allowed to operate on any subdivision designated as Main Line but must not be operated on any subdivision designated as Branch Line unless authorized by Roadmaster or covered by specific instructions. This equipment must not be humped, cut off in motion or struck by any car moving under its own momentum.

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

DODX 40000-40100 are cars belonging to the Department of Defense. Hand brakes 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:

- Coupled to other cars except buffer cars (Buffer cars will be placed ahead of and behind ribbon rail cars at welding plant).
- Handled in freight service with other cars unless authorized and train is equipped with Rail Movement Detectors (RMD).
- Separated for maintenance or repairs unless under direct supervision of a roadmaster.

3(A). Multi-Platform and Stack Intermodal Cars

Unless otherwise indicated in the timetable individual subdivision special instructions, multiplatform stack intermodal cars are authorized for movement on tracks as outlined in SSI Item 5.

These cars must not be cut off in motion or struck by any car moving under its own momentum.

3(B). Rotary/Rapid Discharge Coal Cars

All cars equipped with dump door air lines (including foreign line cars) having:

- elevated hoses for dump door air line, or
- air brake train line on one side of coupler and the dump door air line on the other side (both hoses at end sill level), must have the dump door air line coupled between cars equipped in unit trains or in proper receptacle to prevent dragging when not in use.

Note: Connect door air line hoses to locomotives only when at unloading facility or shortly before unloading.

3(C). V-Slope Flat Cars

V-Slope Flat Car loads of pulpwood logs, without side retainers, are restricted to 35 MPH and must be observed closely enroute. Trains handling these cars will stop before passing through truss or girder bridges and crew will inspect cars to ensure safe passage through bridge before proceeding.

3(D). Two-Axle Cars

Hand brakes must not be depended upon to hold two-axle cars. When a two-axle car is set out, it must be chained to the rail or coupled to a non-two-axle car with operative hand brake.

3(E). Air Dump Cars

Employees are prohibited from riding in air dump cars. Cars must not be moved with doors open, except as necessary to clear material just dumped. Air dump cars must not be cut off in motion or struck by any car moving under its own momentum.

When air dump cars are being operated, the conductor must personally supervise the handling to see that all locking devices are in proper position and that all people are in the clear before charging actuating air line and before they are operated.

Only employees who are knowledgeable in the operation of air dump cars may operate such cars in unloading operations. When coupling actuating air hoses, not more than three air dump cars may be charged at a time.

Before charging the actuating air line, or before attempting to dump air dump cars, it must be known that protection against movement on adjacent tracks which could be fouled by material to be dumped, has been provided as follows:

- A. If the adjacent track is a Main Track, controlled siding or other track where CTC is in effect, authority must be obtained as prescribed by MWOR 6.3.1 (Main Track Authorization) or flag protection must be provided in both directions as prescribed by MWOR 6.19 to control movement by the work area.
- B. If the adjacent track is a track governed by GCOR/MWOR6.28 (i.e. yard, industry track, etc.), movement must

TOC Home

not be permitted to pass air dump cars which are being charged or being unloaded.

3(F). Caboose Placement

All cabooses other than the working caboose moving in trains for any reason, are to be handled on rear of train or just ahead of working caboose, except:

- A. Trains operating with helpers on the rear end must have cabooses other than the working caboose placed behind helpers.
- B. Trains or yard movements limited to maximum speed of 10 MPH may operate with caboose placed anywhere in train.
- Cars with defective couplers may be transported to repair facilities behind caboose.
- D. A crew transport train consisting of no more than two cabooses positioned between two locomotives may be operated during inclement weather conditions. The lead locomotive must be the controlling locomotive, with trailing locomotive isolated.

3(G). Georgetown Equipment Restrictions

Georgetown Rail Equipment cars (cars with initials GREX) must not be cutoff in motion or struck by any car moving under its own momentum. They must not exceed 5 MPH through other than Main Track turnouts.

3(H). GTTX Equipment

All GTTX cars are restricted to rear end only unless the train consists entirely of GTTX equipment. No more than 25 GTTX cars may be handled in any train unless the train consists entirely of GTTX equipment.

3(I). AMGX Equipment Restrictions

Gondola cars in series AMGX that are solid-drawbar connected must be placed as rear end cars only and are restricted to 50 MPH. For the purpose of this rule these cars may be placed in the rear five cars of the train. Solid blocks of this equipment may extend up to 20 cars from the rear of the train if the trailing car of the block is in the rear five cars.

3(J). Herzog Articulated Equipment

Herzog articulated equipment (Multi-Purpose Machines), identified as Herzog MPM within the table in 3. Equipment Restrictions, are restricted to rear end only positioning because drawbar connection between Herzog locomotive and cars does not have vertical restraint.

Switching Restrictions: All Herzog equipment must not be

humped or handled with other freight cars during switching operations. This equipment must be cut off or set over so that remaining cars can be switched.

3(K). Herzog Rail Unloading Machine

A Herzog Rail Unloading Machine (RUM) may be coupled to a work train for rail unloading purposes only. The train must remain stationary while the RUM couples to the train in selfpropelled mode. The following restrictions apply to trains with a Herzog RUM coupled to the train:

- All train movements may be made only at the direction of a qualified Herzog RUM operator accompanying the equipment.
- Maximum speed with Herzog RUM on trailing end of the movement is 15 MPH.
- Maximum speed with Herzog RUM on leading end of the movement is 10 MPH.

3(L). Handling Roadway Equipment Equipped with Couplers and Air Hoses by Trains or Engines

To prevent equipment damage, the following restrictions apply when handling Roadway Equipment equipped with rail car couplers and air hoses during train or switching movements:

- · All air hoses must be coupled and air brakes cut in.
- An Engineering employee must be present when switching this equipment, including shoving movements.
- When moving between work locations all P811, UC01, UC03, UC08, UC09, UC10 and SC29-35 machines, and the flat cars transporting supporting equipment accompanying these machines, must be handled in a dedicated unit train or a dedicated work train. No additional rail cars may be handled in these trains.
- The heaviest machine may be placed as the rear car of a

train only as directed by an Engineering employee.

Maximum allowable speed while transporting in a train is 50 MPH

4. Geometry Test Car Instructions

Geometry test cars 80/81, 85/86, 87/88, 90, 91, 92 and 93 must move in train by themselves. Geometry test cars 80/81, 85/86, 87/88, 90, 91, 92, and 93 are not required to have an ETD at the rear of the car when the car is occupied.

Work Orders for trains handling geometry test cars BNSF 90, 91, 92, and 93 will include instructions advising the conductor to call the Geometry Car Desk at 817-352-4559.

BNSF 808306, BNSF 808382, BNSF 808387, BNSF 808426, BNSF 808655, BNSF 808683 and BNSF 937503 are buffer cars assigned to Geometry Car service. When operating in a Geometry Car Consist, these buffer cars are considered to be passenger train equipment with a maximum authorized speed of 70 MPH.

Trains handling test cars AAR 112, BNSF 82 and BNSF 83 behind the locomotive consist may operate without further restricting the train from the maximum authorized speed designated in timetable individual subdivision special instructions. GCOR 7.3 and 7.9 must be used when switching and geometry test cars must not be cut off in motion or struck by any car moving under its own momentum. They must not be coupled with more force than is necessary to complete the coupling, not exceeding coupling speed of 2 MPH. These cars must receive careful handling at all times.

When not on a train, cars must be protected as prescribed by GCOR 5.12 or 5.13. These cars are considered to be occupied at all times.

FRA Track Geometry Inspection Cars

The Federal Railroad Administration (FRA) Office of Railroad Safety-Automated Track Inspection Program (ATIP) manages a fleet of geometry test cars that measure track geometry for compliance with the Federal Track Safety Standards. FRA geometry cars are pulled behind a railroad-owned locomotive and staffed with FRA employees and contractors.

FRA Geometry Car Operation

- Each train dispatcher and train crew will be governed by these instructions.
- Before ATIP testing commences, the FRA representative (assisted by the test car director) is responsible for overall safety and will:
 - Conduct a face-to-face job safety briefing with the train crew and all occupants of the test car concerning onboard safety appliances and standard operating procedures.
 - Be aware of and discuss the operational and safety conditions, and on-track protection procedures, which may change throughout the course of the ATIP test; and update the job safety briefing accordingly.
- The FRA representative will communicate directly with the railroad to ensure all operating rules, special instructions, and safety rules in effect on the test route are understood and correctly applied.
- Trains consisting entirely of FRA geometry cars are restricted to BNSF timetable passenger train speeds, and must not exceed the following maximum equipment speeds: DOTX 216, 125 MPH; DOTX 217, 219, 220 and 221, 90 MPH; and DOTX 218, 80 MPH.
- All mandatory directives will be transmitted and received in compliance with railroad rules and instructions. For

purposes of this instruction, all references to assigned crew member apply only to the train crew. The FRA Geometry Car operator relies on the train crew to identify relevant railroad physical characteristics, movement authority limits and authorized speeds.

FRA Geometry Car Protection

- Neither FRA nor contractor employees will operate a railroad switch or derail, and will rely upon a railroad employee to perform that function. After receiving authority for placement from the appropriate railroad representative, protective devices owned by FRA, i.e., signs, derails, and locking devices, will be applied by an FRA representative.
- FRA geometry cars must not be relocated or coupled to other rolling equipment without permission of FRA. At the request of FRA or the railroad, the following additional protective measures must be used:
 - Within a locomotive servicing area or car shop area, the railroad's Blue Signal Protection rules and procedures will govern.
 - When FRA geometry cars are unoccupied, FRA may request additional protection, such as posted guards, provided by the railroad and reimbursed by FRA.
 - c. Where provided, a remotely controlled switch, providing entrance to the track occupied by FRA geometry cars, will be aligned against movement to that track. Blocking devices applied by the control operator will be placed on the switch and signal controls to prevent undesirable access.
 - d. A manually operated switch will be aligned against movement to a track occupied by the FRA geometry car, and secured with an effective locking device, exclusive to FRA. In addition, the switch stand's operating mechanism will be equipped with an FRA-provided, visible, all-weather display tag, warning any users: "OUT OF SERVICE - DO NOT OPERATE."
 - e. If a switch-locking device cannot be provided, as described above, FRA-provided portable derails will be used as an alternative to restrict access in either direction. In addition to the portable derails, the placement of warning signs will be displayed, indicating the presence of FRA geometry cars. The warning signs will be affixed or adjacent to the derail. FRA-provided derails will not be placed nearer than 150 feet from each end of the geometry cars, except where appropriate.
 - f. If an FRA geometry car is standing alone, in addition to applying the hand brake, one wheel will be securely chocked to prevent movement.
 - g. Either on a Main Track or other than Main Track, before anyone goes on, under, or between FRA track geometry cars, the locomotive engineer will apply the independent brake on the locomotive, remove the locomotive reverser, and open the field generator switch. The individual requiring protection will place a "Do Not Operate" tag on the locomotive control stand at a location where it is readily visible to the locomotive engineer or operator at the controls of that locomotive. The "Do Not Operate" tag may only be removed by the person who placed it on the locomotive control stand. Additionally, if adjacent

TOC Home

tracks are, or will be, fouled by the individual going on, under, or between the FRA track geometry car, appropriate adjacent track protection must be afforded before going on, under, or between the car.

5. Car Restrictions

Item 2 of the individual subdivision special instructions indicates a maximum gross weight of car and a letter restriction (A through H).

The maximum gross weight of car restriction is applicable only to four-axle cars with a coupled length of 49 feet 6 inches or greater. The maximum gross weight of car restriction for cars shorter than 49 feet 6 inches, six-axle cars, eight-axle cars or other specialty cars can be obtained from Table 5 by cross referencing the car length and the letter restriction for the subdivision.

Example: Item 2, Individual Subdivision Special Instruction of subdivision XXX indicates a maximum gross weight of car of 143 tons, Restriction E.

- For hoppers 53' long, the maximum gross weight/car = 143 tons from Item 2 (or by looking at line 8, column E).
- For tank car 43' long, the maximum gross weight/car = 136 tons (line 6, column E).

Cars that do not meet the weight limits specified in Table 5 or in Item 2 of the individual subdivision special instructions or in any part of the following paragraphs are not permitted without authority of System Structures Department or BNSF Clearance Bureau. 35-ft. cars (BNSF 601090-601399) loaded to 143 tons may operate only on the Hibtac, Casco, Lakes (between Superior and Gunn) and Allouez Subdivisions. These cars must comply with weight limits indicated in Table 5 when operating on all other subdivisions.

The actual car weight may exceed the maximums by up to one ton due to weighing tolerances. Weight and length restrictions indicated in this section and in Item 2 of the individual subdivision special instructions do not apply to locomotive cranes, ribbon rail cars or specialized work equipment.

Item 1(B) of the individual subdivision special instructions may include loaded railcar weight references, in which case the actual car weight may exceed the maximum by up to one ton due to weighing tolerances.

When single car movements apply to the movement of cars weighing over 143 tons and up to 157.5 tons as specified in Table 5 for '143X', single car movements shall denote that the car shall be separated from the locomotive and from other cars weighing more than 143 tons by at least one car weighing no greater than 143 tons. One train may contain up to ten '143X' cars weighing over 143 tons and up to 157.5 tons with separation meeting the single car movement definition noted above.

| Tabl | e 5. | | | | | | | | | |
|-------------|------------------------------------------|----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------|
| | Car Restrictions | | | | | | | | | |
| Line No. | No/ Axles and/ or Car Length | Typical Car Types & Partial Listing of Representative Car Number Series | Restri Indica single "143X for mu tons a single "P," will withou "NP," v | ted we car or a which car mo car mo chich de wit spec which cat me ted wit B | Class A ight lim multipl h deno ar mov to 157. ovemen notes to ial auto denotes | A throu hits are e car n tes tha rement 5 tons hts. that this bhrizati s that tl | gh H applic novem t 143 t s but w can be s type on. his type | able to ents ex ons are veights accep of car i | either ccept for e perm over 1 oted for s perm | or: litted 143 r nitted |

| | 1 ovloo | I | | | | | | | | |
|----|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-----|-------|-----|-----|-----|-------|
| 1 | 4 axles & length less than 35'0" | Hopper | 89 | NP | 89 | NP | NP | NP | NP | NP |
| 2 | 4 axles & length 35'0" to 36'11" | Hopper, tank cars BN 99000- 99949, BN 98000- 98189, BNSF 601090- 601179 | 134 | 117 | 134 | 117 | 110 | 110 | 110 | 110 |
| | | 1001110 | Α | В | С | D | Е | F | G | Н |
| 3 | 4 axles & length 37'0" to 38'11" | Hopper, tank cars ATSF 82056-82990, 176900- 177861 | 141 | 123 | 141 | 123 | 117 | 117 | 117 | 117 |
| 4 | 4 axles & length 39'0" to 40'11" | Hopper, tank cars BN 435500- 435999 | 143 | 131.5 | 143 | 131.5 | 123 | 123 | 123 | 123 |
| 5 | 4 axles & length 41'0" to 42'11" | Hopper, tank cars BN 476000- 476019 | 143 | 143 | 143 | 143 | 134 | 134 | 134 | 131.5 |
| 6 | 4 axles & length 43'0" to 44'10" | Hopper, tank cars | 143 | 143 | 143 | 143 | 136 | 136 | 134 | 131.5 |
| 7 | 4 axles & length 44'11" to 49'5" | Hopper, gondola, tank cars BN 686000- 686054 COILCAR | 143 | 143 | 143 | 143 | 143 | 136 | 134 | 131.5 |
| 8 | 4 axles & length greater than or equal to 49'6" | Hoppers, flats, gondolas, tank cars | 143X | 143X | 143 | 143 | 143 | 136 | 134 | 131.5 |
| 9 | 6 axles | ACFX 88348-88373, CELX 6400-6458, CELX 10400-10438, DODX 40000-40573, DUPX 29400-29439, 29600-29666, HCMX 4402, KCS 700002-700053, KRL 600908-600910 LMIX 403, 409, 410, 412, 414, 418, NS 185541- 185542 | 197 | 197 | 197 | 197 | 197 | 197 | 185 | NP |
| 10 | 6 axles | DODX 39810- 39832, KRL 600430 | 197 | 197 | 185 | 185 | 185 | 178 | 175 | NP |
| 11 | 6 axles | Others | 185 | 185 | 170 | 170 | 170 | 165 | 160 | NP |
| 12 | 8 axles & length greater than or equal to 80'0" | ATSF 90001- 90004, 90006- 90007, ATSF 90011- 90016, BN 631021 | 263 | 263 | 263 | 263 | 263 | 235 | 235 | NP |
| 13 | 8 axles & length greater than or equal to 55'0" and less than 80'0" | | 263 | 255 | 263 | 255 | 235 | 235 | 235 | NP |

TOC Home

| 14 | 8 axles & length less than 55'0" | ATSF 90020- 90023 | 220 | 195 | 220 | 195 | 180 | 180 | 180 | NP |
|----|----------------------------------------------|---------------------------|-----|-----|-----|-----|-----|-----|-----|----|
| 15 | | Articulated Intermodal | Р | Р | Р | Р | Р | NP | NP | NP |

6. Work Order: Instructions for Reporting Work

Conductors and engine foremen are responsible for documenting and reporting all scheduled and unscheduled work performed during their tour of duty. Timely reporting by radio communication, telephone, cellular phones, and electronic devices such as computers is key to maintaining current inventory, accurate records and a successful operation.

Any foreign line carrier operating on BNSF that sets out equipment must notify the BNSF train dispatcher and the BNSF Mechanical Help Desk at the earliest opportunity and provide the following information:

- Equipment being set out including the engine/car number.
- · Location where equipment was set out.
- Reason equipment was set out (e.g. flat spots, broken brake rigging, hot bearing, etc.).
- Commodity if a car contains a hazardous material, including but not limited to, Inhalation Hazard car(s).
- · Any other pertinent information.

Unless otherwise designated by the division, all trains except work trains and those trains currently reporting via the Work Order Reporting System will be required to use the Mobile Train Reporting (MTR) performed enroute.

Communication between the train and the MTR application will be performed on an approved electronic device.

When reporting by Mobile Train Reporting is not possible, conductors and engine foremen are expected to use the VTR System by MRAS/PBX radio and telephone. If VTR is not possible contact the Customer Support Specialist promptly after completion of work performed at each station. You will be required to enter your employee ID number for routing to the proper Customer Support Specialist.

Work orders issued to train and switch jobs will list all scheduled work.

Conductors and engine foremen must know the proper track NUMBERS where they report work. Refer to the TRKLIST command in TSS for track numbers at a station or on a subdivision.

Unit Trains (C, E, G, J, U, and X)

Unit Trains at origin must report a "Pick Up" event and unit trains at destination must report a "Set Out" event using MTR.

- Report "Set Out" time through the MTR when the set out work is complete at the industry track, trains crews are clear of the equipment and the customer can begin processing the train, or when the unit train is handed off to the facility operator.
- Report "Pick Up" time through the MTR when the train begins departure from the industry track, departing the customer facility.

Train Work Order Package includes the following documents:

- Train list and profile.
- FRA 215.9 Mechanical Defective Cars List (if applicable).
- · Hazardous manifest (if train contains hazardous materials).

- · Work order for each station.
- · Track list of each track to be worked.
- · Supplemental Work Order Form.

The following reporting codes will be used to report work performed:

| | Reporting Codes | | | | | |
|------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| | Reporting Instructions for So | cheduled/Unscheduled Work | | | | |
| Code | | | | | | |
| CC | CARRIERS CONVENIENCE | (Code, date, time, station name, zone, track where cars were left) Cars left on an industry track for carrier convenience must not include a spot number. | | | | |
| DD | CARS DELIVERED IN INTERCHANGE | (Code, date, time, station name, zone/ track, and name of road) | | | | |
| IP | INTRA-PLANT SWITCH | (Code, date, time, zone/track/spot) | | | | |
| МО | MOVE | (Code, date, time, station name, zone/ track/spot). Use only to reposition a placed car to correct customer inventory. | | | | |
| ND | NOT DONE | (When ND code is used, enter ND explanation code or a full written explanation.) | | | | |
| OF | CARS OFFERED OR NEEDING OFFERED TO A CONNECTING ROAD | (Code, date, time, station name, zone/ track, name of road and person's name refusing cars) | | | | |
| PK | PICKUP | (Code, date, time, station name, track, location in train) Display train location using one of the following codes (HE-Head End, RE-Rear End, FB-Fill Behind). When filling behind cars in the train, enter the initial/number of the car the pickup will follow in standing order. | | | | |
| PU | PULL | (Code, date, pull time, station name, zone/track where cars are pulled from. Also include date, time, station, zone/ track where cars were left.) | | | | |
| RR | CARS RECEIVED IN INTERCHANGE | (Code, date, time, station name, zone/ track, and name of road) | | | | |
| RS | RESPOT | (Code, date, time, zone/track spot) | | | | |
| so | SETOUT | (Code, date, time, station name, zone, track, timetable direction and standing order) When track length will not hold all cars to be set out, enter first car initial/number and track where remaining cars were moved. If cars are set out on an interchange track, refer to reporting code DD. | | | | |
| SP | SPOT | (Code, date, time, zone/track/spot) When cars are spotted to an industry track and no spot number is provided, use "01" as a spot number. | | | | |
| TU | CARS TURNED ON WYE OR TURNTABLE | (Code, date, time, station name, zone/ track/spot) | | | | |

Not Done Reasons - Potential Charge to Customer

Car Can't Be Pulled - Customer Reason

- · Customer Instruction Conflicting with Work Order
- Track or Equipment Inaccessible
- Unsafe Conditions or Car(s) Unsafe to Move
- Other Customer Exception

Car Can't Be Spotted - Customer Reason

- · Customer Instruction Conflicting with Work Order
- · Track or Equipment Inaccessible
- Unsafe Conditions or Car(s) Unsafe to Move
- · Other Customer Exception

Not Done Reasons - Not Chargeable to Customer Operation Reason

- Bad Order Car
- · Done in Other Direction
- Tonnage Restrictions or Loco Problems
- Instructed to do Other than Scheduled Industry Work

- Not Switched into Train Unavailable
- · Hrs of Service Expired or Short on Time
- · Weather Conditions
- · Not Granted Mainline Time by Dispatcher
- · Other Operating Exception

Reporting Methods

Radio—Voice Train Reporting (VTR) using the MRAS/PBX or radio is available as a secondary method of reporting work when the Mobile Train Reporting application is unavailable. Mobile Train Reporting (MTR) is the preferred method of reporting work. Conductors and engine foremen are expected to report as soon as possible after work is performed at each station. If Mobile Train Reporting (MTR) is used to report, it is not necessary to call Customer Support.

Telephone or Cellular Phones—Telephone or cellular phones assigned to conductors and engine foremen may be used when MRAS/PBX or radio communication is unavailable or radio is congested in order to provide timely reporting in the field

Electronic Device—Computer reporting will not require any written documentation to be forwarded.

Conductors and engine foremen are required to call their designated Customer Support Specialist anytime there are questions or problems with work order information or work to be performed during their tour of duty.

Work Order Codes

There are three types of work order codes that appear on work orders: Request Codes, Status Codes and Hold Codes.

| | Request Codes | | | | | |
|------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Code | Displays Wo | ork to Be Performed | | | | |
| IP | INTRA-PLANT SWITCH | Customer request to move a car originally spotted correctly to another spot or track within the industry. Cars are commonly moved per this request to complete loading, for inspection, etc. This switch is chargeable to the customer. | | | | |
| PK | PICKUP | Cars available to be picked up by train, local, road switcher at station. | | | | |
| PU | PULL | Customer request to move a car from an industry track to another track or scheduled destination. | | | | |
| RS | RESPOT | This switch is not chargeable to the customer and should be used only when correcting a railroad error. Customer request to move a car to a different track or spot within the industry after being placed incorrectly. | | | | |
| so | SETOUT | Cars scheduled to be set out by train, local, road switcher at station. | | | | |
| SP | SPOT | Customer request to spot car for loading/unloading. | | | | |
| TU | CARS TURNED ON WYE OR TURNTABLE | Request to turn a car previously spotted and re-spot. | | | | |

| | Status Codes | | | | | | |
|--------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------|--|--|--|--|--|
| Displays Current Status of Cars (Does not require any work to be performed) | | | | | | | |
| Code | | | | | | | |
| СР | СР | Constructive placement. (Condition between carrier and customer.) | | | | | |
| DD | CARS DELIVERED IN INTERCHANGE | Displays cars scheduled for interchange delivery to a connecting road. | | | | | |

| | CARS OFFERED OR NEEDING OFFER TO A CONNECTING ROAD | Displays to the carrier, cars normally delivered in interchange cannot be delivered due to connecting road's inability or unwillingness to accept cars. |
|----|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| PL | | Car on spot. (Displays car status and not a request.) |

| Hold Codes | | |
|--------------------------------------------------------------|---------------------------------------------------------|--|
| Carrier/Customer Instructions Have Not Been Provided | | |
| Scheduled Train Field | | |
| HOLD ED | Car to be held for equipment distribution. | |
| HOLD EH | Car is to be held for embargo. | |
| HOLD HL Car is HIWIDE and has not been scheduled to a train. | | |
| HOLD LS | Car is on floating lease being held for customer order. | |
| HOLD ME Car is to be held for mechanical inspection. | | |
| HOLD MT Car not scheduled for outbound train. | | |
| HOLD NI | Car has no instructions for spotting. | |
| HOLD OT | Car is to be held for local order. | |
| HOLD WH Car is to be held for weighing. | | |
| HOLD HF Car has no measurements/clearances. | | |
| | SCHI Code Field | |
| DO * | Written delivery order. DO NOT SPOT. | |
| NC * | Non-credit customer. DO NOT SPOT. | |
| SO * | Car billed shipper's order. DO NOT SPOT. | |
| ZNTKSP Field | | |
| 00 00 00* | DO NOT SPOT | |
| + D | | |

^{*} Do not spot cars with '00 00 00' in the ZNTKSP field or cars with NC, DO or SO in the SCHI field.

(Cars may be pulled or picked up and moved to a location for further disposition when these codes are displayed.)

Work order documents will display work order codes as outlined by customer or carrier for specific instructions to conductors or engine foremen. They will be located in the Special Car Handling Instructions (SCHI) column or in the Scheduled Train column.

Hours of Service

Conductors or engine foremen should plan ahead and report scheduled and unscheduled work before hours of service expire. Conductors and engine foremen who relieve crews whose hours of service have expired will be responsible for reporting work performed during their tour of duty. If a crew's hours of service expire and they are unable to report scheduled or unscheduled work, the information must be passed on to the relieving conductor, engine foreman or supervisor who will be responsible to report work for the previous job.

Pick Up in Block

When picking up cars, enroute, trains must pick up in block unless otherwise advised by train dispatcher or in conflict with current train makeup instructions.

7. Dimensional and Special Shipment Restrictions

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

Dimensional loads on BNSF are defined as wider than 11' and/ or higher than 17' ATR and/or longer than the length of the car.

Transportation Supervisors: See Management Instruction regarding advance notification requirements for dimensional

shipments routed on UPRR or within the state of California.

- a. Any dimensional and/or oversize car or special shipment must be accompanied by one of the following: message included with train's work order, track bulletin or message issued by BNSF Clearance Bureau.
- b. Before a dimensional shipment can be assigned to a train the supervisor in charge of train or yard crews (Terminal Manager, Trainmaster, Assistant Trainmaster, Yardmaster, etc.) at that location, or the conductor or yard foreman where no supervisor of train or yard crews is on-duty, must review and verify the dimensional clearance bulletin to ensure shipment is clear over the designated route of travel. After the review is complete the shipment may be assigned to the train appropriately. Issues regarding scheduling and/or train set, please contact Service Scheduling at 817-867-2000. Any issues regarding additional clearance segments and/or a lack of clearance, please contact the Dimensional Clearance Team for assistance at high.wide@bnsf.com.
- c. Before a dimensional shipment can be moved in the yard, train or yard crews handling the dimensional shipment must ensure there is adequate clearance on adjacent tracks for safe movement. Clearance bulletins issued by the High Wide Team only protect BNSF main lines.
- d. Before a dimensional or special shipment can be moved in a train the supervisor in charge of train crews (Trainmaster, Assistant Trainmaster, Yardmaster) at that location, or the conductor where no supervisor of train crews is on-duty, must obtain permission from the train dispatcher. This does not relieve conductor from complying with GCOR 1.47. When yard supervisors are notified of expected arrival of wide cars, precautions must be taken to safeguard employees in yard.
- e. 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 promptly notify the train dispatcher.
- f. Train dispatcher must issue appropriate track warrant, track bulletin or message when dimensional shipment restricts opposing train and confirm message received.
- g. 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.
- h. To provide for close observation enroute, all dimensional shipments must be placed in a block next to the lead locomotive consist, or due to the following exceptions as near the lead locomotive consist as possible:
 - In the application of the paragraph h. autoracks carrying HL special condition code (car kinds M2E, M2F and M3F) are not considered dimensional shipments. (See Item 46)
 - Dimensional shipments, including idler cars moving with dimensional shipments, must be placed in compliance with minimum weight requirements outlined in train makeup rules.
 - On trains destined to or operating in the state of California, and train room permits, dimensional shipments must be no closer than the 6th car or platform from the lead locomotive consist. Dimensional shipments placed in train to comply with these requirements are also considered in compliance when enroute from the state of California.
 - 4. Trains received from foreign railroads with

- dimensional shipment placement other than described above, may proceed to a location specified by train dispatcher to correct the condition.
- When dimensional shipment is a shiftable load, GCOR 1.37 applies.
- Boeing dimensional shipments, identified as having contents ACFTEQ on the train list, must be placed ahead of other dimensional shipments. Trains with one or more Boeing shipments with contents ACFTEQ are limited to a combination not to exceed 10 loads and empties.

No more than six uncovered assembled airplane fuselages may be transported in train without approval from Boeing.

The following specialized Boeing Service idler cars weighing 45 tons or more may be billed loaded or empty, depending on destination.

Boeing Service Idlers cars listed below do not count towards the 10 car combination limitation:

| MTTX 978773 | XTTX 146316 | XTTX 146319 |
|----------------|----------------|----------------|
| TBCX 737002 to | XTTX 146322 | XTTX 146323 |
| TBCX 737042 | | |
| TBCX 737067 to | XTTX 146251 to | XTTX 146264 to |
| TBCX 737084 | XTTX 146254 | XTTX 146267 |
| XTTX 146262 | XTTX 146337 | XTTX 146276 |
| XTTX 146339 | | |

Trains handling all empty dimensional Boeing cars with contents ACFTEQ are limited to maximum of 25.

Airplane fuselages transported in trains from Wichita to Renton or Mukilteo must be turned as soon as possible to move nose first in the direction of train travel unless otherwise approved by Boeing.

Planes may travel backwards (tail first) from Renton to Mukilteo, in northbound direction only when approved by Boeing on a case by case basis.

- Employees are prohibited from riding excessive dimension cars. This restriction does not apply to:
 - Auto-Max cars (car types M2F and M3F)
 - Boeing cars XTTX 146220, XTTX 146232, XTTX 146304, XTTX 146311, XTTX 146298, XTTX 137353
- j. Train crews handling dimensional and/or oversize car or special shipment car(s) approaching locations controlled by the train dispatcher and where these car(s) are restricted should communicate with the train dispatcher and jointly determine if a meet or pass of any other equipment at the restricting location(s) can be accomplished safely.
- k. When the dimensional message indicates "Stop, Proceed on Hand Signals" at a specific location, the following will apply:
 - · Stop the train before passing the location specified.
 - · Check the dimensional load for shifted contents.
 - If safe to proceed without damage to shipment or property, move beyond the specified location on instructions from an employee(s) closely observing the shipment, not exceeding 5 MPH until the dimensional shipment clears the location specified.

TOC Home

 If employee(s) is unable to continue observing the shipment closely due to train makeup, topography, etc., movement may continue, not exceeding 5 MPH until the dimensional shipment clears the location specified.

8. Trackside Warning Devices (TWD)

8(A). Description

Trackside warning devices (TWD) inspect passing trains for defects or monitor for unusual trackside conditions that could adversely affect the safe and efficient movement of trains. Examples of such devices include detection of the following conditions:

- Overheated journal bearings (hot bearing) (HBD)
- Dragging equipment (DED)
- · High/Wide/Shifted load (SLD)
- · High water
- · Earth/Rock slide fence (Slide)

Individual subdivision special instructions identify the following:

- · Detector location
- Detector type

Unless otherwise stated, protection will be hot journal and dragging equipment with bidirectional operation.

Exceptions will be shown as follows:

- · Northward direction only (NWD)
- · Southward direction only (SWD)
- Eastward direction only (EWD)
- · Westward direction only (WWD)
- Dragging equipment only (DED)
- · Shifted load only (SLD)
- Earth/Rock slide fence (Slide)
- · Track Integrity Warning System (TIWS)
- Wheel Impact Load Detector (WILD)
- · Detectors that protect bridges, tunnels or other structures
- Exception Reporting detector

8(B). Detector Radio Message

While passing over a detector, a pre-alarm message indicating "You have a defect" will be transmitted if a defect is detected. When this pre-alarm message is transmitted, immediately begin reducing speed in preparation to stop after the alarm message is transmitted, utilizing train handling methods that minimize in-train forces. Do not reduce speed below 20 MPH.

After a train has passed a detector, a radio message will be transmitted (unless the detector is defined as "Exception Reporting" in Item 5(B) of the individual division timetables). This radio transmission will provide alarm message details for defects noted during train passage such as "hot journal" detected, or non-alarm messages such as "no defects" or "integrity failure."

When the entire train has passed the detector and alarm message is transmitted, immediately stop the train utilizing train handling methods that minimize in-train forces.

The detector message is not complete until "Out" is transmitted

Train Approaching Detector

Except in emergency, when approaching train is within 150 feet of a TWD, DO NOT make a radio transmission until the entire train has passed the TWD.

The train crew must have the radio set to the "in service" radio channel, for the Subdivision and location of the TWD, as shown in the timetable. The radio channel should not be

changed until the entire train has passed by the TWD location and you have allowed time for the TWD to transmit any messages.

8(C). Detector Message and Train Crew Action

Use the following table to determine crew requirements when a detector message is received. If detector indicates more than one detector message or circumstance, comply with each train crew action shown. Radios at Exception Reporting detectors will only transmit a message when an alarm is present. Do not report a failure to transmit to the train dispatcher as is required with other types of detectors.

Note: 5(A) indicates detectors that protect bridges, tunnels or other structures. 5(B) indicates other TWD locations.

| Table No. 1 - 8(C) Non-Alarm Message | | | | |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--|
| Type Detector | Non-Alarm Message | Train Crew Action | Additional Instructions | |
| 5(A) or 5(B) | When detector announces "no defects", or when advised by signal maintainer or train dispatcher that there are no defects. | Proceed. | None | |
| 5(A) | "Integrity Failure" | Stop the train consistent with good train handling. Perform a rolling inspection not exceeding 5 MPH on both sides of the train without entering or traversing protected structure. If unable to stop before a portion of the train has entered or traversed the protected structure, perform a walking inspection of that portion that is on or has already traversed the structure and perform a rolling inspection for the remainder of the train. | Report integrity failure to train dispatcher. | |
| 5(A) | "Train Too Slow" with no alarm or Crew is notified by train dispatcher or signal maintainer that TWD is out of service. | Proceed. | None | |

| "Train Too Slow" or "Integrity Failure" or 5(B) Crew is notified by train dispatcher or signal maintainer that TWD is out of service. | Proceed. | Report "Integrity Failure" to the train dispatcher unless "Train Too Slow" is transmitted in the same message. Then, no report to the train dispatcher is required. |
|----------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|

5(A) "You have a defect, dragging equipment near axle XXX"

Or

"You have a defect, wide load right/left side near axle XXX"

Or

"You have a defect, shifted load right/left side near axle XXX".

- As soon as message
 "...you have a defect"
 is transmitted,
 provide warning to
 other trains and stop
 immediately.
- 2. A post train alarm message will be transmitted summarizing defects detected followed by "Out". Inspect the indicated axle(s). If no post train alarm message is transmitted inspect entire train.
- 3. If no defect is found, inspect 12 axles forward and 12 axles to the rear of the indicated axle regardless of whether a defect is found before reaching the 12th axle.
- Report findings to the train dispatcher.
- When the defective car(s) are set out or continue in train, notify the train dispatcher and mechanical help desk.

Detector post train alarm message may identify more than one defect. Inspect train for all reported defects before proceeding. If detector alarm message does not include axle designation, inspect both sides of entire train.

stopped on top of the detector, a post train alarm message will be transmitted summarizing defect(s) detected followed by "Out".

If train is

Upon moving the train, defect detection will continue for the remainder of the consist. Additional defects may be identified and transmitted with invalid axle designation. Inspect both sides of the train from the last reported defect.

5(B) left side axle XXX"

"Hot journal right/ 1. As soon as message "...you have a defect" is transmitted, begin reducing train speed in preparation to stop and provide warning to other trains. Do not released by reduce speed below 20 MPH.

- 2. A post train alarm message will be transmitted summarizing defects detected followed by "Out". Stop immediately after the post train alarm message is transmitted or no alarm message is transmitted and the entire train has passed through the detector.
- 3. Contact NOC detector desk to initiate review of bearing profiles that caused alarm. If at any point before or during the inspection the NOC detector desk determines the stop to be invalid and releases the train, the inspection may be concluded.

Otherwise:

- 4. Inspect the indicated axle(s). If no post train alarm message is transmitted inspect entire train
- 5. If no defect is found, inspect 12 axles forward and 12 axles to the rear of the indicated axle regardless of whether a defect is found before reaching the 12th axle.
- 6. Report findings to the train dispatcher.
- 7. When defective car(s) are set out or continue in train notify the train dispatcher and Mechanical Help Desk.

Detector post train alarm message may identify more than one defect. Unless the NOC detector desk, inspect train for all reported defects before proceeding.

If detector alarm message does not include axle designation, inspect both sides of entire train.

| 5(A) or | "Excessive | 1. Inspect the indicated | Unless |
|------------|----------------------------------|-----------------------------------------|----------------------------------|
| 5(B) | Alarms" | axle(s). | released by |
| | | 2. If no defect is found, | the NOC |
| | | inspect 12 axles | detector desk, |
| | | forward and 12 | inspect train |
| | | axles to the rear of | for all reported |
| | | the indicated axle | defects before |
| | | regardless of whether | proceeding. |
| | | a defect is found | |
| | | before reaching the | |
| | | 12th axle. | |
| | | 3. Inspect both sides | |
| | | of the remainder of | |
| | | the train from the last | |
| | | reported defect. | |
| | | 4. Report findings to the | |
| | | train dispatcher. | |
| | | 5. When defective | |
| | | car(s) are set out | |
| | | or continue in train, | |
| | | notify the train | |
| | | dispatcher and | |
| | | Mechanical Help | |
| E(A) | Post train alarm | If train slowed below 20 | Report "Train |
| 5(A) | message with | MPH while crossing the | Too Slow" with |
| *Special | "Train Too Slow" | detector in preparation | alarm to Train |
| condition, | is Transmitted. | to stop, follow train crew | Dispatcher. |
| preparing | is mansimiled. | actions for announced | Dispatcher. |
| to stop. | | alarm message. | |
| E(A) or | Post train alarm | <u> </u> | Donort " Trois |
| 5(A) or | | Inspect both sides of the entire train. | Report " Train Too Slow" with |
| 5(B) | message with "Train Too Slow" | uic cillie lialli. | alarm to Train |
| | is transmitted. | | Dispatcher. |
| | is nansiiineu. | | Dispatorior. |
| | | | |

| Table No. 3 - 8(C) Other Circumstances | | | |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Type Detector | Circumstance | Train Crew Action | Additional Instructions |
| | No message or Incomplete message is transmitted. No message or Incomplete message is transmitted. | 1. Enter recall code and be governed by message. 2. If still no message or incomplete message, proceed. 1. Enter recall code and be governed by message. 2. If still no message or incomplete message, stop the train. 3. Make a walking | Instructions Report no message or incomplete message to train dispatcher. Report no message or incomplete message to train dispatcher. |
| 5(B) - without recall code | No message or Incomplete message is transmitted. | inspection of both sides of entire train. Proceed | Report no message or incomplete message to train dispatcher. |
| 5(B) - Exception Reporting | No Message | Proceed | Do Not Report "No Message" to Train Dispatcher |
| 5(B) - with recall code Exception Reporting | Incomplete Message is Transmitted | Enter recall code and be governed by message. If still no message or incomplete message, stop the train. Make a walking inspection of both sides of train. | Report incomplete message to train dispatcher. |
| 5(B) - without recall code Exception Reporting | Incomplete Message is Transmitted | Stop the train. Make a walking inspection of both sides of entire train. | Report incomplete message to train dispatcher. |

Note: Detector message followed by the word "Out" indicates a complete message. Total axle count is not required for a complete message. If an alarm message is transmitted and it is not followed by the word "Out", the train will be governed by the Train Crew Action for that alarm message

24 System Special Instructions—No. 4—December 1, 2023 (Updated 3/1/25)

TOC Home

8(D). Train Inspection

When alarm message requires inspection, inspect the side of the train in the message. The reference to defect locations will be from HEAD END of train, and references to LEFT or RIGHT side are to engineer's left or right side in the direction of travel.

Determine the location of the indicated axle by physically counting axles from the HEAD END of the train, including locomotive axles. DO NOT depend on wheel report information for correct axle count. When alarm message requires, inspect indicated axle(s). If inspection does not reveal a defect, inspect 12 axles forward and 12 axles to the rear of the indicated axle. When this is necessary, inspect all 12 axles in each direction regardless of whether a defect is found before reaching the twelfth axle.

Dragging Equipment/Shifted Load Inspection

When a dragging equipment or shifted load alarm message is received, make a walking (trackside) inspection of the train until the inspection is complete or until an obstruction (bridge without a walkway or hazardous walking conditions) prevents further inspection. When obstruction prevents completion of inspection, move train at no more than 5 MPH to complete the inspection per GCOR 6.29.2. The train may proceed only after walking inspection confirms there is no dragging equipment or shifted load(s), defective car(s) are repaired or permission is received from the train dispatcher or manager to move the defective equipment.

Overheated Equipment Inspection

When an overheated equipment alarm is received, follow this procedure to inspect equipment:

- · Crew member positioned on the ground must count axles.
- Move train at no more than 10 MPH until the indicated axle is near crew member or until inspection is complete.

When a train is stopped by a trackside warning device for hot journal, crew is to immediately contact train dispatcher who will relay the occurrence along with train identification and location to the NOC Detector Desk. The NOC Detector Desk will then contact the train and assist the crew with the process of inspection and identification of the suspect car. Train may not depart inspection location until NOC Detector Desk releases train from inspection and permission to depart is received from train dispatcher. The train crew must report the following to the NOC Detector Desk:

- 1. The axles were physically counted
- A heat-indicating infrared device was used at the indicated axle, and
- If inspection does not reveal a defect, that 12 axles forward and to the rear of the indicated axle have been inspected.

If a infrared device is not available, set out the indicated car.

After released by the NOC Detector Desk, contact the train dispatcher for permission to depart inspection location and to report train delay/detector stop information (i.e. axle readout, inspection result, car initial and number, journal number and size, set out location, etc.). To contact the NOC Detector Desk, when using the 3 digit radio call-in code, use the 2 digits indicated in the timetable followed by a 5. If using the 1 digit radio call-in code, use 5.

Freight Trains

Unless otherwise indicated below, if no defect is found train may continue, but crew members must closely observe indicated equipment for the next 25 miles or until inspection by hot bearing detector.

When a train actuates a wayside hot bearing detector before crew change location, the relieving crew will be advised of the equipment that activated the detector so that they can inspect the car and follow the above procedure if the equipment actuates a subsequent detector enroute.

Non-Key Trains:

- A. When a freight train is stopped by a trackside warning device and the indicated axle is on a loaded, placarded, non-intermodal car containing hazardous material, the following will apply:
 - 1. When a hot journal/bearing or hot wheel condition is indicated, the car must be set out.
 - When a dragging equipment or high/wide/shifted load condition is indicated, the car must be set out. However, the indicated car may remain in the train if inspected by mechanical personnel and no defects are found or the condition is corrected.
- B. When a freight train (excluding intermodal trains) is stopped by a trackside warning device for a hot journal/bearing or hot wheel condition the following will apply:
 - If no loaded hazardous material cars are behind the indicated car/axle and no defect is found, the car may continue in the train.
 - If indicated car/axle is ahead of cars containing loaded hazardous material (excluding Class 9 shipments such as asphalt, sulfur, etc.), the car must be set out.

Key Trains:

When a Key Train is stopped by a trackside warning device, apply the following:

- When a hot journal/bearing or hot wheel condition is indicated, the car (hazmat or not) must be set out.
- When a dragging equipment or high/wide/shifted load condition is indicated, the car (hazmat or not) must be set out. However, the indicated car may remain in the train if inspected by mechanical personnel and no defects are found or the condition is corrected.

Passenger Trains

If no defect is found after inspecting 12 axles forward and 12 axles to the rear of the indicated axle, inspect both sides of the entire train.

If no defect is found, train may continue, but crew must closely observe indicated equipment for the next 25 miles or until next inspection by hot bearing detector.

8(E). Testing Bearing Temperature

A handheld infrared device is the only method to test bearing temperature.

Handheld Infrared Device Procedure:

Test bearing temperature by targeting the bearing cup, pointing the laser at object and pull the trigger. Unit must be held approximately 1 - 1.5 feet away from the bearing to be measured. In order to be accurate, the target area must be free of grease or dirt (Use Klein Tools-IR1 or other company-supplied handheld infrared device).

CAUTION: Laser should never be pointed directly at eye or indirectly off reflective surfaces.

If temperature exceeds 200 degrees, the bearing is considered overheated and must be set out for repair.

8(F). Consecutive Alarm Messages

If the same equipment is indicated by two successive hot bearing alarm messages, set out the indicated equipment. When a train actuates a wayside hot bearing detector before a crew change location, the crew being relieved will advise the relieving crew of the equipment that activated the detector. If the same equipment is indicated by the next detector with a hot bearing alarm message after departing the crew change location, set out the indicated equipment.

8(G). Alarms Indicated on Locomotive or Caboose

When unable to locate a defect indicated on a locomotive or caboose, notify the following:

- · Connecting crew members
- · Mechanical personnel
- Supervisor

Do not set out a caboose with a generator belt attached to the indicated axle unless a hot bearing, hot wheel or dragging equipment is found.

8(H). Special Conditions

When a hot bearing is found within 25 miles of a hot bearing or hot wheel trackside warning device, a crew member must notify the train dispatcher. The train dispatcher must notify the signal maintainer and request the TWD equipment be inspected.

When blowing or swirling snow conditions may prevent hot bearing detectors from making a proper inspection, crew members must reduce train speed to no more than 30 MPH while train is passing the detector to minimize this condition.

8(I). High Water Detectors

High water detectors have been placed under certain bridges and in areas where high water might occur.

- A. When train is notified of high water by rotating red lights, radio message, signal indication or at a radio readout and no response is received, crew must not proceed over bridge or track until trackside examination by crew member or Engineering employee has been made to determine the following:
 - · The track has not lost its normal alignment,
 - The track or bridge does not have sagging surface,
 - The shoulder ballast or ballast between the ties is not missing,
 - Water is not running between the ties, and
 - · Water is not over the rail.

If inspection is made by an Engineering employee, the employee must be at the location and complete the inspection immediately before the train traverses the location. Follow up inspections must be made before each subsequent train move until the hazard is known to no longer exist. If determination cannot be made, contact train dispatcher for instructions before proceeding.

- B. Trains moving against the current of traffic must approach all locations protected by high water detectors prepared to stop unless:
 - · The track has not lost its normal alignment,
 - · The track or bridge does not have sagging surface,
 - The shoulder ballast or ballast between the ties is not missing,
 - Water is not running between the ties, and
 - · Water is not over the rail.

If determination cannot be made, contact train dispatcher for instructions before proceeding. Note: When moving against the current of traffic and the location is protected by rotating red light or radio response, be governed by Item A above.

TOC Home

8(J). Slide Detectors

Slide detectors have been placed in certain areas where earth/ rock slides might occur.

When a rock slide is indicated by rotating red light or radio message, trains must proceed at Restricted Speed AND be prepared to stop short of any obstruction through the entire slide detector area.

When train is stopped or moving at Restricted Speed because of signal indication governing movement through a slide detector, train must ALSO be prepared to stop short of any obstruction through the slide detector area.

Train dispatcher must be promptly notified if slide conditions are observed

At locations equipped with Radio Readout type detectors, if no response is received, trains must proceed at Restricted Speed until track at this location is known to be clear of any obstruction. Train dispatcher must be promptly notified if slide conditions are observed.

8(K). Warm Journal Detectors

Warm Journal Detectors identify potential failure conditions in advance of actual failures using information provided only to the NOC Detector Desk, where the information is evaluated and necessary crew action is determined. When crew action is necessary, the NOC Detector Desk will coordinate through the chief dispatcher to have the train dispatcher issue required train crew action via radio. Train crews are then to contact the NOC Detector Desk and be governed by any additional instructions.

When notified by the dispatcher or NOC Detector Desk to take action relative to a "warm" bearing/journal, the train (including Key Trains or any train with hazardous material shipments) may be moved without additional restrictions to a convenient location to inspect or set out as directed.

Directed train crew action may include:

1. Perform a Set and Release of the Air Brakes:

Perform a set and release of the air brakes (minimum of 10 psi brake pipe reduction) in an attempt to release any sticking brakes at the first convenient location consistent with good train handling. A "running release" may be performed if engineer determines conditions allow per ABTH Rule 103.3C. When a running set and release is necessary the NOC Detector Desk may contact the train crew directly with instructions.

2. Stop and Inspect a Specified Car:

Stop and inspect specified car and be governed by instructions provided in each case by the NOC Detector Desk.

Set Out a Specified Car:

Set out specified car at location as directed.

Instructions for potential failure conditions identified by the NOC Detector Desk do not supersede instructions for overheated/hot journals or defective equipment identified by other Trackside Warning Devices or visual inspections.

8(L). Track Integrity Warning System (TIWS)

The following TIWS instructions are in effect, unless otherwise specified in subdivision specific Timetable Special Instructions:

The Track Integrity Warning System checks the rail for continuity and alerts the Train Dispatcher to possible track occupancies or defects (e.g. broken rail) in non-signaled territory.

Subdivisions where TIWS is in effect are divided into a series of "zones" displayed by the Train Dispatcher's control system and identified in the field by Mile Post signs, Siding Switch signs, or a combination of these signs. Mile post signs identifying boundaries of a "Zone" may be displayed in tenths of a mile. Example: MP 926.3.

Track authority limits may be designated by MP signs representing "Zone" limits.

Alerts will be generated to the train dispatcher when occupancy is detected within a zone(s) not corresponding in proper sequence with an authority issued on that segment of track. Such alerts are referred to as "Track Integrity Down" (TID) and will be communicated by the Train Dispatcher to trains authorized within the zone(s).

Verbal instructions for "TID" may be provided to trains closely approaching the TIWS zone when an alert is received.

A new authority including "TID" information will be issued to trains not closely approaching an alerting zone. "Track Integrity Down" will be abbreviated as "TID". Following are examples of a "TID" communicated by Track Authority:

"TID MP 1011.3 to MP 1015.8" or "TID WSS Baker"

Trains receiving notification of "TID" must move at Restricted Speed within the designated zone limits and/or over a designated switch.

8(M). Wheel Impact Load Detector (WILD)

A Wheel Impact Load Detector (WILD) monitors passing trains for wheel defects which are categorized as Level 1 or Level 2. When a train passes over the detector, WILD installations equipped with field radio broadcast capability will transmit a radio message only when a defect has been identified, followed by the word "out". WILD installations with radio broadcast capability will be identified in the timetable.

Level 1

When a Level 1 defect is identified by a WILD with radio broadcast capability, a radio message will be transmitted indicating "you have (number of defects) defects", "Train (lead locomotive number)". After a brief pause, the detector will then broadcast details regarding right or left side, axle count from head end of the train and car number for the defect identified. Required train crew actions for Level 1 defects:

- Record the information transmitted by the detector.
- Stop train and notify the train dispatcher of the delay due to required WILD Level 1 inspection.
- Inspect the axles identified for defects.
- If no defect is found, inspect 12 axles forward and 12 axles backward from the axles identified.
- · Notify the dispatcher of the conditions found.
- Train may not depart from the inspection location until released by the detector desk and permission to depart is received from the train dispatcher.

If a defect message is incomplete or cannot be understood, enter the recall code. If message recall is unsuccessful, notify the train dispatcher and proceed with no restriction.

Level 2

Level 2 condition information is monitored by the detector desk and is used for predictive maintenance purposes only. The WILD will not transmit Level 2 detail by radio.

9. Amtrak Instructions

BNSF dispatchers must have General Track Bulletins (GTB) issued at least one hour before trains departure. If the Amtrak train crew does not have the GTBs 45 minutes before trains departure they must contact the dispatcher immediately. If unable to contact the dispatcher for GTBs 35 minutes before train departure, train crew must contact the BNSF Passenger Operations Team at 1-800-871-0902.

Dispatcher must be notified immediately when train does not maintain maximum authorized track speed.

Dispatcher must be notified immediately when crews experience rough track conditions stating limits and severity. This same information must be documented on the conductor delay report

No trash may be discarded on BNSF property.

Station and Reporting Times

Station work must be done in an expedient manner to avoid exceeding station dwell times. If station work is anticipated to exceed scheduled dwell time by more than 5 minutes, sufficient advance notice must be given to the dispatcher to eliminate or minimize train delays.

Amtrak Trains Reporting Clear/Releasing Track Warrants

Engineer and conductor are jointly responsible, through job safety briefing, to ascertain and agree on the exact location that their entire train has passed before reporting past a specific point or clearing their track warrant. When reporting past a specific location:

- Engineer and conductor will job brief and agree on train's location.
- Communication will use the following format:
 Crew member will state: "(Name), locomotive initial, number,
 (direction), reports clear of (mile post/location) (Provide
 switch briefing when required). Over."

Dispatcher will then check information against computer system information and if correct, will restate track release information followed by the question, "Is that correct. Over"?

Crew member will state: "Job safety briefing between conductor (name) and engineer (name) confirm, that is correct. Over".

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 at 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.
- Double stretch is required after pick up or set out of cars or locomotives
- Required hand tools and supplies must be available on locametive.
- Required switch keys must be in possession of Engineer and Conductor.
- Amtrak may not exchange or discharge passengers between trains except at stations.

- Amtrak may not exchange supplies between trains except at stations unless authorized by train dispatcher.
- Amtrak train garbage/refuse to be off loaded must be loaded into approved containers and only at stations that have assigned Amtrak employees or caretakers.
- Amtrak toilets must be discharged into appropriate containers. Dumping of toilets from Amtrak trains on BNSF right of way is prohibited.

Head End Attendance

The head end of all occupied passenger trains must not be left unattended for any reason while occupying Main Track or siding. At crew change locations the engineer's job safety briefing will take place in the locomotive cab or controlling compartment of cab control car. If the outbound crew is not on spot at a crew change location on arrival, the inbound engineer will remain on the head end until the outbound engineer arrives.

Head End Power (HEP) Requirements

- Departure from the originating station with the HEP cables short looped is prohibited.
- In the event of HEP failure, crew members must determine if the train may be handled safely and must make every effort to advance the train to the next siding or scheduled stop before repairs are made.
- All HEP cables must be secured with approved tie-downs.
- Air hoses and HEP cables must be secured no less than 4 inches above the top of the rail.

BNSF Crews Operating Amtrak Trains

When a BNSF crew operates an Amtrak train, a freight locomotive must be used. Amtrak personnel must handle all 480-volt AC power and set up Amtrak locomotives in the trail position. BNSF crews are prohibited from handling, adjusting or performing work between or under cars when Head End Power (HEP) 480 volt AC is energized. A freight locomotive will not be necessary when BNSF engineer is accompanied by an Amtrak qualified engineer or qualified Amtrak supervisor.

BNSF Mechanical Assistance

When mechanical problems develop the train dispatcher must be notified immediately as described in System Special Instructions item #45 and BNSF NOC Mechanical Desk notified if assistance is required. The delay for mechanical problems must be documented properly on the delay report.

Conductor Delay Reporting

The Amtrak conductor delay reporting method has been replaced with an electronic method. The electronic delay report (EDR) is essential to both Amtrak and BNSF. If the train operates on a route requiring EDR, the delay information must be reported no more than two hours after the train arrives its destination or at a crew change location.

The reporting must be professional, brief, specific, and worded clearly and concisely. Each individual reason for delay must be separated from other delays. The reporting must include, in order of occurrence, the following:

- Any delay due to the inability to maintain maximum authorized passenger train speed.
- Reasons for delay over dwell times identifying specific cause of delay (passengers, baggage, late bus connections, mechanical issues, etc.).
- Delays associated with field equipment detectors. These
 delays require that specific information be given, even if
 no defect is found. Information as to the location of the
 defect, Car/Locomotive initial and number, axle and journal
 if applicable, and reason for inspection and defect, if any
 found.

TOC Home

- Amtrak instructions regarding authorization to hold or delay train, including reason.
- · Delays caused by operating with one engineer.
- · Delays caused by late General Track Bulletins.
- If the conductor manually changes electronic time, an explanation of the reason for change must be included within the EDR.

Reporting is required on all trips, including special trains, deadhead moves and trains terminated short of destination.

Signal Awareness Forms

Passenger train conductors and crew members are exempt from special instructions Item 43 unless they are in the controlling unit or the cab room of the controlling cab car and there is more than one crew member in the controlling unit or cab room of the controlling cab.

Storage of Cars Within Restricted Limits or Yard Limits In Non-Signaled Territory

Within restricted limits or yard limits in non-signaled 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 GCOR 6.13 or 6.14.

11. Shunting the Track

Commodities Insulating Track

Employees should be alert for insulating commodities such as clay, chips, oil, etc. on top of rails, or leaves covering the rails. This condition could possibly insulate the track and cause loss of train shunt. Such conditions should be promptly reported to the train dispatcher. When conditions are reported, trains must approach road crossings at grade equipped with automatic crossing warning devices prepared to stop until it is determined that the warning devices are operating properly.

Movements Consisting of Less Than 12 Axles

In CTC, manual interlocking, or ABS territory, a crew member must inform the train dispatcher/control operator, of train/ engine movement consisting of less than 12 axles so that protection against loss of shunt can be provided. Train, engine and other such movements consisting of less than 12 axles must approach road crossings at grade equipped with automatic crossing warning devices prepared to stop until it is determined that the warning devices are operating properly.

12. Switch Control/Monitoring Systems

12(A). Turnouts Equipped with Two Switch Machines (Movable Point Frogs/Swing Nose Frogs/Derails)

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 movable point frog, swing nose frog, or derail must both be placed in hand operation.

GCOR/MWOR 9.13.1 applies at all locations where turnouts are equipped with two switch machines (movable point frogs/swing nose frogs/derails).

12(B). Remote Control Power Switch (RCPS)

Remote Control Power Switch (RCPS) allows the train dispatcher to request that the switch be lined and monitor switch position in non-signaled territory. The location of RCPS will be designated in the timetable. RCPS limits are designated by signs and the limits must not be occupied unless authorized. Track authority will authorize use of RCPS limits at each end of authority in the following manner:

"Switch - Yes" indicates that the authority includes the RCPS limits designated by signs in the field.

"Switch - No" indicates that the authority does not include RCPS limits and movement must stop short of sign designating RCPS limits.

If the train dispatcher cannot line the remote control power switch to the desired position, or the control machine does not indicate that the switch is lined and locked, the train dispatcher must instruct the employee to operate the switch by hand. Movement may then proceed to that switch. Before passing over the switch, movement must stop and the employee must operate the switch by hand.

To operate a remote control power switch by hand:

- · Obtain permission from the train dispatcher.
- · Unlock the switch lock.
- · Place the selector lever in the HAND position.
- Operate the hand throw lever until the switch points move when the lever is moved.
- · Line the switch for the intended route.
- Do not return the selector lever to the POWER position until at least one unit or car has passed over the switch.

The following information and instructions apply when the RCPS system is in service:

The train dispatcher will receive an alert if a train has authority over any equipped switch that changes status to indeterminate/out of correspondence.

When an alert is received, the train dispatcher must promptly determine the location of the train with authority over the alerting switch and do the following:

- If the train has passed the alerting switch, perform a track release to cancel the alert.
- If the train is closely approaching (less than 7 miles) the alerting switch, the train dispatcher must instruct the crew to stop their train, consistent with good train handling, if possible, before traversing switch.
- If the train is not closely approaching the alerting switch, but it is more than seven miles from alerting switch, the train dispatcher is required to issue a new authority to the affected train that voids the authority over the alerting switch and ends at the alerting switch.

RCPS Position Indicator

| Green | Switch lined and locked for Main Track movement |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Yellow | Switch lined and locked for movement to or from Main Track |
| Dark (not illuminated) | Switch not locked, or selector lever in "hand" position. Contact train dispatcher and obtain permission to hand operate the dual control switch. |

RCPS position indicator lights do not authorize movements to occupy the limits between the RCPS signs governing the switch.

12(C). Switch Point Monitoring System (SPMS)

Switch Point Monitoring System (SPMS) is a program that will alert the dispatcher that a Main Track switch may not be properly lined for an approaching train in non-signaled territory. SPMS locations will be designated in the timetable.

The following information and instructions apply when the system is in service:

The train dispatcher will receive an alert if a train has authority over any equipped switch that changes status from the normal position. Alerts will occur if a switch is reversed or its position becomes unknown (indeterminate).

Exception: An alert will not occur for trains operating with a proceed track authority (box 2) for switches located in the "from" and "to" locations of their authority.

When an alert is received, the train dispatcher must do the following:

- Promptly determine the location of the train with authority over the alerting switch. If the train has passed the alerting switch, perform a track release to cancel the alert.
- If the train is closely approaching the alerting switch, the train dispatcher may notify the crew verbally using the appropriate verbiage in the dialog box presented.
- If the train is not closely approaching the alerting switch, the train dispatcher is required to issue a new track authority to the affected train that restricts authority to the alerting switch.

Note: Work between (box 4) authority for trains must end at any indeterminate switch. Authority may be issued beyond the indeterminate switch only after employee has verified that the switch is in the normal position by performing an on-ground inspection.

The dispatcher is prohibited from issuing two work between (box 4) track authorities to the same train that make the limits of authority end-to-end.

For example, do not issue track authority #1 with work between (box 4) from Anna to Bess and track authority #2 with work between (box 4) from Bess to Cloy.

Information received from the Switch Point Monitoring System must not be used to change the position of a Main Track switch that is protected by a track authority under the Protect Open Switch rules (GCOR 8.3, MWOR 8.3, and TDOCOM 42.19).

When a train crew is notified to be prepared to stop at an alerting switch, (either verbally or with a track authority), the train must not proceed over the switch until a crew member inspects the switch from the ground. The position of the switch must be reported to the train dispatcher as soon as possible after the inspection.

Maintenance of Way (MW) employees must have permission before operating an equipped Main Track switch. When Form B authority is in effect, the foreman or employee(s) working under the Form B must notify the dispatcher when opening any equipped Main Track switch(es).

When a MW employee receives a track authority with "Be prepared to stop at (location) until known to be in the normal position, the dispatcher must not indicate the switch to be "normal" unless the reporting employee has traversed the switch in Main Track to Main Track movement with on-track equipment and is physically at the switch.

The dispatcher must not "normal" an alerting switch until it has been inspected by a field employee.

12(D). Independently Controlled Switches (ICS)

Independently Controlled Switches are dual control switches of a crossover which, under certain conditions prescribed by the rules, may be operated independently. At locations identified in the timetable as having independently controlled switches, Maintenance of Way employees may request control operator permission to operate one end of a crossover for maintenance or testing purposes only.

12(E). Protect Open Switch (POS)

In non-signaled territory, track warrant authority for trains must end at any open Main Track switch. Authority may be issued beyond the open switch after the train has stopped at the switch. Immediately contact the train dispatcher for additional authority when the train is stopped at the switch.

In ABS territory, track warrant work between authority for trains must end at any open Main Track switch. Authority may be issued beyond the open switch after the train has stopped at the switch. Immediately contact the train dispatcher for additional authority when the train is stopped at the switch.

(Note: A train stopped short of the switch for topographical reasons, i.e., road crossings, grade considerations, etc., may be considered as stopped at the switch for application of this process).

13. In Effect on BNSF Railway

The one-page comprehensive list titled "Rule Books, Timetables, and Instructions in Effect on BNSF Railway" is now available on the System Rules Homepage.

To access it, navigate to:

Other Rules Resources > Rule Books, TT, SSI & Other Instructions in Effect (link).

This document provides a consolidated reference for rules timetables and instructions currently in effect across the BNSF system.

Remember - it is the responsibility of all employees to stay informed of updates and revisions, which are available electronically within the Rules & TT app and System Rules Webpage.

30 System Special Instructions—No. 4—December 1, 2023 (Updated 5/1/24)

TOC Home

In Effect While Operating on Foreign Railroads:

The following System Special Instruction items must be complied with by BNSF crews operating over a foreign railroad:

- · Item 6. Work Order: Instructions for Reporting Work
- · Item 27. Cars Set Out Bad Order
- · Item 28. Grade Crossing Accidents
- · Item 35. Switching and Handling Business Cars
- Item 43. Signal Awareness/Position of Switch Form
- Item 45. Network Operations Center Notification Requirements
- · Item 49. Responsibilities and Certification
- Item 50. Rail Security Sensitive Material (RSSM)
 Instructions Chain of Custody Documentation for Rail Sensitive Material

Detour Train Documents

- When a foreign railroad detours trains on BNSF, the train list and hazardous material information must be left on the lead locomotive for use by the relieving train crew.
- When BNSF detours trains on a foreign railroad, the train list and hazardous material information must be left on the lead locomotive for use by the relieving train crew.
- The train list and hazardous material information must remain on the lead locomotive at crew change points.
- Detoured train documentation is not interchanged to the handling road's computer system.

General Code of Operating Rules, BNSF Amendments and Supplements

GCOR 1.10—is changed to read:

GCOR 1.10 Games, Reading, or Other Media

Employees on duty must not:

- Play games
- Use personal electronic devices other than provided for in Rule 2.21 (Electronic Devices)
- Read magazines, newspapers, or other literature not related to their duties when:
 - On a moving train or locomotive unless deadheading in the cab of a non-controlling locomotive
 - Any crew member is performing safety related activities or
 - It would delay or interfere with required duties.

When use is not permitted, magazines, newspapers or other literature not related to duties must be stowed out of sight.

GCOR 1.17 Hours of Service, Supplemental Instruction

When reporting hours of service, time spent waiting for deadhead transportation must not be counted when determining time on-duty for hours of service purposes when relieved of all duties.

GCOR 1.37 Open Top Loads—is changed to read:

Flat cars, open top cars, and open TOFC/COFCs with loads which protrude beyond the car ends or if shifted, would protrude beyond the car ends must not be placed in trains next to the following if train length and makeup permit:

- · Occupied outfit car
- · Passenger car
- Engine
- Caboose
- Shipment of automotive vehicles or machinery that is not fully enclosed

This restriction does not apply to cars equipped with chains or cables securing the load to the car.

GCOR 1.43 Stopped in Tunnels—Under A. Engine or Train Stopped in Tunnel:

That part reading:

Apply hand brakes to prevent movement in case the air brakes leak off.

Is changed to read:

4. Secure required number of cars to prevent movement in case the air brakes leak off.

GCOR 1.46 Duties of Yardmasters—the following is added:

At the end of each shift, the yardmaster must make a transfer, filling in all the required information, including:

- All grade crossing warning devices out of service
- · Any undelivered Track Bulletin Restrictions
- · Any tracks, switches, or other infrastructure out of service
- Any other conditions or issues which may affect the safe and efficient management of the yard.

If the office has more than one shift, the yardmaster being relieved will remain until the relieving yardmaster understands, accepts, and acknowledges the transfer.

The Yardmaster Transfer must be documented in writing and maintained for 30 days.

GCOR 1.47 Duties of Crew Members—Item C, All Crew Members' Responsibilities, the following is added to Item 2:

Crew members must not use binoculars or similar devices to determine the position, aspect, or indication displayed by a fixed signal.

GCOR 1.48 Time, Supplemental Information

Dial 8-998-8463, 8-WWV-TIME, or 8-435-6000 to obtain coordinated universal time signal.

GCOR 2.2 Required Identification

Delete that part reading:

If communication continues without interruption, repeat the identification every 15 minutes.

GCOR 2.14.1 Verbally Transmitting and Repeating Mandatory Directives

Supplemental Instruction

Apply the following when verbally transmitting and repeating a mandatory directive identified by numbers separated with a hyphen:

- State the first number, then state or spell each digit separately for that number.
- · State the hyphen as "dash".
- State the second number, then state or spell each digit separately for that number.

Example: Authority number 407-15; "407; 4, 0, 7 dash 15; 1, 5."

Employees repeating the initial transmission of the mandatory directive must repeat the number in this same format.

Supplemental Information

When authorities are repeated precisely as they are transmitted, the Control Operator / Train Dispatcher is able to follow the words when checking the repeat for accuracy. When authorities are not repeated properly, it is more difficult for the Control Operator / Train Dispatcher to follow the repeat process.

Employees are expected to repeat authority precisely as it is recorded on the authority form. All words which are on the form or shown in the examples must be repeated in the proper order and without adding or deleting words.

Employees will be given three chances to repeat an authority properly. If unable to repeat properly after three attempts, the Control Operator / Train Dispatcher will stop the authority and the employee will not be given additional authority until a supervisor has been contacted.

GCOR 2.14.2—The following rule is added:

GCOR 2.14.2 Before Reporting Clear of Authority Limits

Before a field employee reports clear or releases a portion of authority limits, and the Train Dispatcher/Control Operator accepts the information, the following must occur:

- The employee will provide their name or other identification and the authority number to the Train Dispatcher/Control Operator.
- The Train Dispatcher/Control Operator will have the required form or computer screen displayed for data entry and confirmation.
- The Train Dispatcher/Control Operator and employee will carefully match the verbally transmitted information against the authority form to ensure the information matches and is correct.

GCOR 2.21—is changed to read:

GCOR 2.21 Electronic Devices

The restrictions in this rule apply to both the use of railroadsupplied and personal electronic devices by railroad operating employees and does not affect the use of railroad radios under FRA regulations. A railroad operating employee shall not use an electronic device if that use would interfere with the employee's or another railroad operating employee's performance of safety-related duties.

- Railroad-Supplied and Personal Electronic Devices
 Electronic devices may be used under the following
 conditions:
 - To respond to emergencies involving railroad operations or encountered on duty.
 - · Due to a radio malfunction.
 - · Calculator if used for an authorized business purpose.
 - Digital watches with sole function of displaying date and time.
 - Medical devices that are approved by the railroad may be used as necessary.

Crew members are jointly responsible for compliance with electronic device rules. Except as otherwise authorized, recording communications between employees using audio or video devices is strictly prohibited without the prior knowledge and express consent of all parties.

Dead Head Status

Employees Dead Heading NOT in the controlling locomotive:

May use an electronic device provided safety is not compromised and it does not interfere with safety-related duties

Employees Dead Heading IN the controlling locomotive: Each electronic device must be turned OFF with earpieces removed when:

- · On a moving train.
- Any crew member is on the ground (while performing any safety-related duties).
- Any crew member is riding equipment during a switching operation.
- Any railroad employee is assisting in the preparation of the train for movement.

B. Railroad-Supplied Electronic Devices

Employees issued a railroad-supplied electronic device must log in at the start of their duty and remain logged in until the tour of duty is complete.

These devices may only be used for authorized business purposes, such as but not limited to:

- · Updating or transmitting information.
- Viewing or modifying work-related documents (e.g., switch lists, track lists, work orders).
- Communicating with supervisors, dispatchers, customers, or customer service.
- Receiving or releasing track warrant authority when PTC is inoperative, or the lead locomotive not PTC equipped.

May be used:

- Crew members may use railroad-supplied electronic devices inside a controlling locomotive (freight and passenger) after there has been a job safety briefing and all crew members agree that it is safe to use the device
- While a railroad operating employee is outside the cab
 of a controlling freight locomotive only if employee is
 not fouling a track and all crew members agree it is
 safe to use.

Method of taking photographs:

- Standalone camera to photograph a safety hazard, a violation of a rail safety law, Regulation, order, or standard, or conditions that prevent a train crew from accessing or performing work at a customer facility. A job safety briefing must be conducted to ensure the location where photographs are taken is confirmed to be safe.
- Cameras integrated into cell phones or other multifunctional electronic devices may only be used for this purpose if the device is railroad-supplied and used for an authorized business purpose.

Conditions for Use:

- The train must be stopped.
- A job safety briefing must be conducted to ensure the location where photographs are taken is confirmed to be safe.
- If on the ground, the employee must not be fouling any track.
- The camera function must be turned off immediately after use.

May not be used:

The use of railroad-supplied electronic devices by an engineer while operating the controls of a locomotive may not be used:

- While on a moving train, unless the device use is directly related to train movement (e.g., referencing a railroad rule, special instruction, timetable, or directive).
- When any crew member (including utility employees) is working on the ground, or riding rolling equipment during switching operations, or when any other employee is assisting with train, engine, or on-track equipment preparation, including testing brakes or equipment.
 - These prohibitions also apply to other operating employees in the locomotive cab unless a job safety briefing is conducted, and all agree it is safe for other operating employees to use.

The assigned employee is responsible for the care of the device and care must be taken not to lose or damage the device

C. Personal Electronic Devices

May be used:

Personal electronic devices may only be used if they do not interfere with safety-related or required duties, delay operations, or compromise safety. After a job safety briefing and crew agreement, personal electronic devices may be used:

 In the cab of a controlling locomotive while stopped (except as noted under "May not be used" section below), or in a designated crew room for voice communication, texting, or updating railroad documents.

May not be used:

Personal electronic devices must be turned off, stowed out of sight, and earpieces removed when:

- · On a moving train.
- Any crew member is on the ground or performing safety-related duties.
- A railroad employee or authorized individual is inspecting or assisting with train, engine, or on-track equipment preparation of the train for movement, including testing brakes or equipment.

Crew members must not use personal electronic devices as outlined above or knowingly allow others to do so unless the above is followed and the equipment is stopped, a job safety briefing is conducted, and all crew members agree that it is safe to do so.

GCOR 4.3 Timetable Characters, Supplemental Instruction

A......Automatic Interlocking

B......General orders, notices, and circulars

C.....Radio communication

gGate, normal position against conflicting route

G...... Gate, normal position against this subdivision

J.....Junction

M Manual interlocking

P.....Telephone

R.....Restricted Limits

S......Railroad crossing protected by permanent Stop sign

TTurning facility

U......Railroad crossing not protected by signals or gates

X......Crossover

X(2).....Multiple crossovers

YYard Limits

GCOR 5.3.3 Signal Disappearance—is changed to read: If a person disappears who is giving the signal to back or shove a train, engine, or car, or the light being used disappears, employees must stop movement.

GCOR 5.3.6 Radio and Voice Communication

Sentence added to end of rule:

When radio communication is used to make movements, crew members must respond to specific instructions given for each movement.

GCOR 5.3.7 Radio Response

Delete in its entirety.

GCOR 5.4.2 Display of Yellow Flag—"Less than Two Miles Ahead of Restricted Area" under "A. Restriction is in Effect" is changed to read:

Less than Two Miles Ahead of Restricted Area. When the restricted area is close to a terminal, junction, or another area or if restriction is on a siding, employees will display the yellow flag less than 2 miles before the restricted area. This information will also be included in the track bulletin, track warrant, or general order.

GCOR 5.4.6 Display of Flags Within Current of Traffic—this rule is canceled.

GCOR 5.4.8 Flag Location—is changed to read:

GCOR 5.4.8 Flag Location—Flags will be displayed on all Main Tracks and sidings leading to the track affected.

Flags must be displayed to the right of the track as viewed from an approaching train. In multiple main track territory or where sidings are adjacent to main track(s), they will be placed on the field side ofoutside tracks. Red flags may be displayed between the rails as outlined in Rule 5.4.7 (Display of Red Flag). Flags will be placed in this manner unless otherwise specified by track bulletin, track warrant, special instructions, or general order.

When flags are displayed beyond the first rail of an adjacent track, the flags will not apply to the track on which the train is moving.

Supplemental Instruction

The display of Yellow and Green Tracks Flags as described in GCOR/MWOR 5.4.1, 5.4.2, 5.4.5 and 5.4.8, is not required to indicate Form A speed restrictions on BNSF Subdivisions (or portions of subdivisions) where PTC or TWC Plus is in effect. Any exception to this instruction will be identified within individual Subdivision timetables under Item 4. Subdivision Specific Rules Information. Where this instruction applies, it is not necessary for Form A restrictions to include the verbiage "track flags not displayed".

GCOR 5.5 Permanent Speed Signs, Supplemental Instruction

Reduced speed limits may be 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.

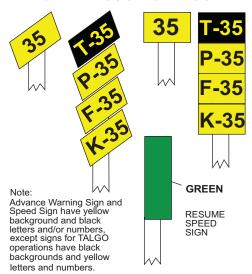
At the end of a reduced speed zone, a train or engine will be governed by a Speed sign displaying a higher speed or a Resume Speed sign which will authorize the maximum permissible speed on that subdivision. In either case, the speed must not be increased until the entire train has passed the sign displayed or has cleared the limits of the restriction. Signs reading "K-END" indicate the end of Key Train municipal area limits. Resume speed signs are not displayed at the end of Key Train municipal area limits.

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

Permanent speed signs will not be placed for trains moving against the current of traffic unless otherwise indicated.

These signs, as illustrated, apply to train and engine movements as follows:

ADVANCE WARNING SIGN SPEED SIGN



Figures preceded by letter P apply to passenger trains, except TALGO, if there is a TALGO sign.

Figures preceded by letter F apply to freight trains.

Figures preceded by letter T apply to TALGO passenger trains.

Figures preceded by the letter K apply to Key Trains.

Figures not preceded by a letter apply to all trains.

GCOR 5.8.1 Ringing Engine Bell—the following is added as a fourth bullet:

· When whistle signal (7) is required.

GCOR 5.8.2 Sounding Whistle—the Indication for Sound (8) is changed to read:

| Indication |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regardless of any whistle prohibitions: |
| Approaching men or equipment or other |
| individuals on or near the track. |
| After sounding initial warning for men or equipment or other individuals, sound whistle signal (4) intermittently until the head end of train has passed the men or equipment or other individuals. |
| Whistle warning is not required: |
| When there is an adjacent track and men or equipment or other individuals are beyond the farthest rail of the adjacent track. For members of the same crew associated with movement of their engine unless necessary to warn or alert a crew member Do not sound whistle in designated mechanical servicing and repair facilities, unless for an emergency or when approaching roadway workers. |
| |

GCOR 5.8.4 Whistle Quiet Zone—the following is added:

An employee may sound the train horn to provide warning to crews on other trains in an emergency situation, vehicle operators, pedestrians, trespassers or animals if, in the employee's sole judgment, such action is appropriate to prevent imminent injury, death, or property damage. Train crews are not restricted from sounding the horn when:

- · There is an emergency situation.
- · A wayside horn system (WHS) is malfunctioning.
- Active grade crossing warning devices malfunction.
- · Grade crossing warning systems are out of service.
- Supplemental or alternative safety measures are not compliant.
- Needed for purposes other than highway-rail crossing safety, for example, to announce the approach of a train to roadway workers.

All other whistle and bell requirements remain in effect.

GCOR 5.9.1 Dimming Headlight—is changed as follows:

- 1. is changed to read:
 - At stations and yards where switching is being done. Headlight may temporarily be turned on bright as needed (i.e., while operating at restricted speed).
- 3. is changed to read:
 - 3. When stopped on the main track waiting for an approaching train. However, when stopped in block system limits, turn the headlight off at the radio request of the crew of an approaching train until the head end of the train passes. After head end of approaching train passes, turn headlight on bright while the train is passing.
- 4. is changed to read:
 - When approaching and passing the head end of a train at night. Headlight may temporarily be turned on bright as needed (i.e., while operating at restricted speed).

GCOR 5.11 Engine Identifying Number—the following exception is added:

Exception:

- On track bulletins that advise about excessive dimension equipment, trains may be identified by train symbol.
- On track bulletins and on track warrants that do not convey movement authority, passenger trains may be identified by train symbol.

GCOR 5.11 Engine Identifying Number, Supplemental Instruction

Engines with the following initials stenciled on the side of the locomotive will be identified as NS engines:

SOU, NW, PRR, CG, INT, GSF, AGS, CRCX and CR (ConRail).

Engines with the following stenciled on the side of the locomotive will be identified as CSXT engines:

CSXT, CSX and CSX Transportation.

Where PTC is in effect, passenger trains operated from a cab control car on the leading end of the movement will be identified by the cab control car initials and number, adding the direction when required.

Metrolink engines or cab control cars with no initials stenciled on the side will be identified as SCAX units.

GCOR 5.13 Blue Signal Protection of Workmen

Item B. How to Provide Protection—is changed as follows:

On a Main Track is changed to read:

On a Main Track. A blue signal must be displayed at each end of the rolling equipment and, if the rolling equipment to be protected includes one or more locomotives, a blue signal must be displayed on the controlling locomotive(s).

Section titled **On Other than a Main Track** is changed as follows:

The following is added after item 1:

Use the following sequence when applying blue signal protection:

- a. Line and lock the switch
- b. Display blue signal at or near the switch and;
- If the rolling equipment to be protected includes one or more locomotives, a blue signal must be displayed on the controlling locomotive(s).

Use the following sequence when removing blue signal protection:

- Remove blue signal from locomotive(s), if applied (remove any blue signal inside the cab before removing the blue signal visible from the outside on the engineer's side of the locomotive)
- b. Remove the blue signal at or near the switch
- Remove the lock from the switch and replace the hook or hasp, if equipped.

Item 2 is changed to read:

- A derail capable of restricting access to the track where work will occur must be locked in derailing position with an effective locking device and:
 - Positioned at least 150 feet from the rolling equipment to be protected.
 - b. Positioned at least 50 feet from the end of rolling equipment on a designated engine servicing track or car shop repair track where speed is limited to not more than 5 MPH. A blue signal must be displayed at each derail.

Use the following sequence when applying blue signal protection:

- a. Lock the derail in the derailing position
- b. Display blue signal at the derail and;
- If the rolling equipment to be protected includes one or more locomotives, a blue signal must be displayed on the controlling locomotive(s).

Use the following sequence when removing blue signal protection:

- Remove blue signal from locomotive(s), if applied (remove any blue signal inside the cab before removing the blue signal visible from the outside on the engineer's side of the locomotive)
- b. Remove the blue signal at the derail
- Remove the effective locking device from the derail and ensure derail is in the proper position.

34 System Special Instructions—No. 4—December 1, 2023 (Updated 7/1/25)

TOC Home

The following is added to the end of item 3:

After the switch operator informs the employee in charge of workmen that switches have been lined against movement onto track and devices controlling the switch have been secured, display required blue signals on controlling locomotive(s).

Use the following sequence when removing blue signal protection:

- a. Remove blue signals from locomotive(s), if applied (remove any blue signal inside the cab before removing the blue signal visible from the outside on the engineer's side of the locomotive)
- Employee in charge to notify the switch operator when it is safe to remove switch-locking devices.

Item C. Blue Signal Readily Visible to Engineer—Item 3 is changed to read:

The engine must not be moved. The controls must not be changed unless directed by individuals who placed the blue signal protection.

GCOR 6.3 Main Track Authorization—the paragraph titled Joint Authority is deleted, and the following is added:

Overlapping Limits

When a train receives track and time, track warrant or track permit authority joint with an employee the train must not occupy the overlapping limits until permission is received to enter the overlapping limits from the employees listed on the authority.

GCOR 6.5 Shoving Movements—is changed to read:

Providing Protection Prior to Initiating Shoving Movement

Radio Communication & Hand Signals:

Equipment must not be shoved until it is visually determined by a qualified employee that:

- To the extent of the observer's range of vision and the portion of the track that is to be used for the intended movement is clear.
- The track will remain clear to the location where movement will be stopped.
- Switches and derails are properly lined for the intended movement.

Equipment must not be shoved until the engineer and the employee protecting the movement have completed a job briefing.

Additional Information:

- The employee must be in a position to provide visual protection of the leading end of the equipment being shoved and must not engage in unrelated tasks while providing protection.
- Cutting off cars in motion is not considered a shove movement if the distance to operate the uncoupling lever does not exceed five car lengths. It must first be verified that the intended route is clear, and switches and derails are properly lined.
- When operating a vehicle, the employee observing the leading end of movement must stop the vehicle to provide instructions or additional information.
- Shoving movements over road crossings must be made in accordance with Rule 6.32.1 (Providing Warning Over Road Crossings).

Radio Communication:

Before beginning a shove movement using radio communication, the employee providing protection must include the necessary information (Who, How, Direction, Distance). In addition, the employee controlling the engine must verbally acknowledge by repeating the following:

- · WHO will protect the shove.
- · HOW the shove will be protected.
- DIRECTION- described in relation to the front of the controlling locomotive (F stencil). Use the following terms:
 - "Ahead" to move forward.
 - "Backup" to move backward.
 - "Stop" to stop the movement.
- · DISTANCE to be shoved and must:
 - Not exceed the observer's range of vision.
 - Use 50 feet as a standard for one car length.
 - When moving, employee controlling the engine must verbally acknowledge radio instructions by repeating the distance communicated when more than four cars.

Movement must stop within the half the distance specified unless additional instructions are received.

Camera Use:

An employee directing movement may utilize camera(s) to provide visual protection per local instruction.

Not Observing Leading End of Movement:

The employee directing movement is not required to observe the leading end of the movement when:

 Local instruction specifies tracks that will be protected with Shove Lights.

or

 Making back up movements in accordance with Rule 6.6 (Back Up Movements).

Speeds When Shoving:

When cars are shoved on a main track or controlled siding in the direction authorized, movement must not exceed:

- · 20 MPH for freight trains.
- 30 MPH for passenger trains.
- Maximum timetable speed for snow service unless the employee in charge authorizes a higher speed.

GCOR 6.5.1 Remote Control Movements—is changed to read:

Remote control movements are considered shoving movements, except when the remote control operator controlling the movement is riding the leading engine in the direction of movement. The remote control operator protecting the shove movement must be the controlling operator and in position to visually observe the equipment before initiating the movement. When initiating movement, the remote control operator must visually determine the direction the equipment moves or have a crew member confirm it. If no confirmation is received, the movement must be stopped immediately.

Exception:

After conducting a job briefing (Who, How, Direction, Distance) with the employee who will be protecting the movement, the controlling operator is not required to transfer control when:

- · Stretching a track to ensure couplings are made.
- Separating equipment to make coupler adjustments. or
- Movement is protected by a qualified employee not equipped with an OCU.

When requesting pin slack, the employee uncoupling the equipment is not required to be the controlling operator.

Relief of Providing Protection

The remote control operator is relieved from providing protection and the requirement to stop within half the range of vision for movements with engine on leading end when:

- The remote control zone has been activated properly verified/swept to determine:
 - · Switches/derails are known to be properly lined.
 - Track(s) within the zone are known to be clear of other trains, engines, railroad cars, and men or equipment fouling track.
- Once the remote control zone has been properly verified/ swept and all crew members have been briefed, the remote control zone may be activated.

Note: These steps must be repeated each time the remote control zone is activated.

GCOR 6.6 Back Up Movements—is changed to read:

After obtaining permission from the train dispatcher, a train may back up on any Main Track or on any track where CTC is in effect under the following conditions:

- The train dispatcher must verify the following within the same or overlapping limits:
 - Another authority is not in effect unless conflicting movements are protected.
 - b. A track bulletin Form B is not in effect.
 - A Main Track is not removed from service by a track bulletin.
 - Permission to leave a switch in the reverse position has not been granted.
- 2. The crew ensures movement will not:
 - a. Exceed the limit of the train's authority.
 - b. Exceed the train's length.
 - Enter or foul a private or public crossing except as provided by Rule 6.32.1 (Providing Warning Over Road Crossings).
 - d. Be made into or within yard limits, restricted limits, interlocking limits, drawbridges, railroad crossings at grade or track bulletin Form B limits.

Before requesting or making a back up move, a job safety briefing between all members of the crew must be conducted that confirms:

- Train is intact, verified either visually or by determining that brake pipe continuity exists using end of train device or distributed power telemetry.
- Distance to be shoved. (Note: Train must not move outside of authority limits.)

- Distance from the end of the train to the end of authority limits is sufficient to accomplish the planned back up movement (E.g. 30 cars from the end of the rear car to next controlled signal or 30 cars from the end of the rear car to MP 30, where track warrant authority ends, etc.).
- Location of nearest affected road crossing in direction of movement.
- Movement will not be made into or within yard limits, restricted limits, interlocking limits, drawbridges, railroad crossings at grade or track bulletin Form B limits.

Before permission is granted, a job safety briefing between a crew member and the train dispatcher or control operator must determine what track authority is needed to accomplish the planned movement. If additional track authority is necessary to make the 6.6 movement, a crew member must request additional authority.

When movement is made under these conditions, Restricted Speed does not apply.

GCOR 6.7 Remote Control Zone, A. Entering Remote Control Zone—is changed to read:

All movements must STOP before passing a remote control zone sign and/or entering a Remote Control Zone unless a determination is made that the zone is not active. Employees may receive this information from the remote control operator, other authorized employee, or special instructions.

When the Remote Control Zone is activated, track(s) within the zone(s) must not be fouled with equipment, occupied, or switches operated until the remote control zone has been deactivated.

GCOR 6.11 Mandatory Directive—that part reading:

Indicate "VOID" on mandatory directive form when:

Is changed to read:

Where paper copies are used, indicate "VOID" on mandatory directive form when:

GCOR 6.20 Equipment Left on Main Track—A. Portion of Train Left on Main Track

That part reading:

 Set a sufficient number of hand brakes to keep the detached portion from moving.

Is changed to read:

 Secure a sufficient number of cars to keep the detached portion from moving.

GCOR 6.21.2 Water Above Rail—is changed as follows:

The 2nd paragraph is changed to read:

Operate engines at 5 MPH or less when water is above the top of the rail. If water is more than 3 inches above the top of the rail, the NOC Mechanical Help Desk must authorize the movement

GCOR 6.21.3 Track Obstruction / Unusual Conditions—is changed to read:

When a train is advised in the words, "Between (location) and (location) be governed by Rule 6.21.3", within the specified limits trains must:

· Not exceed 20 MPH HER,

and

 Be prepared to stop for slides, rocks, washouts, debris or obstructions on the track.

Train crews are reminded to regulate speed where visibility is limited (ex. curvature of track, lighting, weather, etc.) and must report to the train dispatcher conditions encountered, or if none are encountered, within the limits.

GCOR 6.21.4—The following rule is added:

GCOR 6.21.4 Activation of Shifted Load or Dragging Equipment Detector

When a train or engine actuates a shifted load or dragging equipment detector, and an adjacent Main Track or controlled siding may be obstructed, immediately:

- Warn other trains by radio, stating the exact location and status of the train and repeat as necessary.
- Place lighted fusees on adjacent Main Tracks and controlled sidings.
- Notify the train dispatcher or control operator and, when possible, foreign line railroads if necessary.

Warning to other movements is no longer necessary when:

- It is known adjacent Main Tracks and controlled sidings are not obstructed.
- The train dispatcher or control operator advises the crew that protection is provided on adjacent tracks.

Train on Adjacent Track

A train on an adjacent track that receives radio notification must pass the location specified at Restricted Speed and be prepared to stop for obstructions on the track. When advised that the track is clear and it is safe to proceed, this restriction no longer applies.

GCOR 6.22 Maintaining Control of Train or Engine—A new second paragraph is added:

When following a train or engine on a Main Track or controlled siding, crew members must ensure they stop at least 400 feet behind the train or engine, if length of train permits.

GCOR 6.23 Emergency Stop, Severe Slack Action, or Actuation of Shifted Load or Dragging Equipment Detector—the part titled "Inspection of Cars and Units" is changed to read:

Emergency Stop/Severe Slack Action:

Visual inspection must ensure no derailment or damage has occurred to cars, units, equipment or track to the end of the train

Actuation of Shifted Load/Dragging Equipment Detector: Shifted load or dragging equipment inspection requirements must be performed as outlined in the System Special Instructions.

If physical characteristics such as a bridge with no walkway prevent complete inspection, the train may be moved the distance necessary not exceeding 5 MPH to complete the inspection. Stop movement immediately if excessive power is required to start or keep the train moving and discontinue further inspection until a safe alternative to complete inspection is identified by either a job safety briefing or coordination through the train dispatcher.

Exception—The following trains (excluding key trains) are relieved of visual inspection required by emergency brake application if no severe slack action occurred while stopping

and brake pipe pressure is restored as indicated by the caboose gauge, end-of train telemetry device (ETD) or distributed power telemetry:

- · Solid loaded bulk commodity train,
- Train consisting entirely of doublestack and/or articulated spine car equipment,
- Any train where emergency application occurs above 20 MPH, or
- · Any train that is 5000 tons or less.

Train types in the exception are relieved of further visual inspection after a defect is corrected, such as recoupling an air hose, and brake pipe pressure is restored as indicated by the caboose gauge, end-of-train telemetry device (ETD) or distributed power telemetry.

GCOR 6.26 Use of Multiple Main Tracks, Supplemental Instruction

Unless otherwise indicated in the individual subdivision special instructions, when using Main Tracks 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.

GCOR 6.29.1 Inspecting Passing Trains—"Ground Inspections" is changed to read:

Conducting Inspections

When a train is stopped and is met or passed by another train, a member of the crew must inspect the passing train. All crew members must remain alert and attentive while the inspection is being conducted.

If inspecting from the ground:

- Dismount equipment on the side opposite approaching train.
- Do not cross adjacent tracks solely for the purpose of inspecting a passing train.

GCOR 6.32.2 Crossing Warning Devices (Highway/ Pathway - Rail Grade Crossings), Supplemental Instruction

In the application of this rule, a crossing having a broken gate(s) is to be considered as having working devices when the balance of the automatic warning devices are seen to be working. Movement may proceed over the crossing at 15 MPH without stopping.

GCOR 7.6 Securing Cars or Engines—is changed to read:

Do not depend on air brakes to hold a train, engine or cars in place when left unattended. Engineer and conductor are jointly responsible, through a job briefing, to ensure equipment left unattended is properly secured and a sufficient number of cars have hand brakes applied to prevent movement. If hand brakes are not adequate, block the wheels.

When the engine is coupled to a train or cars standing on a grade, do not release the hand brakes until the air brake system is fully charged.

When cars are moved from any track, secure enough cars by applying hand brakes to prevent any remaining cars from moving.

GCOR 7.7.1 Gravity Switch Moves—is changed to read:

A gravity switch move is permitted only at locations where specifically indicated by individual subdivision special instructions or when approved by a supervisor due to circumstances such as mechanical failure, etc.

Before performing a gravity switch move, crew members must fully understand the intended movement. They must verify that the track is sufficiently clear and that switches and hand brakes are in working order.

When performing a gravity switch move:

- · Not more than five cars may be handled at one time.
- Sufficient hand brakes must be manned by crew members to insure that the movement can be controlled and stopped.
- Using the hand brake on cars with shiftable loads must be avoided.
- · Cars must not be allowed to couple to other equipment.

GCOR 7.10 Movement Through Gates of Doorways—is changed to read:

Before the initial movement of engines, cars, or other equipment through gates, doorways, or similar openings, stop at least 100 feet prior to ensure that the gates, doorways, or openings are completely open and secure. When overhead or side clearances are close, make sure movement is safe. Do not ride on side of a car, engine, or other equipment when moving through gates, doorways, or similar openings where no clearance exists.

Exception

The requirement to stop does not apply to open gates on loading/unloading tracks at intermodal facilities.

GCOR 7.12 Movement Into Spur Tracks—is deleted entirely.

GCOR 8.9.1 Testing Spring Switch—That part reading: Before a train or engine makes a facing point movement over a spring switch, the switch must be tested when any of the following conditions exist:

- A block signal governing movement over the switch indicates:
 - · Stop.
 - Stop and Proceed.
 - or
- Restricted Proceed.

Is changed to read:

Before a train or engine makes a facing point movement over a spring switch, the switch must be tested when any of the following conditions exist:

- A block signal governing movement over the switch indicates:
 - Stop
 - · Stop and Proceed
 - Restricting
 - 10
 - · Restricted Proceed

GCOR 8.9.6 Approaching a Spring Switch in Non-Signaled Territory—the following paragraph is added:

The Third bullet is changed to read:

 PTC display indicates stop is not required when operating in PTC territory.

GCOR 8.19 Automatic Switches—the following paragraph is added:

In non-signaled territory, when movement continues beyond an automatic switch signal displaying a Stop indication, train must move at Restricted Speed for two miles or until leading wheels pass the next automatic switch signal or opposing distant signal.

GCOR 9.8 Next Governing Signal—is changed to read:

A train may comply with the next signal's indication when its aspect can be clearly seen and the signal governs the track where movement is occurring or will be made.

When operating in PTC Full Enforcement Mode and the PTC Display indicates the next governing signal will allow the train to proceed, or increase speed, the train may proceed complying with the signal indication governing the next block.

This rule does not apply when a rule or previous signal indication requires movement at restricted speed..

GCOR 9.9 Train Delayed Within a Block—is changed as follows:

- B. CTC or Manual Interlocking Limits is changed to read:
 - B. CTC or Manual Interlocking Limits

Proceed prepared to stop at the next signal until the next signal is visible and that signal displays a proceed indication.

When operating in PTC Full Enforcement Mode and the PTC Display indicates the next governing signal will allow the train to proceed, or increase speed, the train may proceed complying with the signal indication governing the next block.

Exception

Conflicting Movement. When the control operator has stopped a conflicting movement, he may then authorize another train to proceed in the same limits, advising both crews of movement to be made. If the stopped movement is later permitted to proceed, that train must move at restricted speed until its leading wheels have passed the next governing signal or the end of the block system.

GCOR 9.11 Movement from Signal Requiring Restricted Speed—is changed to read:

When a train passes a signal requiring movement at Restricted Speed, the train must move at Restricted Speed until its leading wheels have passed the next governing signal. When a next governing signal does not exist, trains operating on the Main Track must move at Restricted Speed for two miles or until leading wheels pass the opposing distant signal.

GCOR 9.15.2 Clearing Track Permits—the following 4th bullet is added:

· Position of hand operated Main Track switches.

GCOR 10.1.1—The following rule is added:

GCOR 10.1.1 Leaving the Main Track

Unless authorized by track and time, a crew member must notify the control operator when the train clears the Main Track unless a crew member is in position to prevent a following movement from passing.

GCOR 10.3, Track and Time—the instructions inside the box are changed to read:

Track and time does not authorize trains to occupy the Main Track within <u>automatic</u> interlocking limits.

GCOR 10.3 Track and Time, Supplemental Instruction Requesting Track and Time

The employee requesting track and time will state name,

occupation, location and train or other identification. The employee will copy the authority granted on the form provided for that purpose, and repeat from the form the authority granted. If the authority is repeated correctly, the control operator will acknowledge with "That is correct." The train must not move until the engineer understands the track and time granted.

When requesting track and time, if communication is lost or an incomplete message is received while the control operator is issuing track and time, or if after repeating the authority to the control operator, the employee does not hear the response from the control operator "That is correct," the employee must not occupy the track. The employee requesting track and time must contact the control operator as soon as possible and confirm with the control operator that the track and time was not received.

GCOR 13.1.4 Cab Signals Cut In and Out—is changed as follows:

The following sentence is deleted from the last paragraph:

If the device was not tested previously, the engineer must make a departure test prior to entering ACS territory.

The following is added after the last paragraph:

Note: Partial cut out requirements do not apply to engines not so equipped.

GCOR 13.3.1 Cab Signal and Block Signal Do Not Agree—the exception is deleted:

Exception—When the train dispatcher's instructions require the train to proceed at Restricted Speed, the train must comply with the train dispatcher's instructions regardless of cab signal indication.

GCOR 13.3.3 Movement with an Inoperative Cab Signal Device—is changed to read:

When it is determined the cab signal device is inoperative, the train may proceed according to block signal indications. However, the train must not exceed 40 MPH until it reaches a point where a crew member can report the defect to the train dispatcher.

The train dispatcher will establish an absolute block in advance of the train.

GCOR 14.3 Operating With Track Warrants—is changed as follows:

The following is added to Items 1 and 2:

The location of the specific point must be indicated on the track warrant form.

The following last paragraph is added:

After Arrival Authority

When track warrant requires "After Arrival" of another train, the limits must not be occupied until the train to be met has been identified by engine number and the rear end marker has passed the meeting point.

GCOR 14.7 Reporting Clear of Limits—the following paragraph is deleted:

When a hand operated switch is used to clear the Main Track, except where Rule 6.13 (Yard Limits) or Rule 6.14 (Restricted Limits) are in effect, advise the train dispatcher of the position of the switch and that the switch is locked when reporting clear of track warrant limits. Train dispatcher shall repeat the reported switch position and employee releasing the limits shall confirm to the train dispatcher this information is correct.

GCOR 14.7 Reporting Clear of Limits, Supplemental Instruction

Reporting Clear/Releasing Track Warrants

Engineer and conductor are jointly responsible, through job briefing, to ascertain and agree on the exact location that their entire train has passed before reporting past a specific point or clearing their track warrant.

When reporting past a specific location:

- Engineer and conductor will job brief and agree on train's location
- Engineer and conductor will communicate with the train dispatcher.
- · Communication will use the following format:

Conductor will state: "Conductor (Name), locomotive initial, number, (direction), regarding track warrant (Number), reports clear of (mile post/location) (Provide switch briefing when required) - Over."

Dispatcher will then check information against computer system information and if correct, will restate track release information followed by the question, "Is that correct? - Over."

Engineer will state: "Engineer (name), (location) is correct. - Over."

GCOR 14.9 Copying Track Warrants

That part reading:

The conductor and the engineer must each have a copy of the track warrant issued to their train, and each crew member must read and understand it.

Is changed to read:

Where paper copies are used, the conductor and the engineer must each have a copy of the track warrant issued to their train, and each crew member must read and understand it.

Item A. Transmitting Track Warrants—is changed to read:

- The train dispatcher will transmit the track warrant, followed by a summary of the total number of boxes and individual box numbers included by stating:
 - "(total number) boxes marked:
 - (Individual box numbers)."
- An employee will enter all of the information transmitted by the train dispatcher, except the summary. As the summary is transmitted, the employee will check the total number of boxes and individual box numbers copied to ensure all items are included.
- The employee will repeat the preprinted and written information transmitted by the train dispatcher, followed by a summary of the total number of boxes and individual box numbers included by stating:
 - "(total number) boxes marked:
 - (Individual box numbers)."
- The train dispatcher will check the repeat and, if all information including the summary is correct, will state the following:

"Track Warrant (number) to (engine ID) (direction) is OK at (time)(dispatcher initials)"

The employee will enter the OK time and the train dispatcher's initials on the track warrant and repeat

them to the train dispatcher,

or

If the track warrant includes after arrival, the dispatcher will state the following:

"Track Warrant (number), to (engine ID) (direction) with after arrival of (engine ID) (direction) at (location) is OK at (time) (dispatcher initials)"

The employee will enter the OK time and the train dispatcher's initials on the track warrant and repeat the "After Arrival" information, OK time and dispatcher's initials to the train dispatcher.

Note: The summary information in Items 1, 2, 3 and the after arrival information in Item 4 will be exempt from pronouncing and spelling numbers as indicated in GCOR 2.14.1, Verbally Transmitting and Repeating Mandatory Directives.

Item B. In Effect—the last sentence is changed to read:

Rules qualified employees may relay track warrants.

GCOR 14.10 Track Warrant in Effect—is changed to read:

A track warrant is in effect until a crew member reports the train has cleared the limits, or the track warrant is made void. The crew member must inform the train dispatcher when the train has cleared the limits. Before a train reports clear of a track warrant, the track warrant is made void or a portion of track warrant limits are released, a crew member must restore hand operated Main Track switches to normal position unless relieved by track warrant.

Employees reporting clear or releasing a portion of track warrant limits must state:

- · Their name or other identification
- · Track warrant number being released
- · Limits being released

In non-signaled territory or double track ABS territory (outside of restricted limits or yard limits), a crew member will job brief with the train dispatcher about the position of main track switches and those switches operated are locked within the limits being released, referencing completion of the Position of Switch form or stating no entries required.

Time Limit Shown

If the track warrant shows a time limit, the train must clear the limits by the time specified, unless another track warrant is obtained. If an employee cannot contact the train dispatcher and the time limit expires, authority is extended until the train dispatcher is contacted.

GCOR 14.11 Changing Track Warrants—the last paragraph is changed to read:

When the limits or instructions of a track warrant must be changed, a new track warrant must be issued showing, "Void Authority ______" and the number of the track warrant being changed.

GCOR 14.13 Mechanical Transmission of Track Warrants, Supplemental Instruction

Mechanical Issuance

Track warrants issued mechanically through printer or fax print only items checked. The item numbers checked will be listed on the bottom of the track warrant. Notify the dispatcher if:

- The track warrant does not contain all items listed on the bottom,
- Computer generated line on the bottom listing the items checked is missing,

or

• Track warrant is missing text or is otherwise not legible.

When contacted, train dispatchers will arrange to provide crews with complete, legible copies and report incident to their supervisor.

GCOR 15.1 Track Bulletins, Supplemental Instruction

BNSF Railway may use a general track bulletin instead of a track warrant to deliver track bulletin restrictions. All rules that apply to track bulletins apply to general track bulletins. Additionally, conductor and engineer may receive a general track bulletin instead of a track warrant listing all restrictions affecting their train movement.

GCOR 15.2 Protection by Track Bulletin Form B—the following are added:

C. Stop Column

When "STOP" is written in the Stop column, the train must not enter the limits unless instructed by the employee in charge. A red flag may be displayed at the beginning of the limits. A train within the limits at the time the track bulletin Form B takes effect, must not make further movement until instructed by the employee in charge.

D. Entering Within Limits

Before entering the track governed by the track bulletin Form B from any location other than the beginning of the Form B limits, obtain permission from the employee in charge.

GCOR 15.2 Protection by Track Bulletin Form B

That part reading:

A crew member must attempt to contact the employee in charge to avoid delay, giving the train's location and track being used. The employee in charge will use the following format to establish communication with the train:

Is changed to read:

A crew member must attempt to contact the employee in charge to avoid delay, giving the train's location and track being used. When possible, attempt must be made at least 2 miles in advance of the limits. The employee in charge will use the following format to establish communication with the train:

GCOR 15.9 Mechanical Transmission of Track Bulletins, Supplemental Instruction

Mechanically transmitted track bulletins from TSS provide summary information indicating the total number of lines or restrictions issued. Employees who receive these documents must cross reference the summary with the document to ensure all items are listed.

GCOR 15.13 Voiding Track Bulletins

A. Voiding Track Bulletins Verbally

That part reading:

Employee must repeat the information to the train dispatcher. If correct, the word "VOID" will be entered to indicate that portion is no longer in effect.

Is changed to read:

Employee must repeat the information to the train dispatcher. Where paper copies are used, if correct the word "VOID" will be entered to indicate that portion is no longer in effect.

GCOR 15.13.1—The following rule is added:

40 System Special Instructions—No. 4—December 1, 2023 (Updated 6/1/25)

TOC Home

GCOR 15.13.1 Voiding General Track Bulletins or Restrictions

A bulletin or restriction or an entire GTB may be voided by the train dispatcher communicating the following:

"Restriction (number) ____ reading ____ is void."

An employee must repeat this information to the train dispatcher. Where paper copies are used, if correct the employee must write "VOID" in the margin to the left of the restriction made void.

2. "General track bulletin No. is void."

An employee must repeat this information to the train dispatcher. Where paper copies are used, if correct the employee must write "VOID" across the first page of the general track bulletin being voided.

GCOR 18.0 The Rules Applicable Only In Positive Train Control (PTC) Territory—

Is changed go read:

GCOR 18.0 The Rules Applicable Only In Positive Train Control (PTC) or TWC Plus Territory—

GCOR 18.1 Positive Train Control Territory— Is changed entirely to read:

GCOR 18.1 Positive Train Control and TWC Plus Territory—

PTC and TWC Plus territories are specified in special instructions. A train must not be operated in PTC or TWC Plus territory if the controlling locomotive is not equipped with an operable PTC system unless otherwise authorized by rule, special instructions, or the train dispatcher. Trains must not depart their originating location without an operable PTC system except as provided in GCOR 18.13 or special instructions.

GCOR 18.2 Taking Charge of PTC Equipped Trains—

First paragraph reading:

When taking charge of a train in PTC territory, or before entering PTC territory, the train must not depart until the engineer confirms:

Is changed to read:

When taking charge of a train in PTC or TWC Plus territory, or before entering PTC or TWC Plus territory, the train must not depart until the engineer confirms:

That part reading:

2. The PTC system on the controlling locomotive is initialized.

Is changed to read:

The PTC system on the controlling locomotive is initialized with the correct GTB covering the route of their train.

GCOR 18.3 Broken or Missing Seals—

That part reading:

Unless authorized, do not break the protective seals on PTC devices. Report broken or missing PTC seals to the designated authority.

Is changed to read:

Unless authorized, do not break the protective seals on PTC devices. Report broken or missing PTC seals to the PTC Desk.

GCOR 18.4 PTC Cut Out-is changed to read:

The PTC system may only be cut out or disabled when authorized by rule or when proper authorization is received.

When advised by the Train Dispatcher, with Chief Dispatcher approval, PTC may be cut out for, but not limited to, the following reasons:

- · It becomes defective, or
- · It prohibits train movement that should be allowed.

GCOR 18.9 Use of Restricted Mode—is changed to read: Restricted Mode may be utilized to perform work events such as:

- · Switching.
- · Pickups, setouts, etc.
- Loading/unloading of work trains under direction of MW Exception: When entire train is intact and moving on main track or controlled siding, restricted mode must be turned off

After all work events have been completed, turn off Restricted Mode.

GCOR 18.10—The following rule is added:

GCOR 18.10 Use of PTC Park Function—The PTC Park function must be engaged when securing unattended PTC equipped locomotives, with or without cars attached, when the automatic air brake valve remains cut in. The PTC Park function must be disengaged before initiating movement.

GCOR 18.12—The following rule is added:

GCOR 18.12 Movements with Inoperative PTC System When the PTC system on the controlling locomotive becomes inoperative after departure or en route, notify the train dispatcher and PTC desk.

Maximum Speeds

The following maximum speeds will apply to movements with an inoperative PTC system.

In non-signaled territory, or when operating against the current of traffic in Rule 9.14 (Movement with the Current of Traffic) territory:

| Trains transporting one or more loaded cars containing TIH/PIH | 30 MPH |
|----------------------------------------------------------------|--------|
| All other trains | 40 MPH |

In signaled territory:

| Freight trains transporting one or more loaded containing TIH/PIH | 40 MPH |
|-------------------------------------------------------------------|--------|
| Freight trains not transporting loaded cars containing TIH/PIH | 49 MPH |
| Locomotives without cars | 49 MPH |
| Passenger trains | 59 MPH |

GCOR 18.13—The following rule is added:

GCOR 18.13 Movements Without PTC

Freight movements engaged in:

- Yard service (including switching, transfer, local, etc.),
- · Assembly or disassembly of trains,
- Hostling locomotives, or Remote Control operations, may operate on PTC or TWC Plus territory without PTC if the train dispatcher is notified and the movement:
 - Originates or terminates in a yard,
 - Does not travel in excess of 20 miles on PTC territory in one direction.
 - Does not exceed restricted speed while on PTC territory or TWC Plus territory.

GCOR Abbreviations—the following abbreviations are added:

| Absolute Signal |
|---------------------------------|
| . Connection |
| Eastbound Controlled Signal |
| .East End |
| East Crossover |
| Independently Controlled Switch |
| Not Applicable |
| Northbound Controlled Signal |
| North End |
| North Crossover |
| Protect Open Switch |
| Positive Train Control |
| Remote Control Power Switch |
| Restriction |
| Restricted Limits |
| .Release Point |
| Southbound Controlled Signal |
| South End |
| Switch Point Monitoring System |
| Station Sign |
| Switch No |
| Switch Yes |
| South Crossover |
| Track Flags Not Displayed |
| Track Integrity Down |
| Track Integrity Warning System |
| Westbound Controlled Signal |
| . West End |
| West Crossover |
| |

GCOR Glossary—the following glossary terms are added:

Electronic Device

An electronic or electrical device used for communication, media consumption, gaming, internet browsing, or any non-essential function that may distract employees from safety-related tasks.

General Track Bulletin

A notice containing track bulletin restrictions and other conditions affecting train movement.

Hard Cut Out (PTC)

A state of the PTC system when PTC cut out switches are placed in the cut out position.

PTC Full Enforcement Mode

The status of PTC when all the following conditions exist:

- · The system state is Active,
- a colored track line (other than gray) exists beneath the leading end of the movement,
- · maximum speed is displayed, and
- · next target or "None" is displayed.

When these conditions are met, the PTC system is actively providing warning and enforcement.

PTC Park Function

A PTC feature which, when engaged, will provide enforcement braking if train movement is detected.

Railroad Operating Employee- An individual who:

- Is engaged in or connected with train movement, including hostlers.
- Provides commuter or intercity rail passenger transportation.
- Is subject to hours-of-service regulations for train service employees.

Soft Cut Out (PTC)

A state of the PTC system resulting from selection of the cut out key on the PTC display.

TWC Plus

A safety enhancement on non-signaled TWC territory that utilizes components of the PTC system to prevent authority, speed, and work zone limit violations. TWC Plus does not prevent movement through misaligned switches, past automatic switch signals, or automatic interlocking signals.

15. Currently Not Used

16. Currently Not Used

17. PTC and TWC Plus - Supplemental Information

Locomotive Consist

At locations where locomotive consists are assembled for trains that will operate on PTC or TWC Plus territory, a PTC-equipped, lead-qualified locomotive must be placed in lead position. At non-PTC originating locations, departure of a train that will operate on PTC or TWC Plus territory without a PTC-equipped, lead-qualified locomotive in lead position, must be approved by the train dispatcher.

PTC Readiness Verifications

At locations where mechanical forces are not on duty to assemble locomotive consists the following applies, conduct an initialization verification and departure test on the lead unit as soon as possible. The following steps can be conducted by any trained personnel with a PTC log-in. A GTB is not required to complete this process

- 1. Cycle the PTC and PTC Radio breakers.
- After the reboot is complete, on the PTC display, select MENU 1, then select INIT.
- When text box displays, "THIS WILL ERASE EXISTING TRAIN DATA DO YOU WANT TO CONTINUE?" select YES.
- On the RAILROAD SELECTION screen, highlight BNSF and select ADD, then SUBMIT.
- The display should indicate "PLEASE WAIT FOR SYSTEM CONFIGURATION". The TMC is now establishing a connection to the office.
- If prompted to download or install new software, follow current software deployment instructions as outlined in track bulletin
- When the "PRESS KEY TO ACCEPT TERMS OR CANCEL" message is displayed, the office server has established a connection. Select CANCEL. If the Accept Terms screen does not display, there is a PTC issue preventing connection to the server. Contact PTC Desk for further instructions.
- 8. Before beginning the PTC Departure Test, set the Automatic Brake valve to the Release position. Then from Menu 1, select DEPART test and follow the prompts to complete the Departure Test. When prompted, ensure the Automatic Brake Valve is placed in Suppression and remains in Suppression until the test is complete. Placing the Automatic Brake Valve into any position other than Suppression may nullify functions required for efficient PTC system operation.

Restricted Speed

PTC does not enforce all requirements of GCOR 6.27 - Restricted Speed. When required to operate at Restricted Speed, PTC enforces a speed of 20 MPH.

42 System Special Instructions—No. 4—December 1, 2023 (Updated 7/1/25)

TOC Home

Unusual Conditions

Any train experiencing a PTC Enforced Braking Event which results in an occupied locomotive stopping in a tunnel or other enclosed structure, in addition to current instructions, immediately place Enforcement Cut Out Switches located in the nose of the locomotive to the Cut Out position. If operating conditions allow, recover brake pipe and exit the location.

Notify Train Dispatcher and contact the PTC Desk immediately and be governed by their instructions.

PTC Desk

The PTC Desk may be contacted by radio, or telephone 817-593-5900. When necessary to troubleshoot PTC issues, contact should be established by a crew member located on the lead locomotive (when practical).

18. Electronic Delivery of Information

PTC initialized trains may receive the following electronically delivered directives:

- · Form A track bulletins
- · Form B track bulletins
- · Crossing warning notifications
- Track warrants

Train crews are responsible for complying with electronically delivered directives when:

- · Notified by the prompt on the PTC display,
- Contacted by the train dispatcher confirming receipt of the directive, or
- · Directives(s) remain viewable on the PTC display.

When crew members responsible for complying with electronically delivered directives are not in the controlling locomotive (such as train service employees in passenger service), the engineer will communicate to those crew members the contents of new directives as soon as practical after the prompt is received and prior to reaching the directive location.

Upon receipt of a PTC directive prompt, crew members utilizing iGTB (general track bulletins delivered via the iGTB application on the iPad) must select the refresh button. If, after selecting the refresh button the information is not viewable on iGTB, information from the PTC display must be copied on the prescribed form, verbally confirmed with the train dispatcher as outlined in SSI Item 18. (B), and the engineer must have a written copy.

When any restriction is voided in the system by the train dispatcher, it will no longer be visible on the bulletins list and the train crew may consider the restriction no longer in effect. Electronically delivered Form Bs are not permitted in Yard Limits or Restricted Limits.

Inoperative PTC

| Directive | Train Crew Action |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form A Track Bulletin or Crossing Warning | If PTC status changes to a condition where electronic view of directives is not available on the PTC display, be governed as follows: • When directives delivered to PTC have been copied and confirmed with the train dispatcher or are viewable in iGTB, GCOR 18.12 applies. or • When directives delivered to PTC have not been copied and confirmed with the train dispatcher, or are not viewable in iGTB, stop train consistent with good train handling and contact the train dispatcher to verify and determine if additional directives are needed. Once verified, crew members may proceed per GCOR 18.12. |
| Form B | Stop the train consistent with good train handling and contact the train dispatcher. |
| Track Warrant | Stop train consistent with good train handling and contact the train dispatcher. |

18. (A) PTC or TWC Plus Territory

Trains operating in a PTC active state may receive electronically delivered directives without verbal interaction with the dispatcher. Train crews must review as soon as practical and follow prompts for acknowledgment.

Directives that are delivered electronically via PTC will immediately be displayed onboard and protected by PTC on trains operating in a PTC active state.

18. (B) Non-PTC and Non-TWC Plus Territory

Where taking charge of a PTC-equipped train, the PTC system on the controlling locomotive must be initialized by a PTC qualified employee. The train dispatcher will initiate communication that a directive has been delivered. (Note: this verbal confirmation process does not apply to Form B Track Bulletins). Because PTC is in a disengaged state, directives will not be enforced by PTC.

Authority

Train crews will receive "delivery prompts" for track warrants. Because PTC is in a disengaged state, these will not be enforced by PTC.

The train dispatcher will state the track warrant number, and if included, box 5 (after arrival). Train crew will confirm receipt of the track warrant to the train dispatcher by stating the track warrant number, limits (including track) and total number of boxes marked including which specific boxes are marked. The train dispatcher will confirm information repeated is correct.

Example:

Train dispatcher states: "BNSF 5179 East, did you receive track warrant 725-45 with a box 5 on your PTC display?"

Train crew responds: "BNSF 5179 East, yes we did receive track warrant 725-45 from Anna to Bess on main track with two boxes marked, 2 and 5."

If the train crew cannot confirm the directive is on the PTC display or if the information displayed is incorrect, the directive will be issued using the verbal transmission / repetition process. Dispatcher will notify the PTC desk.

Restrictions

Train crews may not always receive "delivery prompts" for restrictions. It may be necessary to select "view bulletins" on the PTC display to locate the restriction being confirmed. Because PTC is in a disengaged state, these will not be enforced by PTC.

The train dispatcher will contact the train crew and state the restriction number or milepost(s) that restriction applies to. The train crew will confirm receipt of the restriction to the train dispatcher by stating the restriction number (where applicable), milepost(s), speed (where applicable) and track on which the directive applies. The train dispatcher will confirm information repeated is correct.

Example:

Train dispatcher states: "BNSF 5179 East, did you receive form A track bulletin 1355 on your PTC display?"

Train crew responds: "BNSF 5179 East, yes we did receive form A track bulletin 1355 from MP 181.0 to MP 181.5, 10 MPH on main track".

19. Currently Not Used

20. Currently Not Used

21. One-Person Train Crew Operation

This instruction applies to one-person manned helper operations ("a oneperson train crew").

A one-person train crew must comply with all existing applicable policies, rules, regulations, and instructions, in addition to the operating rules outlined in this section below.

A. Hazardous Material - Accidental or Non-Accidental Release

In the event of hazardous material release, a one-person train crew member shall promptly:

- · Move to a safe location.
- Contact the dispatcher or control operator and report the release.
- The dispatcher or control operator shall follow the Emergency Response Requirements and make notification to the designated response desk(s) (ROC/ SID) as soon as possible.
- The designated response desk shall follow established protocols for determining the appropriate response.

B. Injuries, Accidents/Incidents, and Derailments

- In the event of any injury, accident/incident, or derailment, a one-person train crew member shall promptly report the event to the dispatcher or control operator.
- The dispatcher or control operator shall follow the Emergency Response Requirements and make notification to the designated response desk(s) (ROC/ SID) as soon as possible.
- The designated response desk shall follow established protocols for determining the appropriate response.

C. Emergency Response Requests for Highway-Rail Grade Crossings

In the event that an emergency responder or other public safety officer requests the unblocking of a highway-rail grade crossing by a one-person train from a one-person train crew member in response to a potentially life-threatening situation:

- The one-person train crew member may take any reasonable action to safely move the one-person train to unblock the highway-rail grade crossing within the train's authority, requesting additional authority from the dispatcher or control operator if necessary.
- If the one-person train cannot be moved due to an injury, accident, derailment, disabled train, or other event impacting the one-person train or one-person train crew member, the one-person train crew member shall contact the dispatcher or control operator.
 The dispatcher or control operator shall follow the Emergency Response Requirements and make notification to the designated response desk(s) (ROC / SID) as soon as possible.
- The designated response desk shall follow established protocols for determining the appropriate response.

D. Disabled One-Person Trains

- In the event a one-person train becomes disabled due to a mechanical issue or other event, the one-person train crew member shall contact the dispatcher or control operator and the mechanical desk to report the event.
- The dispatcher or control operator shall follow the Emergency Response Requirements and make notification to the designated response desk(s) (ROC/ SID) as soon as possible.
- The designated response desk shall follow established protocols for determining the appropriate response.

E. Illness, Injury, or Incapacitation

- In the event a one-person train crew member becomes ill or is injured or believes they may become incapacitated while enroute, the crew member shall promptly contact the dispatcher or control operator.
- The dispatcher or control operator shall follow the Emergency Response Requirements and make notification to the designated response desk(s) (ROC/ SID) as soon as possible.
- The designated response desk shall follow established protocols for determining the appropriate response.
- If a report is received that a one-person train crew may be incapacitated, the dispatcher or control operator shall attempt to contact the one-person train crew following the procedure for a loss of radio communication provided in subsection F below.

F. Railroad Radio Communications

Radio or Wireless Requirements:

- The one-person train crew assigned to a train must have a working radio or working wireless communications on the controlling locomotive and comply with GCOR 2.0 Railroad Radio and Communication Rules.
- A one-person train crew member shall make contact with another railroad employee, including either a dispatcher or control operator, a supervisor, or an intermittentlyassisting crew member, whenever it can be anticipated that radio or wireless communication could be lost, (e.g. before the train enters a tunnel), unless the one-person train is equipped with technology or a different protocol is established to monitor the one-person train's real-time progress through the period of lost communication; and

If radio or wireless communication is lost with a one-person train crew member, the dispatcher or control operator shall attempt to contact the one-person train crew member via radio or wireless communication, and after three (3) unsuccessful attempts within five (5) minutes, the dispatcher or control operator shall then contact the Service Interruption Desk who will take appropriate steps including determining whether a search and rescue operation is necessary.

Requirements for Directives:

 A dispatcher or control operator shall confirm with a oneperson train crew member that the train is stopped before delivering a mandatory directive or crossing warning by radio transmission.

G. Alerter System

A one-person train crew member shall test the alerter system to confirm it is functioning before departure from each initial terminal, or prior to being coupled as the lead or controlling locomotive in a locomotive consist. The alerter on the lead or controlling locomotive must be tested by allowing the warning timing cycle to expire that results in a penalty application of the locomotive brakes.

22. Remote Control Operations

- Division Timetable Special Instructions will designate limits of Remote Control Zones (RCZ). RCZ signs will be posted at zone access locations.
- When a remote control operations system radio broadcasts "Operator Down", movements on adjacent tracks must be made at a speed that allows stopping within half the range of vision until the safety of all members of the remote control crew is confirmed.

23. Currently Not Used

24. Switch Tender Instructions

The train dispatcher and switch tender are required to have a job safety briefing before a switch tender acts on instructions from the train dispatcher. Following a shift change, another briefing is required between the train dispatcher and switch tender, which will include discussion of pending instructions and determination if the instructions are still correct.

When communicating concerning approaching train movements, use engine initials and number and direction. Do not use only train symbols or blanket terms such as "westbound or eastbound trains."

The dispatcher will issue specific instructions to the switch tender. The switch tender must repeat the instructions to the train dispatcher and receive confirmation of being correct, before acting on the instructions.

For example: After confirming with the train dispatcher that BNSF 1234 West will be the next train to line from Main Track 1 to Main Track 2 at Robinson Spur, the switch tender is then to call the BNSF 1234 West and verify the train has authority from Main Track 1 to Main Track 2 at Robinson Spur. After verification has been received from the BNSF 1234 West, and after the switch tender has visually identified the BNSF 1234 West, the switch tender will line the route for the movement. After the movement is clear of the switch, the switch must be lined and locked in the normal position.

When necessary for the train dispatcher to change routing instructions to the switch tender after authority has been granted to a train, it is the responsibility of the dispatcher to communicate directly with the switch tender. Another authority over the switch that the tender is in charge of cannot be issued until the dispatcher has informed the switch tender of the change.

When a switch tender is at a remote location, away from a depot and/or base station radio, the switch tender must check with dispatcher when arriving at such location to confirm they can clearly communicate. If the switch tender becomes aware of any radio communication problems, the train dispatcher must be notified. The chief dispatcher will make particular arrangements when communication problems are evident.

While in charge of a switch, the switch tender must not leave the switch unattended unless it is lined and locked for normal movement.

The train dispatcher's transfer must include switch tender locations and pending instructions from the train dispatcher to the switch tender.

25. FRA Random Drug Testing

TY&E employees selected for FRA Random Drug Testing must show the start time of the Random Drug Test (RDT) in the remarks column of their timeslip. Start time of RDT begins when a supervisor notifies the employee that they are selected for RDT. A stop time on RDT is necessary only if different from their off-duty time.

26. Verification of Rules Examination

Employees required to pass rules examination must have a current rules examination card when issued, or engineer's certificate in their possession while on-duty.

27. Cars Set Out Bad Order

When practical, a car set out between terminals due to mechanical defect should be left where it can be accessed by truck for making repairs. If the car set out is a military shipment or Rail Sensitive Security Material (RSSM), the Resource Operation Center, Fort Worth must be promptly notified at 817-593-7200 or 800-832-5452, Option 3. The PBX/MRAS radio system may be used for this communication.

28. Grade Crossing Accidents

The following information is designed to serve as post grade crossing accident guidelines. It is designed to provide the utmost in safety for you and your crew.

After the accident has occurred and the train is stopped:

- A. Ensure the safety of crew members, accident victims, and the public.
- B. Meet the requirements of GCOR 6.23.
- C. Contact the dispatcher or any other available radio contact and advise:
 - Exact location, and
 - What emergency services are needed. Be sure to include alternate routes for the emergency vehicles if your train is blocking road crossings.
- D. Assess the damage to the vehicle and train to determine if there is any danger to your crew or the public.
- E. Assign a crew member to monitor a radio to provide further information for emergency assistance.
- F. If it is safe, render assistance to accident victims. It is important not to move the victim unless a life threatening situation exists.
- G. Turn "off" the vehicle's ignition and inform the investigating officer you did so. Otherwise, do not disturb the accident scene. Do not move the train unless necessary to permit emergency vehicles to access the accident scene through a blocked crossing, etc.

43b System Special Instructions—No. 4—December 1, 2023 (Updated 7/1/25)

TOC Home

- H. Only give information to:
 - 1. The investigating officer,
 - 2. Authorized company managers.
 - Cooperate with the investigating officer. Answer the officer's questions and provide as much information as you can recall.
 - b. Record the badge number and name of the investigating police officer at the scene. Witness with the officer that the headlight is on, and that the whistle and bell on lead unit are in proper working order. Also, note that the crossing warning devices are functioning.
- Assign a crew member to verify the accuracy of the train list. Save all train lists, track warrants, track condition messages, and other pertinent documents for the proper BNSF managers.
- J. Ascertain that no part of your train is derailed and that it will be safe to proceed once released by the investigating officer
- K. Personal counseling will be available to any crew member who might experience post-accident trauma.

29. Trains Performing Track Maintenance Work

The conductor is in charge of and will be responsible for all work train movements. The safety of the overall train operation is the responsibility of the entire train crew. During work activities the engineer may accept train movement instructions only from a designated individual identified in the job safety briefing before commencing work. The individual designated to provide train movement instructions to the engineer will be a member of the train crew except during work activities requiring precision train movement, such as rail recovery. An individual of the work group may be designated to communicate directly with the engineer for precision train movements under the supervision of the conductor.

The engineer will respond to all Stop signals.

When Maintenance of Way, Signal, Structures, Mechanical or other work groups are involved with the activities of the work train (i.e. weed spraying, dumping ballast, loading/unloading track materials, etc.), a coordinator from such group must be designated. The train crew will communicate with the designated coordinator concerning all train movements and work activities.

An initial job safety briefing will be conducted before commencing work and additional job safety briefings must be held at intervals not to exceed four hours until the end of the tour of duty. In addition, when there is a change in assignment or a significant delay in activities has occurred, a job safety briefing must be conducted before commencing work. Employees who subsequently work in the vicinity of a work train after such job safety briefings have been held, must not commence work until they have received a job safety briefing from the designated coordinator regardless of authority received to occupy the area. The conductor is responsible to ensure that no work activity begins until the required job safety briefings are complete.

Job safety briefings must include applicable operating rules, safety rules, special instructions and any other work-specific information. The designated coordinator is responsible for communicating impending train movements to the work groups under his control.

All employees assigned to a work train and/or its activities are responsible to be on the lookout for train or track car movements at all times. Lookouts will be utilized when necessary and all movements must be fully protected.

In signaled territory, when at the intended work location and before performing work associated with track maintenance (i.e. weed spraying, dumping ballast, loading/unloading track materials, etc.) on a Main Track or Siding the conductor must:

- Notify the train dispatcher of the milepost limits where the work will be performed.
- Notify the train dispatcher when the work has been completed.

30. Track Condition Messages

Track condition messages (TCM) may be issued by train dispatchers to cover restrictions that affect movements on tracks governed by GCOR/MWOR 6.28, or any restriction not normally covered by a track bulletin restriction.

Restrictions shown on a track condition message may be cancelled verbally by the train dispatcher.

Authority can be given by a train dispatcher or supervisor to enter a track shown to be out of service on a track condition message.

When a track warrant indicates a track condition or train message is to be received, conductor is responsible for securing those messages necessary for movement of their train. Track condition messages must be retained and complied with on all trips made during the tour of duty on which they were received.

31. Securing Track Warrants/General Track Bulletins

When reporting for duty at initial terminal, a crew member will secure track warrants, track bulletins, and track condition messages or general track bulletin, unless otherwise instructed. A relief crew member must contact the dispatcher before departing to determine if additional documents are required, and advise if all crew members are present and ready to depart.

If the identifying unit is not shown correctly on the address line, contact the train dispatcher and correct the address line before departing the initial station.

2. Currently Not Used

Flood, Excessive Wind, Tornado, Cold Weather and Earthquake Instructions

Observations Associated with Flood/High Water Instructions for observations, or when otherwise notified by the

44 System Special Instructions—No. 4—December 1, 2023 (Updated 9/1/24)

TOC Home

train dispatcher, of flood/high water with or without a flash flood warning/emergency:

| Conditions Observed Associated with Flooding/High Water | | | |
|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------|
| Condition | Passenger Trains | Key Trains | All Other Trains |
| Water over rail | Immediately stop train, consistent with good train handling. Report condition to Dispr. After stopping for these conditions, do not move the train until further instructions are received from maintenance personnel. | | |
| Surface irregularity | | | sistent with good |
| Washout | | | ion to Dispr. After |
| Side scour | | | , |
| Erosion at piers, footing, dump planks and head walls of bridges | | | |
| Debris against bridge with active water flow | Do not exceed 30 MPH until entire train has passed the condition. Report to Dispr. | | |
| Turbulent water | | | port to Dispr. |

Instructions for observations of flood from a stream or river near BNSF track, with or without flash flood warning, or when otherwise notified by the train dispatcher of flood/high water:

| Water Observed Reaching Bottom of Ballast Line (Figure 1 Below) | | | |
|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------|--|------------------|
| Condition | Passenger Key Trains Trains All Other Trains | | All Other Trains |
| Standing Water | Report to Dispr | | |
| Moving Water | Do not exceed 30 MPH until entire train has passed the condition/warning limits and report to Dispr. | | |
| Water Observed Reaching Top of Ties (Figure 1 Below) | | | |
| Standing Water | Do not exceed 30 MPH until entire train has passed the condition/warning limits. Report to Dispr. | | |

Moving Water

Do not exceed 20 MPH and be prepared to stop for slides, rocks, washouts, debris, track surface irregularities or obstructions on the track until the entire train has passed the condition/warning limits. Report to Dispr.

Water Between Top of Tie & Bottom of Ballast

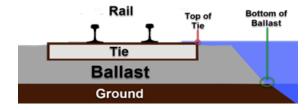


Figure 1 - Top of Tie and Bottom of Ballast

Flash Flood Warning/Emergency

Weather information received by BNSF from Accu-Weather Enterprise Solutions, Inc., is categorized as a "Warning" or "Emergency" when it describes conditions that require immediate action by the train dispatcher to notify train crews of imminent danger. These restrictions are immediately distributed to the relevant train dispatchers. When Accu-Weather issues a "Flash Flood Warning" or "Flash Flood Emergency", the dispatching center will immediately advise all involved trains of the specific conditions.

Flash Flood Critical Areas are designated in the Division Timetable. Division Engineers will identify "critical" areas by subdivision, segmented by mile post locations based upon their susceptibility to flooding or their history of being prone to washouts or side-scour wash.

Instructions for movement of trains when notified of flash flood warning/emergency:

| Flash Flood Warning | | | |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| | Passenger Trains Key Trains All Other Trains | | |
| Critical Area | Do not exceed 20 MPH through critical area limits and be prepared to stop for slides, washouts, debris, track surface irregularities or obstructions on the track. | | |
| Non-Critical Area | Do not exceed 30 MPH through limits identified in the warning. | | |
| | | | |

Additional restrictions, including a requirement to stop the train, may apply if flooding/high water conditions are observed by the train crew.

| Flash Flood Emergency | | | |
|-----------------------|------------------|------------|------------------|
| | Passenger Trains | Key Trains | All Other Trains |

All Limits

Do not exceed 20 MPH through limits and be prepared to stop for slides, washouts, debris, track surface irregularities or obstructions on the track.

Additional restrictions, including a requirement to stop the train, may apply if flooding/high water conditions are observed by the train crew.

The Flash Flood Warning/Emergency restrictions will remain in effect until the track has been inspected and employee performing the inspection advises the train dispatcher that the applicable restriction is canceled. If the Flash Flood Warning/Emergency limits include locations identified as being "critical," these areas will be inspected on a priority basis as directed by the dispatching center.

Train dispatchers will continue to issue Flash Flood Warning/ Emergency until the track has been inspected and the Flash Flood Warning/Emergency expires or is canceled by Accu-Weather.

Local Observations by Maintenance Personnel

When local maintenance personnel become aware of current conditions that might produce flash flooding that could result in damage to BNSF track or structures, they will:

- Immediately place the speed restriction described above on the affected route.
- Inspect the track for washouts, side-scour wash, surface irregularities and/or water over the rail.
- Carefully inspect bridge foundations and drainage structures, with careful attention to bridges with mud sills, for erosion behind dump planks and head walls, erosion around piers and footings, and obstructions from drift and debris.
- If water level, turbulence, or other conditions make a
 thorough inspection impossible at the site of such a bridge,
 operations of all trains will be reduced to no more than
 20 MPH and prepared to stop for slides, rocks, washouts,
 debris, track surface irregularities or obstructions on the
 track until the entire train has passed the condition/warning
 limits until it is possible to make a proper inspection.
- If, during the initial track inspection, there is any doubt about the safety of train operations over bridges, a qualified Structures employee must be called at once, and any speed restrictions that have been placed on bridges will not be lifted until authorized by the Structures employee.
- Track and bridge foremen must continue to patrol past their respective territories if an adjoining territory is likely to have been damaged, and such damage might not have been discovered.

Excessive Wind Instructions

When High Wind Warnings are received, the train dispatcher will make a general radio broadcast regarding the High Wind Warning over the radio(s) nearest the affected area and will notify all affected trains and employees with movement

authority providing time and limits of the expected high winds. The term "until traversed" may be used in place of communicating the expiration time of the warning when notifying trains and MW authority holders of High Wind Warnings. Until traversed means the rear of the train is clear of the limits

The following governs movement of trains within or entering the High Wind Warning limits when notification is received:

· Light engine consists:

- Proceed at maximum authorized speed.

· Passenger Trains:

If Wind / Train Speed Table is provided on Work Orders, proceed at speed indicated in the table. If Wind / Train Speed Table is not provided:

- Proceed up to 40 MPH if wind speeds are between 50 MPH and 60 MPH.
- Proceed up to 20 MPH if wind speeds are between 61 MPH and 80 MPH.

· Foreign Trains:

- Stop train prior to entering High Wind Warning limits. If train is within limits of High Wind Warning, Stop. Proceed only if directed by the train dispatcher; do not exceed 20 MPH.
- Trains that have furnished a consist blow over speed greater than the High Wind Warning speed are authorized to proceed at 20 MPH.

- · All trains not specified above:
 - Refer to Wind / Train Speed Table located on the train profile, work orders or other informational source to determine train speed based on the High Wind Warning speed.
 - When Wind / Train Speed Table requires train to Stop, stop train prior to entering High Wind Warning limits. If train is within limits of High Wind Warning, Stop.
 - Proceed only if directed by the train dispatcher; do not exceed 20 MPH.
- If the Wind / Train Speed Table indicates "Contact Dispatcher" or is unavailable on Work Orders:
 - Notify train dispatcher that Wind / Train Speed Table is unavailable
 - Stop train prior to entering High Wind Warning limits. If train is within limits of High Wind Warning, Stop.
 - Proceed only if directed by the train dispatcher; do not exceed 20 MPH.

When High Wind Warnings exceed 70 MPH, loaded bulk commodity trains may be authorized by the train dispatcher to proceed at restricted speed.

When High Wind Warnings exceed 80 MPH, all trains must Stop.

Exception: Light engine consists or loaded bulk commodity trains may be authorized by the train dispatcher to proceed at restricted speed.

When a High Wind Warning requires a train to Stop, immediately notify the train dispatcher.

Tornado Watch and Warning Instructions:

Tornadoes are the most violent of all storms. Paths of destruction range from a few hundred feet in width to more than a mile and extend the length of a city block to 300 miles. The greatest potential for such storms usually exists from April through September.

When tornado watch or warnings are received, the train dispatcher will notify all affected trains and employees with authority in the area providing the tornado watch or warning information

A "tornado watch" means atmospheric conditions are such that tornadoes may develop. A tornado watch is generally issued 4-6 hours before the conditions may occur.

During a tornado watch, all train movements and yard activities will continue, keeping alert for any signs of weather change. The danger signs to look for are severe thunderstorms, hail, roaring noise, a funnel cloud, or combination of the above. When a crew knows they are in a watch area, the radio on a locomotive or a packset should be used to monitor instructions and information to and from the train dispatcher. In the event a crew spots a funnel cloud, the train dispatcher should be immediately notified, consistent with the crew's safety.

If a train or yard assignment has an occupied caboose, upon being notified of a tornado watch, the occupants of the caboose should immediately move to the locomotive consist. While in the process of moving to the locomotive, if the tornado watch turns into a "tornado warning," or a funnel cloud is spotted, those affected should seek shelter in a nearby

ditch, ravine, culvert or in a depression. If none of these are available, lie face down on the ground with hands over the head away from the caboose or cars in the train.

A "tornado warning" means a tornado has been sighted or verified by the National Weather Service or by persons associated with official weather spotters. The train dispatcher will keep trains and crews appraised of limits of tornado warnings. Train crews are to follow instructions as follows:

During a tornado warning, all train movements and yard activities must stop. Any train enroute will stop and employees should seek appropriate shelter consistent with the safety of all involved, avoiding the stopping of a train on a high bridge, across railroad and highway crossing at grade, or anywhere the presence of a train could be a hindrance.

After the tornado warning has expired:

- If determination is made that the path of the tornado crossed the tracks at the location or in the immediate vicinity of the train, crew members must inspect their train before moving to determine if any damage or derailment has occurred to the train or if the track structure has been damaged.
- All trains within or entering the tornado warning limits may proceed, prepared to stop when approaching bridges, culverts, or other points likely to be affected until relieved by the dispatcher. The train dispatcher must be advised immediately of damage or unexpected conditions.
- The train dispatcher must restrict trains as prescribed in the second bullet, until an inspection has been completed by division employees or all of the limits of the tornado warning have been traversed by a train and it is confirmed by the train crew(s) that no damage or unexpected conditions were observed.

Cold Weather Restrictions:

The correlations that exist between rail service failures, temperature, train axle load, track and equipment conditions, and train speed are complex and involve many factors including equipment and track component design and material properties, their relative wear conditions, and the rail/wheel interaction for various traffic mixes and operating conditions.

In order to maximize safety with regard to extreme temperatures and temperature changes, rail laying temperatures and weather extremities across our railroad have been considered. In that effort, the railroad has been divided into two regions as follows:

Region 1 contains the following divisions:

| California | All subdivisions |
|------------|-------------------------------------------------------------------------------------------------------------------|
| Chicago | Beardstown and Yates City subdivisions |
| Heartland | Afton, Amory, Birmingham, Cherokee, Cuba, Ft. Scott, Hannibal, River, Thayer North, and Thayer South subdivisions |
| Kansas | Arkansas City, Douglass, Emporia, Hereford, La Junta, Panhandle, Strong City, and Topeka subdivisions |
| Montana | Kootenai River subdivision from MP 44.0 to Sandpoint Jct only |
| Northwest | All subdivisions |
| Red River | All subdivisions |
| Southwest | All subdivisions |

Region 2 contains the following divisions:

| Chicago All other subdivisions not listed under Region 1 |
|----------------------------------------------------------|
|----------------------------------------------------------|

| Heartland | All other subdivisions not listed under Region 1 |
|--------------|--------------------------------------------------------------------------------------------------|
| Kansas | All other subdivisions not listed under Region 1 |
| Montana | All subdivisions excluding that part of Kootenai River subdivision from MP 44.0 to Sandpoint Jct |
| Powder River | All subdivisions |
| Twin Cities | All subdivisions |

Cold Weather Train Speeds:

The Engineering Department has identified two factors which require Cold Weather Train Speeds--Low Temperature Threshold and Temperature Change Warning, as follows:

Low Temperature Threshold:

In Region 1, this threshold is 0 degrees Fahrenheit. In Region 2, this threshold is -20 degrees Fahrenheit.

Unless further restricted by individual subdivision Special Instructions, be governed by the following:

When ambient (air) temperature drops below the Low Temperature Threshold trains must not exceed the following speeds:

In non-signaled territory: 40 MPH for all trains.

In block signal system limits:

| Trains 100 tons per operative brake and greater. | 40 MPH |
|-----------------------------------------------------------------------------------------|--------|
| Key trains | |
| Trains less than 100 tons per operative brake. | 50 MPH |
| Passenger trains, Z-symbol intermodal trains, or single level loaded intermodal trains. | 65 MPH |

If in doubt as to the temperature, contact the train dispatcher. Notify the train dispatcher when your train is restricted due to this requirement.

These restrictions remain in effect until the ambient (air) temperatures rise above the Low Temperature Threshold.

Temperature Change Warning:

In Region 1, this is any temperature of 50 degrees Fahrenheit or warmer that falls to 10 degrees Fahrenheit or colder within 24 hours.

In Region 2, this is any temperature of 40 degrees Fahrenheit or warmer that falls to 0 degrees Fahrenheit or colder within 24 hours

The train dispatcher will make notification to trains that temperature has exceeded the Temperature Change Warning. When so notified, trains must observe Cold Weather Train Speeds, by Region, as shown above. The Engineering Department will perform a track inspection, reporting results to the train dispatcher. If no further restrictions result from the track inspection, the train dispatcher will verbally notify the trains affected.

Be aware that Cold Weather Train Speeds may still be required due to Low Temperature Threshold. In other words, once track inspection is completed following a Temperature Change Warning, the ambient (air) temperature may still be below the Low Temperature Threshold, requiring that Cold Weather Train Speeds must still be observed.

However, if the ambient (air) temperature is above the Low Temperature Threshold and no further restrictions resulted from track inspections, observance of Cold Weather Train Speeds is not required.

Determining Ambient Temperature

When referring to a subdivision timetable for extreme air temperature operating instructions, be governed by the following:

- Ambient air temperature readings may be obtained by train crews utilizing any local means available such as field personnel, track side warning detectors, yardmasters, temperature displays from such sources as banks, etc.
- When unable to determine the ambient air temperature utilizing local methods, contact the train dispatcher who will determine ambient air temperature at the closest available location utilizing the AccuWeather website or other available means.

Earthquake Instructions

When an earthquake is reported, the train dispatcher will do the following: (See Decision Table, next column)

- If the magnitude or epicenter are unknown, instruct all trains within 150 miles of the reporting location to "proceed at Restricted Speed due to earthquake conditions." An acknowledgment must be obtained from each train or engine receiving these instructions.
- 2. Once magnitude and epicenter are known, the following inspection criteria will apply:
 - If magnitude is less than 5.0, no inspection is required.
 - If magnitude is 5.0 or greater, response will depend on the group of states and provinces within which the epicenter is located and the following criteria will apply within the designated radius from the epicenter.

| Magnitude Range | Criteria for Response | Group 1 Radius | Group 2 Radius | Group 3 Radius | Group 4 Radius |
|--------------------|---------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|-------------------|
| Less than 5.0 | No Inspection Required | N/A | N/A | N/A | N/A |
| 5.0 to 5.49 | Trains proceed at Restricted Speed until signals have been inspected. | 30 Miles | 40 Miles | 70 Miles | 70 Miles |
| 5.5 to 5.99 | Trains proceed at Restricted Speed until signals, track and bridges have been inspected. | 30 Miles | 40 Miles | 70 Miles | 70 Miles |
| 6.0 to 6.40 | Trains proceed at Restricted Speed until signals, track and bridges have been inspected. | N/A | N/A | N/A | 150 Miles |
| 6.0 to 6.49 | Trains stop until signals, track and bridges have been inspected. | 50 Miles | 80 Miles | 150 Miles | 80 Miles |
| 6.5 to 6.99 | Trains proceed at Restricted Speed until signals, track and bridges have been inspected. | N/A | N/A | N/A | 220 Miles |
| 0.5 to 0.99 | Trains stop until signals, track and bridges have been inspected. | 70 Miles | 140 Miles | 220 Miles | 140 Miles |
| 7.0 to 7.49 | Trains proceed at Restricted Speed until signals, track and bridges have been inspected. | N/A | N/A | N/A | 400 Miles |
| 7.0 to 7.49 | Trains stop until signals, track and bridges have been inspected. | 100 Miles | 300 Miles | 400 Miles | 300 Miles |
| 7.5 and above | Trains stop until instructed to proceed after inspection of track, signals and bridges completed. | As Directed* | As Directed* | As Directed* | As Directed* |

* Radius at discretion of command center but not less than for magnitude 7.0 to 7.49

Group 1: California and Baja California, Mexico

Group 2: Arizona, Coloradó, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming; Alberta, Canada; and Sonora and Chihuahua, Mexico

Group 3: Area east of Group 2

Group 4: Oregon, Washington and British Columbia, Canada

34. Duplicate Mile Posts

Duplicate mile posts on a subdivision are identified by an alpha suffix (e.g. MP 345X, MP 420Z). Timetable individual subdivision special instructions will list where duplicate mile posts are in effect.

35. Switching and Handling Business Cars

- Business Cars must be handled as outlined in accordance with GCOR 7.3, 7.6, and 7.9.
- b. Air Brakes—The Business Car air brake system must be

- connected to the locomotive and the automatic air brake used in controlling movements during switching.
- c. Coupling—When coupling into Business Cars, Business Car equipment, or when it is coupled to other equipment, the movement must be stopped approximately 50 feet from point at which the coupling will be made. Business Cars must not be cut off while in motion or no car moving under its own momentum should be allowed to couple to them. Note: Business cars being added to the rear of trains must be performed by a separate locomotive (switch engine) with coupling not to exceed 1 mph. Do not attempt to make a coupling with the rear of the outbound train onto the business cars being added.
- d. After Coupling—Once the coupling is made to the Business Car, the couplers must be fully compressed and stretched to know the couplers are locked before making air, electrical or communication connections.
- e. When cars are to be coupled to the observation end of BNSF Business Car 30 (Glacier View) and Business Car 32 (William B. Strong), the car next to the Business Car must be an empty flat, gondola or other type of car with a low profile.
- f. 480 Volt electrical jumper cables between Business Cars or any other car so equipped will be considered to be energized until applicable lockout/tagout procedures confirm connections are de-energized. All connections and disconnections are to be performed by authorized Mechanical Personnel Only.
- g. Cars are to be considered occupied at all times whether they are moving in the train or parked. Contact information for the mechanical rider or other on board staff can be referenced on the business car movement wire or the Passenger Operations Desk at 817-352-2606.
- When cars or trains are parked, protection must be established as outlined in GCOR 5.12. Local Transportation Department will coordinate with local Mechanical Department to provide required protection.
- White "Occupied Camp Car" signs will be available on Business Cars through Business Car personnel.
- j. All hand brakes must be fully released before moving Business Cars. If a hand brake is not accessible on an enclosed vestibule, the on board Mechanical Rider or Mechanical Supervisor must be contacted to allow access or verify that hand brakes have been released.
- Business Cars cannot be moved until vestibule steps are raised. Vestibule steps must not be lowered until Business Cars have come to a complete stop.

36. Instructions for Handling Continuous Rail

(Excluding articulated loads of 80 ft. length rail or less) Rail trains loaded with continuous welded rail must not be kicked, nor allowed to be struck by other kicked cars; and, must be handled through all turnouts with extreme care. Before a switching move is made, an air brake inspection and test as prescribed by ABTH Rule 100.11 must be performed.

Switching movements must be made using automatic air brakes to control slack in either a bunched or stretched condition. Extreme care must be used when stopping movements to avoid injury to employees or damage to equipment. Use of locomotive brake must be avoided, when possible, to stop the movement. When exceeding 12 rated axles of power during shoving movements, use only the minimum amount of tractive effort necessary to begin movement.

 Exception: BNSF 919900 - 919905 Short Articulated Consist (SHARC) cars are excepted from requirements for loaded continuous welded rail trains.

Except during necessary switching moves and train makeup, or

when moving as a work train under supervision of maintenance of way, suitable cars must be placed at each end of the "rail" cars to act as a buffer and idler. Rail cars equipped with barrier plates or cars labeled "Buffer/Idler" in addition to other cars taller than the height of the top rails on a loaded train meet this requirement. Tunnel cars equipped with barrier doors eliminate the need for buffer cars if doors are closed and secured. (Tunnel cars numbered BNSF 920119 through BNSF 920173 , BNSF 920230 through 920249, and BNSF 920280 through 920299 have these barrier doors). Trains handling rail trains should not be required to make setouts or pickups enroute. Two loaded rail trains must not be moved together in same train, unless authorized by the manager of the rail facility or his representative. When a two loaded rail train movement is authorized, the maintenance representative will designate which rail train will be placed at the head end. The other rail train must then be positioned in the train immediately at the rear of the first or head end of rail train separated by a suitable buffer car.

Full-length rail strings, when loaded, will have their lengths constructed so that the ends will fall between the green stripes painted on end ramp cars. When the rail train is stretched or bunched, and during transit, rail ends must be between the red stripes painted on end ramp cars, or else the train must be held until released by the general roadmaster or his representative. A white stripe will be applied across top of all rails between tie-down stands on center car of the rail train so it can be determined at inspection points whether rail has slipped or shifted.

Loaded Rail Trains

- 1. Trains without Rail Movement Detectors (RMD):
 - · Must be handled in special service.
 - Must not be required to make setouts and pickups enroute.
 - Exception: When authorized to operate two loaded rail trains together, splitting of the trains is permitted.
 - Must have suitable cars placed at each end of loaded rail train to act as buffer and idlers except during necessary switching moves and train makeup, or when moving as a work train under the supervision of maintenance of way.
- Trains with Rail Movement Detectors (RMD)
 May be handled in trains other than special service under the following conditions:
 - Rail train must be on head end.
 - · Train length limited to 64 cars.
 - Should not be required to make setouts and pickups enroute.
 - Suitable cars placed at each end of loaded rail train to act as buffer and idlers.
 - If cars other than loaded rail train are included in movement, and RMD (i.e. strobe lights) becomes inoperative enroute, a maintenance representative (a rider) must accompany each train during transit, unless rail train is then moved in special service. When the RMD is inoperative, each time the train stops, the rider must inspect the cars carrying the continuous welded rail for shifted, bowed, or broken rail, and to ensure that each base clamp (tie-down block) is tight. Defective strobe lights must be reported to the train dispatcher, who will notify the manager of rail facility so that the problems can be documented and repairs can be arranged as soon as possible.
 - Strobe lights at each end ramp car must be observed frequently enroute. When strobe lights are observed

to be flashing, the train must be stopped and all cars carrying continuous welded rail must be inspected to determine any rail movement. If movement is found, observe and complete the following:

- If adjacent track or standard clearances are not fouled, train may be moved to clear main track not exceeding speed of 10 MPH.
- If adjacent track or standard clearances are fouled, protection must be provided and train must not be moved until inspected by proper personnel.
- If no movement is found, cancel flashing strobe lights by depressing the reset button at the control box for three seconds. The train may proceed at authorized speed.

The RMD consists of electrically activated screens/gates, four amber-colored strobe lights, and associated controls. There are two 12-volt absolyte batteries, charged by an array of solar cells mounted between the tunnel stand strobe lights, to power the system. RMDs are installed on all rail train ramp cars, which are placed at each end of a rail train. If a rail string becomes loose and makes contact with the screen, strobe lights will commence flashing. The strobe lights are mounted on the ramp cars, positioned at the uppermost corners toward each end. Two are mounted on each side of the adjustable ramp stand, and the other two are mounted on each side of the tunnel stand.

The "ramp or tunnel" strobe lights operate in a parallel mode with a common activation (redundancy); thus each set will flash independently.

To check that strobe lights are operational, use a metal rod, bare wire or other metal object to make simultaneous contact between the screen and any rail in the load or other metal ground. After observing the lights flash, depress the reset button, which is located on the control box, for three seconds to turn off and conserve batteries. The lights should flash approximately 60 times per minute; and fully charged batteries will operate them for about sixteen hours.

The RMD system is inspected and tested at rail complexes before rail trains are released for movement. When second-hand welded rail is picked up and loaded in the field, the RMD system will be inspected and tested by the rail train supervisor before train is released for movement.

Routing of rail trains from the Rail Welding Facility, Pueblo, CO, to points west should be via Amarillo, TX, instead of the northern route through Raton, NM; unless train has stop(s) to deliver rail between La Junta, CO, and Belen, NM. When a rail train is to be routed via the northern route, loading parameters of welded rail strings will be held more restrictive to allow a greater degree of safety for movement through tight curves and mountains.

At designated intermediate inspection points, make mechanical inspection of cars in compliance with FRA requirements. Manager Rail Complex in Laurel, Pueblo, or Springfield must be advised if any mechanical repairs are needed.

Open End Gondola Consist (Any Ownership)

Maximum authorized speed for trains handling short lengths of continuous welded rail in open end gondola consist is 45 MPH.

Open end gondola consist loaded with continuous rail must not be kicked; nor allowed to be struck by other kicked cars.

Loaded open end gondola consist should be handled within 25 cars of the head end of trains. Loading of rail into open end gondola consist shall comply with the following instructions:

 Continuous lengths of welded rail will not be loaded more than one layer high.

- Width of layer will not exceed 67 percent of the inside width of the narrowest gondola.
- 3. Rail will be centered width wise in open end gondola consist. If practical, spikes, cleats or blocks will be driven into bearing timbers (raised fashion) to prevent walking of load near sides. Rail lengths will be spotted lengthwise from outboard ends of open end gondola consist to allow sufficient distance to exist for clearance (i.e. to exceed the amount of coupling slack). Amount will be determined by number of cars in consist.
- 4. Continuous lengths of rail will be supported upon timbers with a minimum size of 4" x 4" hardwood. These timbers will be spaced equally throughout load in sufficient number to prevent rail from contacting floor of cars or bottom flanges used for gondola end retention, and provide friction necessary to limit rail shifting.
- Couplers of cars will be gagged and locked to prevent accidental opening.
- Outboard ends of open end gondola consist will have ends installed or stacked timbers arranged into a barricade with a minimum height that exceeds the height of rail
- Continuous welded rail lengths will be loosely banded (to allow the required linear movement of the individual lengths of rail when consist is negotiating a curve) to keep all pieces grouped together.

Empty Rail Train Blocks (Any Ownership)

When handling empty 'rail train' blocks, all cars weighing 50 tons or less, by car count, must be placed behind all cars weighing more than 50 tons per car.

37. Key Train and Key Train Commodity Securement Requirements

Do not leave a Key Train or rail cars meeting the Key Train definition unattended on a main track or siding unless permitted by the train dispatcher.

The train dispatcher may grant permission to leave a Key Train or rail cars meeting the Key Train definition unattended after receiving permission by recorded phone or CAD IM from the NOC-General Director Transportation, Corridor Superintendent, Assistant Corridor Superintendent, or Chief Dispatcher who will evaluate operating circumstances.

When permission to leave the train or car(s) is received from the train dispatcher:

- Job brief between members of the crew to review all applicable securement requirements.
- Secure equipment as required by all securement requirements of the employing railroad.
- Include the following in a job safety briefing with the train dispatcher, who will verify information is provided:
- Tonnage and length of train (or total number of individual cars) left unattended,
- Grade of track at the location as indicated by timetable grade chart.
- Whether equipment secured is located on curve or straight track,
- Any inclement weather conditions (e.g., precipitation, high wind).
- Total number of hand brakes applied,
- Confirmation the train or car(s) is secure. Communication to include statement, "Conductor and engineer agree securement requirements have been met."

Note: These requirements do not apply when a portion of the train or car(s) is left properly secured and the on-duty crew is:

· Picking up, setting out, or repositioning cars at an industry,

50 System Special Instructions—No. 4—December 1, 2023 (Updated 2/1/24)

TOC Home

- Switching cars to/from tracks adjacent to main track or siding,
- · Adding, removing, or repositioning locomotives, or
- Moving part of a train when doubling a hill or cutting crossings.

38. De Minimis Territory

De minimis territory carries a minimal quantity of PIH/TIH materials and must meet certain criteria related to annual tonnage, grade, train spacing, and volume factors including:

- Fewer than 100 loaded cars containing PIH/TIH materials per year, and
- Two or fewer trains per calendar day carrying any quantity of PIH/TIH (loaded and residue/empty).

Prior to operating on de minimis territory train crew must notify the train dispatcher if carrying any quantity of PIH/TIH materials (loaded and residue/empty).

Maximum speed of trains carrying any quantity of PIH/TIH materials on de minimis territory is 40 MPH.

De Minimis Territories

| Division | Subdivision | Limits |
|--------------|-------------|-----------------------|
| Southwest | El Paso | MP 932.1 to MP 1152.5 |
| | Phoenix | MP 375.2 to MP 193.4 |
| Powder River | Casper | MP 133.2 to MP 514.5 |
| Montana | Great Falls | MP 3.5 to MP 99.9 |
| Twin Cities | Aberdeen | MP 704.6 to MP 777.0 |

39. Train Inspection Due to Track Indication

A BNSF or foreign line carrier crew instructed by the train dispatcher/control operator to inspect their train due to track indication(s) must promptly stop the train consistent with good train handling procedures and inspect both sides of the entire train. During inspection, particular focus must be given to wheels, axles, trucks or other parts of the train that may cause track damage.

When conditions permit, inspection is to be performed while the train is moving, not exceeding 5 MPH to afford the inspector opportunity to hear a defect such as a broken wheel. To complete inspecting the entire train, inspection may also be performed while backing up not exceeding 5 MPH when all requirements of GCOR 6.6 (Back Up Movements) can be met.

Any side or portion of the train that cannot be inspected while the train is moving must be inspected while the train is stopped. Discontinue inspection if it cannot be completed safely until an alternative is identified by job safety briefing or coordination through the train dispatcher/control operator and/or supervisor.

Notify the train dispatcher/control operator of any defects and when inspection is complete.

40. Rear End Restricted Cars

Cars restricted to "rear end only" may be in train up to five cars ahead of rear car. Certain cars may require extreme rear end movement because of mechanical deficiencies.

41. Car Identification B-End

Conventional Equipment: The "B" end of the car is the end where the hand brake is located. Face the "B" end of the car. The left side of the car is to your left and the right side of the car is to your right as you face the "B" end. Count axles from the "B" end beginning with No. 1 being closest to you and No.

4 being farthest away. If the defective journal or wheel is the third axle away from the "B" end of the car on the left side as you face the equipment you will report it as "L3."

Multi-platform Equipment: The important thing is to locate the "B" end of the car. Each segment or unit of such cars is identified by a letter. This letter and the car number are shown on small badge plates located on each segment or unit of the car. The end segments are designated "A" and "B." The interior segments or units are designed (beginning at the "B" end) by the letters "C" through "E" on the five unit or segment cars. Locate the "B" end of the car as indicated by the stencil. Do not rely on the location of the hand brake. Many of these cars are equipped with a hand brake on each end.

Face the "B" end of the equipment. The left side of the car is to your left and the right side of the car is to your right as you face the "B" end of the equipment.

Count axles from the "B" end beginning with No. 1 being closest to you. The axles on this type of equipment are numbered consecutively from No. 1 through No. 9 and then by the alphabet with axle "10" identified by the letter "Z," axle "11" by the letter "Y," axle "12" by the letter "X," etc., going backwards through the alphabet.

If the defective journal or wheel is the ninth axle away from the "B" end of the car on the right side as you face the equipment, you will report it as "R9." If it is the fourteenth axle away from the "B" end of the car on the right side as you face the equipment, you would report it as "RV." Remember, on this equipment, axles "1" through "9" are identified numerically. Axles "10" through "14" are identified alphabetically beginning with the letter "Z" working backwards. Each axle is stenciled on most multi-segment or unit equipment on the truck side. Use the stencil when available to verify your identification.

42. Currently Not Used

43. Signal Awareness/Position of Switch Form

General Requirements

Train crews must use and complete a division-approved Signal Awareness/Position of Switch Forms as directed by the Division General Manager.

Signal Awareness Forms Requirements

Signal Awareness forms must be completed when operating on the main track or any sidings outside of restricted or yard limits.

Ground Employee (conductor/foreman/brakeman/helper) are responsible for completing and submitting form as directed by the Division General Manager. Signal Awareness Forms are not required for Engineer-only operations. For yard, road switcher, or local operations, these forms must be completed when a ground employee is present in the controlling locomotive.

Subdivision-Specific Forms

Electronic Forms:

Electronic Signal Awareness/Position of Switch Forms may be accessible through the Job Aid app on iPads.

Paper Forms:

Paper Signal Awareness/Position of Switch Forms may be accessible trough the Job Aid app on iPads as well or available at on-duty points.

Subdivision-specific Signal Awareness/Position of Switch Forms, available at on-duty points, must contain at least the minimum requirements outlined in the standard form. These forms may include additional subdivision-specific information as approved by the Division General Manager. If subdivision-specific forms are unavailable, crew members may request a standard form be included with the GTB.

When required, in addition to observing and calling signals per GCOR 1.47, the ground employee must complete the form in ink while operating on BNSF or foreign railroads. Foreign railroads operating on BNSF may use their own approved Signal Awareness/Position of Switch Forms.

Recording Requirements:

Electronic Forms, the following must be recorded:

- General Information (Date, Train Symbol, Ground Employee/ Engineer Name, Other Individuals Name, if applicable, Home Terminal and Subdivision).
- · Pre-Departure Checklist
- · Signal Awareness Form Section
 - Signal Location
 - Indication to include Clear Signal
 - Speed
 - Time Passed
- Milepost Awareness Form Section (TWC Territory), if applicable
 - MP
 - Flag Location
 - Clear of

Paper Forms, the following must be recorded:

- · CLEAR signals Name or aspect.
- All other signals Name or aspect of the signal, the train speed and time signal passed.
- Flags Name and location of each flag, the train speed and time flag passed.

Regardless of format, all block signals names or aspects, yellow or yellow-red flags, and trackside warning detector exceptions must be recorded.

If the ground employee cannot see the speed indicator, the engineer must call out the speed, in addition to the signal name or aspect, if other than a CLEAR. If the ground employee is unable to record a signal aspect due to other duties, this must be noted on the form with the reason.

When operating on an Approach or Diverging Approach signal, the engineer must notify the ground employee when the train has reduced to the required speed. The ground employee must note the time the speed was reduced on the Signal Awareness Form and repeat the time to the engineer. A job safety briefing must confirm understanding that the train may be required to stop at the next signal.

Position of Switch Forms Requirements Electronic Forms, a crew member must record on the Signal Awareness/Position of Switch Form:

- · Position of Switch Form
 - Date
 - Ground Employee/Engineer Name
 - Train Symbol
 - Subdivision
 - Flag Location & Name
 - MPH
 - Switch/Derail/Switch Lock Name & Location
 - Time/Initials Operated
 - Time/Initials Restored
 - Conductor/Engineer Initials

Completed forms must be emailed to the designated email address listed within the electronic form.

Paper Forms:

Non-Signaled and Double Track ABS Territory (Outside of Restricted Limits or Yard Limits) a crew member must record:

· Name and location of hand-operated main track switches,

- switch point locks, and derails operated.
- Name and location of hand-operated main track switches left in the reverse position.
- Time and initials of the employee operating the switch, switch point lock, or derail.
- Time and initials when these are restored to their proper position.
- Entry of the appropriate box number when a switch is left in the reverse position.

This information must be recorded within the electronic or paper Signal Awareness/Position of Switch Form as soon as practical after changing the switch, switch point lock, or derail position. The time of restoration and securing must be recorded and initialed by both the ground employee and engineer before departing the location. If it is not practical for both to initial the form, after a job safety briefing, the person completing the form may enter the others initials. Initialing each entry serves as a cross-check that the switch, switch point lock, or derail position has been confirmed between crew members

Position of Switch Form (electronic/paper) Communication Requirements When operating in non-signaled territory or Double Track ABS territory (except in Restricted Limits and Yard Limits) and completion of Position of Switch Form is required:

- After lining a hand-operated main track switch, the crew member must communicate with the engineer by radio using the following format, while physically at the switch location:
 - "(Crew member title and name) has lined (switch at MP location or name of switch and station name) to the (normal/reverse) position."
- Before movement may occur, the engineer must respond:
 - "Engineer (name) understands (employee title and name)
 has lined (switch at MP location or name of switch and
 station name) to the (normal/reverse) position." If radios
 become inoperable, all members of crew must job safety
 brief regarding use of hand operated main track switches,
 switch point locks, and derails before use, with notation of
 inoperable radio made on the Signal Awareness/Position
 of Switch Form.

Form Submission

Electronic Forms: Conductors must complete the Signal Awareness/Position of Switch Form accurately and submit it via email as outlined in the form or asindicated by local instructions. All track warrants must be included at the end of each tour of duty.

Paper Forms: Ground Employee (conductor/foreman/brakeman/helper) must sign the Signal Awareness Form and will either submit or retain the form in accordance with division/local instructions. The Position of Switch Form must be signed by the ground employee and submitted along with all track warrants at the end of each tour of duty in accordance with division/local instructions.

Resources: Please refer to the Job Aid app and the System Rules webpage for detailed information on Signal Awareness and Position of Switch Forms. This includes the iPad User Guide and any subdivision ortripspecific forms available in the appropriate division folder.

44. Report of Unsafe Motorist/Trespasser

The Report of Unsafe Motorist/Trespasser Program is designed to capture information on near collisions between trains and vehicles, trespassers, or pedestrians. Reports of suspicious packages, livestock, and right of way fires should also be made when observed. When an incident or observation occurs, employees should make a report by one of the following methods as soon possible:

52 System Special Instructions—No. 4—December 1, 2023 (Updated 3/10/25)

TOC Home

 Notify the train dispatcher and provide as much information as possible. The dispatcher will notify the Resource Operations Call Center,

Or

Call the ROCC at 1-800-832-5452.

Emergencies must be reported as follows:

- · Radio/telephone contact with train dispatcher.
- Radio/telephone/verbal contact with local BNSF Police personnel or to the ROCC at 1-800-832-5452.

45. Network Operations Center Notification Requirements Procedures for Contacting Help Desks

- Train Dispatcher Train crews should continue to contact
 the train dispatcher as required by current instructions
 for all delays. When reporting mechanical defects on
 locomotives, cars, or other equipment such as an HTD/ETD,
 the dispatcher must be contacted initially in order to manage
 delays relative to these defects.
- Chief Dispatcher For Mechanical Related Service Interruptions (SIs), must make sure that the correct lead locomotive ID, ETD, cars, etc., are correctly reported when generating a service interruption in SIDOL.
- Mechanical Help Desk After initially recording and providing general information about defective locomotives, cars, or an HTD/ETD to the train dispatcher, the Mechanical Help Desk must be communicated with concerning the defect. Train crew will report specific details concerning the defect and be governed by that supervisor's instructions concerning handling of the defect.

Note: At terminals, locomotive and/or HTD/ETD defects (on either ROAD or YARD locomotives) must immediately be reported to local supervision the Mechanical Help Desk. A bad order tag must then be attached to the ETD to prevent subsequent use before repairs can be made and be governed by local supervision on where to place bad ordered ETD.

- Bad Order ETD Handling Between Terminals- Train crews
 who have a bad order ETD removed from their train must
 open an ETD defect with the Mechanical Desk, attach a
 bad order tag to the ETD, and either turn over the bad order
 ETD to the mechanical responder on site or if no mechanical
 responder is assisting train, transport the bad order ETD in
 the front portion of the cab of the lead locomotive.
- When transporting, ensure the ETD is placed to where a tripping hazard will not exist while entering and exiting the locomotive cab. Upon reaching the terminal, the train crew must contact and be governed by local supervision on where to place the bad ordered ETD.

Train crews being relieved enroute must notify relief crew of bad ordered ETD placed in the cab for their handling upon reaching terminal. Before repositioning of the lead locomotive in a consist, train crews must contact the Mechanical Help Desk to check lead qualification status of other locomotives in the consist to determine which may be used as a lead locomotive.

Before repositioning of the lead locomotive in a consist, train crews must contact the Mechanical Help Desk to check lead qualification status of other locomotives in the consist to determine which may be used as a lead locomotive.

The Mechanical Help Desk may be contacted by phone at:

Operations North 817-867-7169 Operations South 817-867-7170 Operations Central 817-867-7172

Service Support-In addition to reporting via radio to Service Support at Fort Worth, the following phone numbers and fax

numbers may be used:

Train reporting:

BNSF company line-8-593-7610

Toll-free line-800-549-4601

BNSF fax line-8-593-7615

Fax toll-free line-800-234-1341

Interchange reporting:

BNSF company line-8-593-7640

Toll-free line-800-206-3846

BNSF fax line-8-593-7645

Fax toll-free line-800-223-6757

46. Special Car Handling Instructions (SCHI)

One or any combination of two of the following codes may be shown on train lists to designate special car handling requirements. These same codes may also appear in the Special Instruction Column of switch lists and yard inventories.

| CODE | |
|-------|--------------------------------------------------------|
| | Armed Guard Service |
| | Annual Volume |
| | Bad Order Home Shops |
| | If Bad Order Notify Shipper |
| | Bare Table Flat |
| | Bad Order |
| | Cleaned (swept), Holes in floor 1 in. to 6 in. |
| | Moving to a Customer Demand |
| | CARB (See Note 3) |
| | To Be Cleaned and Conditioned |
| | Condemned Car (See Note 1) |
| | Customs Inspection |
| | Coload Manifest Car |
| | Empty Coal Car Moving as Revenue |
| | Customer Storage |
| CU | Customer Stage |
| | Certification That This Equipment is for Recycling |
| | Distributed Van Bad Ordered |
| | Do Not Hump |
| | Redistribute at Destination |
| | Do not couple to double shelf coupler cars |
| | Shipper's Authority Required for Diversion |
| | Delivery Order Shipment |
| | Drop Yard |
| DS | Do not spot for loading other than hazardous last |
| DT | contained. |
| | Distributed Intermodal Equipment |
| | Do Not Uncouple |
| | Unit has been diverted |
| | Speed Restriction 55 MPH |
| | Embargo Hold |
| | Empty Container Mechanical Lock |
| | Hold for Equipment Management |
| | Return Empty Via Reverse Route |
| | Expedited Service |
| | Hold Early Warning |
| FA | Automobiles Headlights Facing A-End (Opp. of |
| ED | Brake End) of Autoveyor |
| го | Automobiles Headlights Facing B (Brake End) of |
| EM | Autoveyor |
| | Fumigate Car Now Fumigation Placards Applied |
| | Cars Held for the Customer in Bond Pending |
| ı ı.A | Customs Authority |
| HR | Hold for Billing—Mini Waybill Indicating Industry to |
| טו ו | Hold for Billing—Wilfil Waybill Indicating Industry to |
| HC | Hold for FMC Redistribution |
| | Tiola for Fivio Nealstribution |

HDCars Held for Customer Diversion

| | No Car Order Exists | Control |
|-------|-----------------------------------------------------|---------------------------------------------------|
| HL | Excessive Dimension | RPRail Controlled Private |
| HM | Moving in ISO Tank Container | RSRule 7 Reject Candidate |
| | Cars Held for Specified Local Conditions, | SCEquipment Scrapped |
| | **Restricted Usage | SDCar Sold |
| НΟ | Cars Held for Consignee to Surrender Original | |
| пО | | SEHold for Seasonal Storage |
| | BOL or Indemnity Bond | SFFeed Now |
| HR | Cars Held for Customer Furtherance Instructions | SHOPSL Hold |
| | After Arrival at Destination | SOShipper's Order |
| HS | Empty (Non-Private) Cars Held on BNSF | SRRail Surveillance Required |
| | Trackage Awaiting Placement | SSSurplus Storage |
| HT | Heat Car | STMove on special train only, requires single car |
| | High Value Shipment | |
| | | train movement. |
| пл | Cars Held Waiting for Waybill Information from | SWSwitch Only Empty Furnished by Foreign Road |
| | Connecting Carrier | SXSpeed Restriction Exception to Sys Special Ins |
| | In BNSF Bond | OK to Run at Train Speed |
| IC | Inspection Requested at Port of Entry into Canada | TBCar Control Distributed Bad Order |
| | by Canadian Customs | TCTank Car, Meets CPC-1232 standards |
| ID | In Bond Beyond BNSF Destination | TNTank Car, Non - CPC-1232 standards |
| | Interchange Error | · |
| | Inhalation Hazard | TGTransp. Code G—contaminated commodity |
| | | service. Cars should not be placed at industry |
| IIVI | Inspection was Requested by Mexican Customs | other than so designated |
| | at Port of Entry into Mexico | TSTransit Shipment |
| IN | Hold for Inspection | TUTurn This Car Now |
| IS | In Shipper's Bond | ULUnload from left side of car. Left side of car |
| IU | Inspection was Requested by US Customs at Port | determined by feeing the "D" (bulks) and of an |
| | of Entry into USA | UPUnloaded as Placarded |
| 1.0 | Car Trip Leased to Consignee | |
| | | URUnload from right side (from brake end) |
| | Local Distribution Empty | VAVehicle Headlights Facing A-End (Opp. of Brak |
| | Loaded to Gallonage Capacity | End) |
| LO | Local Orders | VBVehicles Headlights Facing B-End (Brake End) |
| LQ | Loaded to Full Cubic Capacity | WAWeigh After Spotted and Released |
| | Handle in Local Service Only | WBWeigh This Car Both Before and After It Goes |
| | Unload in Laredo proper | Spot Spot |
| | Loaded to Full Visible Capacity | • |
| | | WHWeigh |
| | Cleared for export via Laredo | WIWaive Inspection |
| | Customer Location 1 | WLWeigh Light |
| | Location 2 - East Plant | XMCleared to Cross from US to Mexico |
| M8 | Inspect 8 axle or greater span bolster car for ride | 2525 MPH Speed Restriction (See Note 2) |
| | quality components | |
| MB | Make Bill of Lading | Clean and Condition Codes for Empty Cars |
| | Measure Car Now | CODE DESCRIPTION |
| | Mixed Destination Intermodal Units | F1Washed, Food Grade |
| | | F2Cleaned (Swept), Food Grade |
| VII | Requires mechanical inspection, do not move on | F3Dirty, Food Grade |
| | train. | F4Cond/Repairs, Food Grade |
| MN 5 | A running reefer unit set at -5 degrees Fahrenheit | |
| MR 28 | A running reefer unit set at 28 degrees Fahrenheit | F5"Not Observed", Food Grade |
| | Non-credit Patron | F6Rinse, Food Grade |
| | Do Not Divert | F7Inspected, Food Grade |
| | No Hit—Car Distribution | P1Washed, Processor Grade |
| | | P2Cleaned (Swept), Processor Grade |
| | IMDL van or container requires Nava Lock device | P3Dirty, Processor Grade |
| NIM | Non Misc. Credit Patron—Car held account | P4Cond/Repairs, Processor Grade |
| | charges due | P5"Not Observed", Processor Grade |
| NP | No Placards Required | P6Rinse. Processor Grade |
| NT | Do Not Transfer Contents | , |
| | Oils Marine Pollutant | P7Inspected, Processor Grade |
| | Oil Notation | S1Washed, Standard Grade |
| | | S2Cleaned (Swept), Standard Grade |
| | Privately Owned Equipment Subject to Demurrage | S3Dirty, Standard Grade |
| rh | Hold for Pool DestinationMechanical Project Job | S4Cond/Repairs, Standard Grade |
| | | cc topano, ctandara orado |

54 System Special Instructions—No. 4—December 1, 2023 (Updated 3/1/25)

TOC Home

| S5 | "Not Observed", Standard Grade |
|----|--------------------------------|
| S6 | Rinse, Standard Grade |
| S7 | Inspected, Standard Grade |
| S0 | Washed and Sanitized |

Other Codes

There are a number of SCHI codes that begin with a number followed by alpha character which are used to identify alternate storage locations. Example:

1A Hold Storage Arkcity

Codes B1 through B9 mechanical codes reference the type of repairs needed for bad order cars.

Other codes for hazardous materials can be found in the US Hazardous Material Instructions for Rail.

Note 1. The 'CD' Condemned Car code will be inserted by the computer when the car is so registered in UMLER (Universal Machine Language Equipment Register). This does not relieve employees of the responsibility of reporting these codes when appropriate.

Note 2. Report numeric MPH speed restriction only, e.g., 25 for a car restricted to 25 MPH. Certain series of cars which have a permanent speed restriction will have the speed restriction code inserted by the computer. When such speed or speeds are shown, trains must not exceed the lowest speed so indicated. This does not relieve employees of the responsibility of reporting the proper code on work order(s) on all cars which for any reason have speed restrictions.

When cars are subject to two special handling instructions, both codes should be reported. If subject to move with more than two, report the two most restrictive and protect other special handling requirements by an administrative message to those offices and/or individuals to whom the train is addressed.

Note 3. The California Air Resource Board (CARB) has instituted tighter emissions standards for transportation refrigeration units. Some BNSF refrigerated boxcars are not compliant with the new standard and therefore cannot originate, terminate or transit through California state. Non-CARB-compliant cars can be identified by a CB code in the SCHI field and are color coded reverse video blue in TSS.

Equipment management controls have been implemented to assign only CARB cars to the state of California. Waybill edits will verify compliance at release and place a STOP on non-CARB cars if waybilled to a California destination.

No substitution between Non-CARB and CARB cars is allowed unless work orders specifically authorize the exception. Yard Block HOLDCB prevents any Non-CARB cars destined to California, or originating in California from scheduling to a train. Cars will go HOLDMT at origin.

Non-CARB cars will not schedule to trains terminating in or passing through California. Attempts to TRNSET a Non-CARB car to a California-routed train will result in a pop-up window advising that the car must be removed from the line-up and explaining why.

For questions or assistance with handling exceptions for BNSF refrigerated boxcars, email your concerns to the CARB Resolution Team at "MKT DL CP CARB".

When a car on a train list has the "HL" Car Code, and no clearance wire is received, contact your local CS&S office and obtain a clearance wire for the car. If unable to obtain a clearance wire, the car must be set out.

Car kind codes M2E, M2F and M3F (articulated Hi Bi/Tri-

Levels) must not be operated on any Branch Line or on any of the following locations:

- Barstow Subdivision—Barstow to Bettendorf via Crescent Bridge
- · Beatrice Subdivision
- Carlsbad Subdivision—Mines Jct. to Carlsbad
- Chicago Subdivision—BRC overpass between MP 6.70 and MP 6.73 (Handle on Mains 4 and 5 only)
- · Gateway Subdivision
- · Hannibal Subdivision—Burlington to West Quincy
- Helena Subdivision
- · Kettle Falls Subdivision—Danville, WA, to San Poil
- Laurel Subdivision
- Lester Subdivision
- · Longview Subdivision
- · Oregon Trunk Subdivision—Fallbridge to Bend
- Scenic Subdivision—(Exception: Car kinds M2E, M2F and M3F may operate on this subdivision and use only MT 2 between MP 0.15 and MP 1.11.)
- Silsbee Subdivision—Beaumont to Brooks
- · Sioux City Subdivision
- · Stampede Subdivision
- · Mitchell Subdivision
- · Wymore Subdivision—Table Rock to Wymore

Car kinds M2E, M2F and M3F may operate over all other Main Line Subdivisions without clearance wire to protect movement even if car has "HL" code on the train list. (See Item 7 f).

47. Train Makeup Instructions

If a train is determined to be out of compliance with these train makeup rules as listed in items 47 & 47(A), and the maximum authorized speed exceeds 45 MPH, the speed must immediately be reduced to 45 MPH and the train dispatcher notified. The train must not exceed a maximum speed of 45 MPH until it reaches the location specified by the train dispatcher to correct the condition.

System Tonnage Restrictions:

- The following cars must not be ahead of more than 3,000 trailing tons (long car/short car):
 - Any car 80 ft or longer coupled to any car 45 ft or shorter.

Note: Item 1 does not apply to test cars BNSF 82/83 and multi-platform cars except those with individual platforms exceeding 80 feet. (Examples: Twin flat cars and Automax cars.)

- The following cars must not be ahead of more than 5,500 trailing tons:
 - Multi-platform spine cars, regardless of how loaded.
 - See Subdivision Specific Tonnage Restrictions below for additional multi-platform spine car tonnage instructions.
- Trains greater than 5,500 total tons (excluding empty bulk commodity trains):

Restricted cars must not be within the first 10 cars/platforms

The following are restricted cars that pertain to SSI 47 System Tonnage Restrictions Item 3 and Mountain Grade Tonnage Restrictions Items 1 & 2 below:

- Any conventional car (non-multiplatform) weighing less than 45 tons
- Exception: Does not apply to loaded single well double stack cars of any weight (car kind beginning with QU or QK) and Wind Tower Trains with distributed power.
- Any 80 ft. or longer flat car with a single trailer/ container, regardless of car weight.
 Note: This includes twin flat cars (solid-drawbar

connected flat cars TTEX & RTTX series) with a single trailer/container on either segment/platform.

- Multi-platform cars with any empty platforms. Note: All multi-level, multi-platform autorack cars referred to as "AutoMax" cars, are considered to have loaded platforms in the application of this rule, regardless of whether car is loaded with vehicles or not.
- 4. Trains greater than 7,000 tons:

The rear 1/4 of the train by car count must not weigh more than 1/3 of the total weight.

Exception: This does not apply to:

- trains made up entirely of cars weighing a minimum of 45 tons each.
- · solid loaded or solid empty unit bulk commodity trains.
- · trains made up entirely of intermodal equipment.

Mountain Grade Tonnage Restrictions

The following restrictions are in addition to System Tonnage Restrictions (excludes solid empty bulk commodity trains):

- On Glorieta (MP 775.0 MP 842.0) and Raton (MP 639.0 - MP 660.0) Subdivisions the following additional restrictions apply:
 - Multi-platform spine cars, regardless of how loaded, must not be ahead of 2,500 trailing tons.
 - Trains greater than 2,500 tons and less than 3,000 tons, restricted cars must not be within the first 10 cars/ platforms.
 - Trains 3,000 tons or greater, restricted cars must not be within the first 15 cars/platforms.
- On Cajon (Main 3, MP 56.6 MP 62.8), North County Transit Coaster (MP 250 - 255), Gateway (MP 178.0 -188.0), UPRR Mojave (MP 331.3 - MP 381.3), UPRR Moffat Tunnel (MP 17 - 63), UPRR Provo (MP 626 - 685), Scenic (MP 1694.5 - MP 1731.3), Stampede (MP 41.0 - MP 58.5), MRL Third (MP 7 - MP 21) and MRL Tenth (MP 0.0 - MP 20.0) Subdivisions, the following additional restrictions apply:
 - Trains greater than 3,500 tons and less than 4,000 tons, restricted cars must not be within the first 10 cars/ platforms.
 - Trains 4,000 tons or greater, restricted cars, automax cars weighing less than 120 tons, and autoracks weighing less than 60 tons (does not apply to DP trains consisting entirely of automax/autorack cars), must not be within the first 15 cars/platforms.
- On Cajon (Eastward Main 3, MP 56.6 62.8), North County Transit Coaster (MP 250 - 255), UPRR Mojave (Eastward MP 331.3 - 381.3), UPRR Moffat Tunnel (MP 17 - 63), UPRR Provo (MP 626 - 685), Gateway (Northward MP 178 - 188), Stampede (MP 41 - 58.5), and Scenic (Eastward MP 1694.5 - 1731.3), MRL 3rd (Westward MP 7 - 21), MRL 10th (MP 0 - 20) Subdivisions, the following additional restrictions apply:
 - Multi-platform spine cars, regardless of how loaded, must not be ahead of 4,000 trailing tons.
 - Exception: Does not apply to solid bare table trains operating with mid DP consist.
- On Glorieta (MP 775.0 MP 842.0), Raton (MP 639.0 MP 660.0), Cajon (Main 3, MP 56.6 MP 62.8), North County Transit Coaster (MP 250 MP 255), Gateway (MP 178.0 MP 188.0), UPRR Mojave (MP 331.3 MP 381.3), UPRR Moffat Tunnel (MP 17 MP 63), UPRR Provo (MP 626 MP 685), Scenic (MP 1694.5 MP 1731.3), and Stampede (MP 41.0 MP 58.5), MRL Third (MP 7 MP 21), MRL Tenth (MP 0 MP 20) Subdivisions, the following additional restrictions apply:
 - Cars weighing 35 tons or less, that are 80 ft. or longer or that are coupled to cars 80 ft or longer must not be ahead of 4,000 trailing tons.

Note: Unless otherwise authorized, all trains destined Cajon or Mojave Subdivisions will be made up in compliance with above guidelines for Cajon Subdivision (Main 3, MP 56.6 - MP 62.8) and Mojave Subdivision MP 331.3 - MP 381.3).

Multi-Platform Spine Car Tonnage Restrictions

Multi-platform spine cars, regardless of how loaded, must not be ahead of more than 5,500 trailing tons: Trains operating with DP may exceed 5,500 trailing tons behind multi-platform spine cars if the following conditions are met:

- No more than 30 cars equipped with End of Car Cushioning (Autoracks and Super Reefers identified in subdivision specific timetable).
- 2. Trains operating with rear only DP:
 - Multi-platform spine cars must not be ahead of more than 11,000 total trailing tons.
- 3. For trains operating with cut-in DP:
 - Tonnage ahead of and behind the cut-in DP consist must be within 2,000-tons of each other.
 - Trains operating with DP consist cut-in and no rear DP:
 - Multi-platform spine cars ahead of the cut-in DP must not be ahead of more than 11,000 total trailing tons. In addition, multi-platform spine cars behind the cut-in DP must not be ahead of more than 5,500 total trailing tons.
 - · Trains operating with both cut-in and rear DP:
 - Multi-platform spine cars must not be ahead of more than 11,000 total trailing tons.

Exception

Does not apply to the following locations:

- Cajon Sub (MP 56.6 MP 62.8 Eastward only)
- Gateway Sub (MP 178.0 MP 188.0 Northward only)
- Glorieta Sub (MP 775.0 MP 842.0)
- Raton Sub (MP 639.0 MP 660.0)
- North County Transit Coaster (NCTC)(MP 250.0–MP 255.0)
- Scenic Sub (MP 1694.5 MP 1731.3)
- Stampede Sub (MP 41.0 MP 58.5)
- UPRR Moffat Tunnel (MP 17 MP 63)
- UPRR Mojave Sub (MP 331.3 MP 381.3 Southward only)
- UPRR Provo Sub (MP 626.0 MP 685.0)
- Phoenix Sub (MP 135.0 MP 379.2 Eastward only)
- Hi Line Sub (MP 1151.0 MP 1165.2 Eastward only)
- MRL Third Sub (MP 7 MP 21 Westward only)
- MRL Tenth Sub (MP 0 MP 20)

See Mountain Grade and Subdivision Specific Tonnage Restrictions for additional multi-platform spine car tonnage instructions.

Subdivision Specific Multi-Platform Spine Car Tonnage Restrictions

Intermodal trains operating with multi-platform spine cars, regardless of how loaded, are subject to System Tonnage Restrictions as well as the additional restrictions below: DP trains operating:

- Eastward on the Hi Line Subdivision (MP 1151.0 MP 1165.2),
- Eastward on the Phoenix Subdivision (Matthie, MP 135.0 Williams, MP 379.2)

may exceed 5,500 trailing tons behind multi-platform spine cars if the following conditions are met:

- 1. Trains operating with rear only DP:
 - Multi-platform spine cars must not be ahead of more than 7,000 total trailing tons.
- 2. For trains operating with cut-in DP:
 - Tonnage ahead of and behind the cut-in DP consist must be within 2,000-tons of each other.
 - Trains operating with DP consist cut-in and no rear DP:
 - Multi-platform spine cars ahead of the cut-in DP must

not be ahead of more than 7,000 total trailing tons. In addition, multi-platform spine cars behind the cut-in DP must not be ahead of more than 5,500 total trailing tons.

- · Trains operating with both cut-in and rear DP:
 - Multi-platform spine cars ahead of the cut-in DP must not be ahead of more than 9,000 total trailing tons. In addition, multi-platform spine cars behind the cut-in DP must not be ahead of more than 7,000 total trailing tons.

Detoured Foreign Trains

If a foreign line train operating on the BNSF for purposes of detour is in compliance with BNSF train makeup instructions, the train may be operated at maximum speed that would be permitted if train was a BNSF train. If train does not comply with BNSF train makeup instructions, train is authorized to operate on BNSF at a maximum speed of 45 MPH.

Train Length, Tonnage and TOB

When complying with Special Instructions covering speed and other train restrictions where calculations of train length, tonnage and/or tons per operating brake are involved, the locomotive consist should be excluded unless specifically stated otherwise.

Exception:

- The weight of isolated/inoperative locomotives is added to train trailing tonnage when determining THPT in the application of ABTH Rule 106.1 Regulating Tractive Horsepower per Ton, and
- The weight of locomotives with isolated/inoperative dynamic brakes is also added to train trailing tonnage when determining the minimum number of dynamic brake axles where required on mountain grade subdivisions.

End of Car-Cushioning (EOC) Restrictions

- Conventional manifest trains must operate with DP on the roar if:
 - Train contains 15 or more cars with end of car cushioning in the first half of the train by car count, or 30 or more cars with end of car cushioning in the train.
 - and
 - The rear half of the train by car count weighs more than 5,000 tons.
- Manifest trains operating with cut-in DP must operate with DP on the rear if:
 - Train contains 15 or more cars with end of car cushioning in the first half by car count behind cut-in DP or 30 or more cars with end of car cushioning behind the cut-in DP

and

 The rear half by car count behind cut-in DP weighs more than 5,000 tons.

Exception: A solid block of automax/autorack cars at the very end of the train does not count toward the 30-EOC limit provided all automax/autorack cars are at the very end of the train.

Note: Does not apply to trains received in interchange.

Military Train

Unit military trains containing shipments on cars with end of car-cushioning, shown on the train profile as EOC, shall have no more than a total of 80 cars in the train when operating with conventional power (head end only). Train may operate in excess of 80 cars but no more than 90 when operating with a distributed power consist, either cut-in and/or on rear of train. If train (DP or non-DP) exceeds 60 cars, speed is restricted to 45 mph

Loaded Coiled Steel Cars

The maximum number of loaded coiled steel cars and GRS/

G0S on any train is limited per the table below:

| Total Coil Cars in Train | Maximum # of GRS/G0S Coil Cars |
|--------------------------|-----------------------------------|
| 80 | 0 |
| 70 | 10 |
| 65 | 20 |
| 60 | 30 |
| 55 | 40 |
| 50 | 50 |

Additional Train Makeup Restrictions Applicable to Trains Containing Coiled Steel Cars Operating on:

- Birmingham, Cuba, Ft Scott (except between Edward MP 102.6 and 19th Street Yard - MP 0.0)
- Ft. Worth (except between Gainesville MP 411.3 and Fort Worth - MP 346)
- Galveston (except between Bellville MP 106.2 and Galveston - MP 0.0)
- Lampasas
- Phoenix
- Seligman
- · Thayer North
- Thayer South (except between River Jct. MP 462.6 and Tennessee Yard - MP - 496.1) and,
- Wichita Falls (except between Deen Rd. MP 4.8 and Fort Worth Connection - MP 9.9) and.
- · UP Lufkin.

1. Conventional Unit Coiled Steel Trains

Conventional (non-DP) unit trains made up entirely of loaded G0S and GRS cars are limited to 30 cars total and will be operated in a 2x0 configuration.

2. Conventional Manifest Trains Containing Coiled Steel Cars (mixed freight without distributed power)

| Total Train Tonnage | Maximum Loaded Steel Cars with End of Car Cushioning Allowed |
|-------------------------|--------------------------------------------------------------|
| 4,500 tons or less | 30 |
| 4,501 - 5,500 tons | 25 |
| 5,501 - 6,500 tons | 20 |
| 6,501 - 7,500 tons | 15 |
| 7,501 - 8,500 tons | 10 |
| Greater than 8,500 tons | 0 |

When moving on conventional trains, all loaded shipments identified by car kind code G0S or GRS (includes ATSF, BN, BNSF, foreign and private equipment) must be placed within the first 20 cars of the train and be as close to the locomotives as practical. When handling more than 20 G0S or GRS loaded shipments, these cars must be placed directly behind locomotive consist.

3. Unit Coiled Steel Train Operating with DP

Unit trains made up entirely of loaded G0S and GRS cars are limited to 50 cars total and will be operated in a 1X2 DP configuration with dynamic brakes cut out on the trail unit of the remote DP consist. The dynamic brakes must remain cut in on the controlling DP remote unit.

4. Manifest Trains Containing Loaded G0S/GRS Coiled Steel Cars Operating with DP on Rear

Trains containing more than 10 loaded G0S/GRS coiled steel cars:

- May not have more than 30 cars equipped with end of car cushioning (including G0S/GRS cars)
- Must have the G0S/GRS cars immediately behind the lead locomotive consist. Exception: G0S/GRS cars may be intermixed with other loaded coiled steel cars in a block directly behind the lead locomotive consist.

5. Manifest Trains Containing Loaded G0S/GRS Coiled Steel Cars Operating with Cut In DP

Trains containing more than 10 loaded G0S/GRS coiled steel cars:

- May not have more than 30 cars equipped with end of car cushioning (including G0S/GRS cars) ahead of the cut in DP
- Must have the G0S/GRS cars immediately behind the lead locomotive consist. Exception: G0S/GRS cars may be intermixed with other loaded coiled steel cars in a block directly behind the lead locomotive consist
- May not have more than 15 additional cars equipped with end of car cushioning behind the cut in DP.

Wind Tower Trains

Wind Tower Trains containing loads and empty idler cars shall have no more than a total of 80 cars in the train. Trains exceeding 5,500 tons must operate with a single distributed power unit either cut in or on rear of train.

47(A). Train Makeup Instructions and Locomotive Requirements Applicable to Conventional, Distributed Power and Manned Helpers

Note: In the application of instructions below, the terms "DP and "DP remote consist(s)" refers to trains utilizing distributed power and/or manned helper consists. The term "rear end" refers to the very end of the train and "cut in" refers to placement within the train with cars on both sides. RPA refers to Rated Powered Axles and can be referenced in SSI, Locomotive Data Table, 2(B).

Maximum Rated Power Axle (RPA) Limitations for Conventional, Distributed Power and Manned Helper Placement

| Train Type | Head End | Cut In DP/ Helper | Rear end DP/ Helper |
|---------------------------------------------------|----------|----------------------|------------------------|
| Manifest | 42 | 24 | 16 |
| Intermodal | 48 | 24 | 16 |
| Empty Bulk Commodity | 24 | 16 | 8 |
| Loaded Bulk Commodity (no empties in train) | 32 | 40 | 24 |

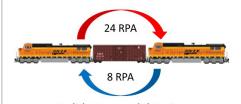
DP RPA Differential:

Single Remote/Helper Consist- If operating with one distributed power consist either cut-in or on the rear, total RPA of head end locomotive consist must not exceed 16 RPA of the total RPA of DP/Helper locomotive remote consist. In addition, total RPA of the remote consist must not exceed 8 RPA of the head end locomotive consist.

Exception: Does not apply to loaded bulk commodity trains. Solid Intermodal trains may operate with 24 RPA differential between head end locomotive consist and DP/Helper locomotive remote consist.



Figure 1(a).



Solid Intermodal Trains

Figure 1(b).

Multiple DP Consists

If operating with distributed power cut-in and on the rear, individual consist RPA must not exceed 16 RPA of the next consist towards the rear of the train (Head to Mid; Mid to rear). In addition, RPA of each consist must not exceed 8 RPA of the next consist towards the head end of the train (rear to mid; mid to head end).

Exception— Does not apply to loaded bulk commodity trains. Solid Intermodal trains may operate with 24 RPA differential between head end locomotive consist and cut-in DP/Helper locomotive remote consist.

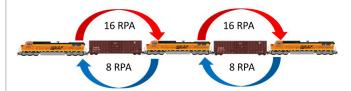


Figure 2(a).

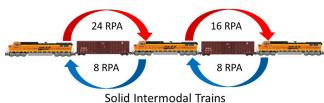


Figure 2(b).

Exception: Trains exceeding 8,000 tons operating on the heavy grade subdivisions listed below, must limit the total RPA of each individual locomotive consist to no more than 8 RPA greater than the next DP/Helper consist towards the rear of the train (Head to Mid; Mid to Rear). Does not apply to loaded bulk commodity trains.

Cajon (Main 3, MP 56.6 - MP 62.8, eastward only)

Gateway (MP 178.0 - 188.0, northward only)

Glorieta (MP 775.0 - MP 842.0)

Raton (MP 639.0 - MP 660.0)

North County Transit Coaster (NCTC) (MP 250 - 255)

Scenic (MP 1694.5 - MP 1731.3)

Stampede (MP 41.0 - MP 58.5)

UPRR Moffat Tunnel (MP 17 - 63)

UPRR Mojave (MP 331.3 - MP 381.3, southward only)

UPRR Provo (MP 626 - 685)

MRL Third (MP 7 - MP 21 westward only)

MRL Tenth (MP 0 - MP 20)

2. DP Remote and ETD Placement Limitations

| Distributed Power and ETD Length Limitations | | |
|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Train description | Maximum length allowed, excluding locomotives | |
| Conventional trains and trains operating with a cut-in single DP/ helper consist not equipped with mid-train ETD repeater | 10,000 ft between lead locomotive consist and end of train device (ETD) on rear Exception: All vehicle trains 8,000 ft. or longer must operate with Distributed Power (DP) either cut-in or on the rear. | |
| Trains operating with cut-in DP/ helper consist (mid-train ETD repeater) with 2-way ETD | 16,000 ft between lead consist and ETD | |
| Solid intermodal trains containing no autoracks operating with a single DP remote consist on rear | 12,000 ft between lead consist and remote DP consist (Lead locomotive and DP remote must be LXA equipped) | |
| Solid intermodal (without LXA), manifest, or bulk commodity trains operating with a single DP remote consist on rear | 10,000 ft between lead consist and remote DP consist | |
| Train of any type operating with two DP remote consists, cut in and on rear of train | 16,000 ft between lead consist and rear remote DP consist | |

Placement instructions for Cut in/Helper DP Consists:

a. One DP Remote Consist

A single DP remote consist cut into the train must not have the cut in DP consist further than 10,000 feet from the head end of train (excluding locomotive length). Single DP consists cut into the train exceeding 8 RPA must be cut in at 300 tons per axle exceeding 8 RPA, but no closer to the head end than 20 cars forward of mid-train, by car count, as long as train makeup requirements next to DP remote consist outlined below in Item 47(A) 3 and 4 are met.

Exception: The requirement to cut in at 300 tons per axle exceeding 8 RPA does not apply to solid intermodal trains, trains with solid intermodal equipment behind cut in DP/Helper consist or trains with loaded bulk commodity cars ahead of cut in DP/Helper consist. On solid intermodal trains, the DP remote consist must be cut in no closer than 1000 feet forward of mid train by length, as long as train makeup requirements next to DP remote consist outlined below in item 47(A) 3 and 4 are met.

b. Two DP Remote Consists

When two DP remote consists are used, they must be positioned with one DP remote consist cut into the train, and one DP remote consist at the rear end. The cut in DP remote consist must not be cut in further than 10,000 feet from the head end of train (excluding locomotive length) and must not be closer to the head end than 20 cars forward of mid-train, by car count.

Exception: Solid intermodal trains operating with two DP remote consists must not have the cut in DP remote consist further than 10,000 feet from the head end of train (excludes locomotive lengths) and must not be closer to the head end than 1,000 feet forward of mid-train, by length.

3. System Distributed Power and Manned Helper Train Makeup Restrictions

| DP Locomotive Consist RPA/ Location/Restricted Car Placement | | Restricted Cars |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cut In DP/ Helper, any RPA | Rear end DP/ Helper, any RPA | |
| | | Cars indicated as rear end only. |
| Must be at rear of train behind any rear end DP/helper consist | | AMGX 2-unit solid drawbar connected gondolas |
| | | Occupied caboose |
| Cut In DP/Helper 9 - 24 RPA | Rear end DP/Helper 9 - 16 RPA | |
| Restricted cars | | Any car 80 ft or longer coupled to any car 45 ft or shorter. Does not apply to multi-platform equipment unless individual platforms are 80 feet or longer. (Examples: Twin flat cars and Automax cars.) |
| be within 5 cars or platforms/ wells ahead of or behind cut in consist. Exception: Does not apply to empty bulk commodity/ combination trains, trains with only baretable equipment behind the cut in DP or to loaded single well double | Restricted cars | Any conventional car (non-multiplatform) weighing less than 45 tons. Exception: Does not apply to loaded single well double stack cars of any weight (car kind beginning with QU or QK) |
| | listed must not be within 10 cars or platforms/wells ahead of consist on rear end. | Any 80 ft. or longer flat car with a single trailer/container, regardless of car weight. Also applies to twin flat cars (solid-drawbar connected flat cars TTEX & RTTX series) with a single trailer/container on either segment/platform. |
| stack cars of any weight (car kind beginning with QU or QK). | | Empty platforms/wells of a multiplatform car. All multi-level, multi-platform autorack cars referred to as "AutoMax" cars, are considered to have loaded platforms in the application of this rule, regardless of whether car is loaded with vehicles or not. |

4. Additional Train Makeup Restrictions Applicable to DP Trains Operating on:

Birmingham, Cuba, Ft Scott (except between Edward - MP 102.6 and 19th Street Yard - MP 0.0), Ft Worth (except between Gainesville - MP 411.3 and Fort Worth - MP 346), Galveston (except between Bellville - MP 106.2 and Galveston - MP 0.0), Lampasas, Phoenix, Seligman, Thayer North, Thayer South (except between River Jct. - MP 462.6 and Tennessee Yard - MP 496.1), Wichita Falls and UPRR Lufkin Subdivisions.

| DP Locomotive Consist RPA/ Location/Restricted Car Placement | Restricted Cars |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cut In DP/Helper or rear end DP/Helper up to 8 RPA | |
| Restricted cars listed must not be placed within 5 cars or | Any car 80 ft or longer coupled to any car 45 ft or shorter. Does not apply to multi-platform equipment unless individual platforms are 80 feet or longer. (Examples: Twin flat cars and Automax cars.) |
| platforms/wells of DP/Helper consist. (cut in and/or on rear end) | Any 80 ft. or longer flat car with a single trailer/container, regardless of car weight. Also applies to twin flat cars (solid-drawbar connected flat cars TTEX & RTTX series) with a single trailer/container on either segment/platform. |
| Cut In or Rear End DP/Helper consist of 9 – 24 RPA (Does not apply to trains with 2, single- locomotive DP remotes) | |
| Restricted cars listed must not be placed within 10 cars/ platforms of lead consist and remote consist(s) | Any conventional car (non-multiplatform weighing less than 45 tons. Exception: Does not apply to empty bulk commodity/ combination trains operating with cut in DP consists or loaded single well double stack cars of any weight (car kind beginning with QU or QK). |
| Restricted cars listed must not be placed between lead consist and remote consist(s) | Intermodal equipment other than double stack and autoracks, regardless of how loaded. (Conventional intermodal flat cars, spine cars - car kind QM, QC, QO, Q5 and QE and twin flats - car kinds FM, QB, QD and QL.) |
| | No more than 30 cars with end of car cushioning ahead of any individual consist of 9 RPA or greater. (Does not apply to solid intermodal and solid loaded bulk commodity unit trains with cars equipped with end of car cushioning.) |

Limiting Tractive Effort When Using Manned Helpers with Trains Not in Compliance with Train Makeup Guidelines:

Conventional trains may be helped from the rear of train with a manned helper only (DP may not be used) when exceeding axle limitation guidelines above if train is disabled and not in compliance with train makeup restrictions for DP/Helper service as outlined above. Tractive effort limit when exceeding 8 rated powered axles and helping trains not in compliance with DP/Helper train makeup guidelines as follows:

Manned Helper Controlling Locomotive with Amperage Displayed:

8 rated powered axles - no restriction

10 rated powered axles - 1,000 amps

12 rated powered axles - 950 amps

14 rated powered axles - 900 amps

16 rated powered axles - 850 amps

Manned Helper Controlling Locomotive with Tractive Effort Displayed:

Limit total tractive effort of AC consist to 100,000 lbs. Total AC locomotive consist tractive effort is determined by multiplying tractive effort indicated on display of controlling locomotive and multiplying by the total number of operative AC locomotives in the consist.

Example: A controlling unit of a two-unit AC locomotive consist should not be allowed to produce more than

50.000 lbs. of tractive effort.

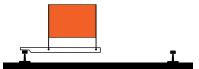
48. Operations Testing

BNSF will use the following banners as stop indications when operations testing for compliance where train, engine or ontrack equipment movements are required to stop short of the items listed in operating rules GCOR 6.22 (excludes Banner #3), 6.27, 6.28 and MWOR 6.27, 6.28, 6.50:

 A high visibility red/orange Stop/Obstruction banner displayed square on point to simulate on-track equipment.



 A high visibility red/orange Stop banner, square or rectangular in shape and approximately 18 by 18 inches in size



Banner 1 or 2 may be used on any track (main, controlled siding, yard, industry, etc.) for movements governed by GCOR/MWOR 6.27 Restricted Speed, GCOR/MWOR 6.28 Movement on Other Than Main Track, GCOR 6.22 Maintaining Control of Train or Engine (stopping 400 feet short of banners is applicable on a Main Track or controlled siding only), or MWOR 6.50 Movement of On-Track Equipment. These banners will be placed between the rails of the track, and simulate a condition requiring movement to stop. Train, engine and on-track equipment movements must stop short of the banner.

 Banner 3 may only be used on yard or industry tracks governed by GCOR/MWOR 6.28. Do not use on switches equipped with switch point indicators (GCOR 8.10) or sidings in TWC territory to simulate a switch or derail lined improperly.



High visibility red/orange with horizontal yellow bar Switch Point/Derail Location Stop banners, square or rectangular in shape and approximately 5 inches by 6 inches. These banners may only be used at existing switch point or derail locations, with one banner placed on each rail directly across from one another, to simulate a condition requiring movement to stop. Train, engine and on-track equipment movements must stop short of the banners.

49. Responsibilities and Certification

Engineers

In the application of the following guidelines, the term "engineer" applies to Train Service Engineers, Student Engineers, Locomotive Servicing Engineers/Hostlers, Remote Control Operators (RCO), and Student Remote Control Operators.

Before beginning each shift or tour of duty, all engineers must ensure their CFR Part 240 certificate is accessible on their railroad-supplied electronic device (iPad) and valid. If there is any doubt about the validity of their certificate, certified employees must contact a supervisor before operating a locomotive.

1. General Responsibilities

Engineers are responsible for and must maintain their certification.

- Engineers must be certified in the appropriate class of service to operate a locomotive.
- Engineers must certify according to federal regulations (49 CFR Part 240) and BNSF Railway certification requirements and programs.
- c. Engineers must have their CFR Part 240 electronic certificate accessible, displaying the correct class of service on their railroad-supplied electronic device (iPad) and display it at the request of a company manager or FRA representative while on-duty.
- d. If a railroad-supplied electronic device (iPad) is temporarily unavailable or a failure occurs, Engineers must print a paper copy of their CFR 240/242 electronic certificate through work force hub or contact their local supervisor for a paper copy until the issue has been resolved.
- Engineers and Conductors must report any conviction for a motor vehicle DUI, DWI, or refusal to test by calling the DUI Reporting Hotline at 913-319-3990 within 48 hours of conviction. The following must be reported:
 - Conviction for operating a motor vehicle while under the influence or impaired by alcohol or a controlled substance. This includes DUI, DWI, DWAI convictions, etc.
 - Conviction for refusal to undergo testing when requested by a law enforcement officer, who suspects the individual is operating a motor vehicle while under the influence of alcohol or a controlled substance.

Note: State-sponsored diversion programs, guilty pleas, and completed state actions to cancel, revoke, suspend, or deny a driver's license are considered convictions under this rule.

If unsure whether a conviction should be reported, engineer must call the DUI Hotline for verification.

After reporting, employee will receive a written referral to the Employee Assistance Program (EAP). If the referral is not received within three business days of the report

- of conviction, please contact the Manger II Railroad Training, Safety and Technical Training at 913-319-2655.
- f. FRA certified employees must report changes in their hearing and/or vision status before working in certified service to the Medical Department, Fort Worth, TX and the Technical Training Certification Group, Overland Park, KS

Changes must be reported when:

- Hearing or vision has deteriorated and no longer meets the minimum requirements or now requires a medical device (corrective lenses or hearing aid) to meet the minimum requirement
- Employees with a current hearing aid or corrective lens restriction attain permanent improvement to the extent that their hearing and/or vision now meets the minimum requirements without any corrective device.

The minimum hearing and vision requirements are:

- The average hearing threshold at 500 Hz, 1,000 Hz, and 2,000 Hz in the better ear is less than or equal to 40 decibels
- 2. Distant vision acuity is 20/40 or better in each eye
- Field of vision in the horizontal meridian is 70 degrees in each eye
- Ability to recognize and distinguish between railroad color signals

2. Engineer Certification Requirements for Operating Locomotives

Certified engineers may operate locomotives under the following conditions:

- A certified locomotive servicing engineer may not operate locomotives coupled to cars.
- A certified locomotive servicing engineer may operate locomotives within a yard or terminal area for hostling purposes.
- Only certified Train Service Engineers, Student Train Service Engineers, Remote Control Operators, and Student Remote Control Operators may operate locomotives coupled to cars.
- d. Certified student Engineers and Student Remote
 Control Operators utilizing a Remote Control
 Transmitter may operate locomotives within the
 limits of their class of service under the direct
 supervision of an Engineer Instructor or Remote
 Control Operator Instructor. Before operating a
 locomotive in a yard or over a road territory for the
 first time, a certified Engineer or Remote Control
 Operator must have made at least one trip observing
 the territory. Engineer Instructors must have a
 minimum of six months of experience on the road
 territory over which they are supervising Certified
 Student Engineers.
- e. Certified Student Remote Control Operators may operate a locomotive using a Remote Control Transmitter under the direct supervision of a Remote Control Operator Instructor.

 Note: An RCO Operator must have a minimum of 30 tours of duty as a Certified Remote Control Operator before training a student.
- Certified Train Service Engineers and Locomotive Servicing Engineers, including Train Service Engineers/Locomotive Servicing Engineers that

have been cutback to train service, and Remote Control Operators who have not had their evaluation and certificate signed before October 1 of each year, must advise their respective Road Foreman of Engines or Designated Supervisor of Remote Control Operators (DSRCO) of this fact. Should a new Road Foreman or DSRCO be assigned or a Engineer or Remote Control Operator change work locations after October 1; the Train Service Engineer/Locomotive Servicing Engineer or Remote Control Operator must again report to the new Road Foreman of Engines or DSRCO that certification evaluation is due.

3. Maintaining Locomotive Engineer Proficiency for Skills, Route Familiarization and Special Equipment

Certified employees must maintain proficiency as an engineer as it pertains to:

- · Skills Proficiency,
- Route familiarization, and
- · Special or unique equipment.

a. Skills Proficiency

An Engineer who has not operated a locomotive in the last 6 months, including under the provisions of Rule 1.47, Item B, Engineer Responsibilities, of the General Code of Operating Rules, must inform crew management of this fact when called to perform service as an engineer and that he/she may only be used as an Engineer/RCO if another qualified Engineer/RCO acts as a mentor (this includes a member of the crew who is qualified as an engineer/RCO or a supervisory engineer/RCO). If seniority limitations or any situation results in a qualified locomotive Engineer not performing the skills of an Engineer for a period of 6 months, that individual must immediately contact his/her Road Foreman of Engines or Supervisory Remote Control Operator (DSRCO) or other supervisor to determine the number of trips required, if any, and routes, for the purpose of maintaining the Engineer's skills proficiency.

Exception: The period is extended to 12 months for RCO if they are also certified as a train service engineer.

b. Route Familiarization

Route familiarization is required in order to perform service as a certified train service engineer without the assistance of a pilot. Once initially qualified on a specific route by making the required number of familiarization trips as specified by the Road Foreman of Engines, route familiarization is maintained by observing the route when performing service in any capacity (engineer or trainman) every 12 months. Other methods of maintaining route familiarization may also be available as specified by the Road Foreman of Engines.

Exception: Route familiarization as outlined above on the heavy and/or mountain grades of the subdivisions listed below, in any capacity, is required every six months:

Cajon, Mojave, Gateway, Scenic, Stampede, Glorieta, Raton, Pikes Peak, MRL Third and Hi Line subdivisions.

Train service engineers assigned to new routes or who become unqualified on current assigned

routes are required to contact their Road Foreman of Engines (or other supervisor) who will advise the number of trips, if any, required to qualify or requalify on that route. If and when an engineer is qualified at the completion of these trips, the Road Foreman of Engines or other supervisor will then authorize the train service engineer to perform service on that route without a pilot. Route familiarization (and the use of a pilot) is not required when the movement to be made does NOT include a section of track with an average grade of greater than 1% over 3 continuous miles and:

- The maximum distance operated will not exceed one mile, or
- The maximum authorized timetable speed for any operation on the track being traversed does not exceed 20 MPH, or
- 3. Movement is entirely on other than Main Track (track governed by GCOR 6.28), or
- Timetable method of operation requires all movements to proceed at Restricted Speed.

Note: Remote Control Operators must check local yard instructions for yard familiarization requirements.

4. Special Equipment Proficiency

Distributed power and electronically controlled pneumatic brake systems require the engineer to have continued experience in order to maintain an adequate level of proficiency. If after the engineer is initially qualified on this equipment and a period of 12 months occurs without any experience operating this equipment (whether or not as assigned engineer), the Road Foreman of Engines or other supervisor must be contacted and the engineer must be governed by his/her instructions concerning requirements to become re-qualified on this equipment.

There are several systems of RC equipment. A certified RCO must receive initial training on unfamiliar equipment before operating it. Once initial training is received the operator only needs to maintain qualification as an RCO on any system.

5. Route Familiarization Pilots

A person acting as a route familiarization pilot may not be an assigned member of the crew. In addition,

- a. Train Service Engineers:
 - When a pilot is required account engineer has NO previous experience on the route, the pilot must be a certified train service engineer.
 - When a pilot is required account engineer requires re-familiarization on a route where previously qualified, any person with route

familiarization may be used as a pilot.

- b. Remote Control Operators:
 - When a pilot is required account the Remote Control Operator has NO previous experience on the Main Track, the pilot must be a Remote Control Operator.
 - When a pilot is required account the Remote Control Operator requires re-familiarization on a Main Track where previously qualified, a Remote Control Operator member of the same crew with route familiarization may be used as a pilot. In addition this crew member must be positioned at the same location as the individual requiring re-familiarization.

Exception: A pilot is not required if the Remote Control Operator has operated over the territory in another certified class of service.

Note: The requirements for the sections 'Skills Proficiency, Route Familiarization, and Special Equipment Proficiency' do not apply to any individual restricted to yard service as a train service locomotive engineer or locomotive servicing engineer unless otherwise instructed.

Conductors

In the application of the following guidelines, the term"conductor" applies to a crew member in charge of a train or yard crew and passenger conductor who has received emergency preparedness training.

Before beginning each shift or tour of duty, all conductors must ensure their CFR Part 242 electronic certificate is accessible on their railroad-supplied electronic device (iPad) and valid. If there is any doubt about the validity of their certificate, certified employees must contact a supervisor before performing service as a conductor.

General Responsibilities (applies to any person with certification as a Conductor)

Any person certified as a Conductor is responsible for and must maintain their certification.

- Conductors must certify according to federal regulations (49 CFR Part 242) and BNSF Railway certification requirements and programs.
- Conductors must have their CFR Part 242 electronic certificate accessible on their railroad-supplied electronic device (iPad) and display it at the request of a company manager or FRA representative while on-duty.
- c. If a railroad-supplied electronic device (iPad) is temporarily unavailable or a failure occurs, Conductors must print a paper copy of their CFR 240/242 electronic certificate through work force hub or contact their local supervisor for a paper copy until the issue has been resolved.
- d. Conductors must report any conviction for a motor vehicle DUI, DWI, or refusal to test by calling the DUI Reporting Hotline at 913-319-3990 within 48 hours of conviction. The following must be reported:
 - Conviction for operating a motor vehicle while under the influence or impaired by alcohol or a controlled substance. This includes DUI, DWI, DWAI convictions, etc.
 - Conviction for refusal to undergo testing when requested by a law enforcement officer, who suspects the

individual is operating a motor vehicle while under the influence of alcohol or a controlled substance. Note: State-sponsored diversion programs, guilty pleas, and completed state actions to cancel, revoke, suspend, or deny a driver's license are considered convictions under this rule.

If unsure whether a conviction should be reported, conductor must call the DUI Hotline for verification.

After reporting, employee will receive a written referral to the Employee Assistance Program (EAP). If the referral is not received within three business days of the report of conviction, please contact the Manger II Railroad Training, Safety and Technical Training at 913-317-0203.

 FRA certified employees must report changes in their hearing and/or vision status before working in certified service to the Medical Department, Fort Worth, TX and the Technical Training Certification Group, Overland Park, KS.

Changes must be reported when:

- Hearing or vision has deteriorated and no longer meets the minimum requirements or now requires a medical device (corrective lenses or hearing aid) to meet the minimum requirement.
- Employees with a current hearing aid or corrective lens restriction attain permanent improvement to the extent that their hearing and/or vision now meet the minimum requirements without any corrective device.

The minimum hearing and vision requirements are:

- The average hearing threshold at 500 Hz, 1,000 Hz, and 2,000 Hz in the better ear is less than or equal to 40 decibels
- 2. Distant vision acuity is 20/40 or better in each eye
- Field of vision in the horizontal meridian is 70 degrees in each eye
- Ability to recognize and distinguish between railroad color signals

2. Maintaining Conductor Route Familiarization

Certified employees must maintain proficiency as a conductor as it pertains to route familiarization.

Route Familiarization

Route familiarization is required in order to perform service as a certified conductor without the assistance of a pilot. Once initially qualified on a specific route by making the required number of familiarization trips as specified by local supervisor, route familiarization is maintained by observing the route biennially based on the calendar year when performing service in any capacity (engineer or trainman). If the route has not been observed once in a 24 month period, qualification will expire at the end of the calendar year. Other methods of maintaining route familiarization may also be available as specified by local supervisor.

Conductors assigned to new routes or who become unqualified on current assigned routes are required to contact their local supervisor who will advise the number of trips required to qualify or re-qualify on that route. If and when a conductor is qualified at the completion of these trips, a supervisor will then authorize the conductor to perform service on that route without a pilot. Route familiarization (and the use of a pilot) is not required when the movement to be made does not include a section of main track with an average grade of greater than 1% over

3 continuous miles and:

- The maximum distance operated will not exceed one mile, or
- The maximum authorized timetable speed for any operation on the track being traversed does not exceed 20 MPH, or
- 3. Movement is entirely on other than Main Track (track governed by GCOR 6.28), or
- Timetable method of operation requires all movements to proceed at Restricted Speed.

3. Route Familiarization Pilots

Employees will be assisted by a pilot if called to perform service as a conductor on a route lacking territory qualification:

- a. When a conductor lacks Main Track territory qualification, the pilot must be a certified employee and meets the territory qualification requirements for the Main Track physical characteristics and is not an assigned member of the crew.
- b. When a conductor was previously qualified on the Main Track, but qualifications have expired, the pilot can be an assigned member of the crew, other than the locomotive engineer who meets the territorial qualification requirement for Main Track physical characteristics.

If a conductor is called and lacks territorial qualification on other than Main Track and the assistance of a certified employee pilot is not practicable, the conductor must reference an appropriate job aid to satisfy this requirement.

50. Rail Security Sensitive Material (RSSM) Instructions Chain of Custody Documentation for Rail Security Sensitive Material

When RSSM shipments in BNSF custody are set out enroute due to mechanical defect, the Resource Operations Center, Fort Worth must be promptly notified at 817-593-7200 or 800-832-5452, Option 4, who will arrange for attendance. The PBX/MRAS radio system may be used for this communication.

Federal regulations require Chain of Custody documentation for Rail Security Sensitive Material (RSSM) in the cases described below.

Rail Security-Sensitive Material (RSSM) includes a shipment of one or more of the categories and quantities listed below:

- Rail car containing more than 5,000 lbs (2,268 kg) of a Division 1.1, 1.2, or 1.3 (explosive) material.
- Loaded tank car containing a material poisonous by inhalation, including anhydrous ammonia, Division 2.3 gases poisonous by inhalation, and Division 6.1 liquids assigned to hazard zone A or hazard zone B.
- Rail car containing a highway route-controlled Class 7 (radioactive) material identified as Spent Nuclear Fuel (SNF) or High Level Radioactive Waste (HLRW) moving under ID numbers UN2916, UN2917, UN2919, UN3328, UN3329, or UN3331.

These materials are identified with the Special Car Handling Code "RC", Restricted Commodity, and/or "Railroad Security Sensitive Material (Restricted Commodity)" in the starred box that identifies hazmat shipments.

Except at locations identified by Division General Order, employees must execute and document Positive Transfers of Custody any time a loaded rail car identified by SCHI code "RC" is:

1. Pulled from or spotted to an industry

2. Delivered or received in interchange

Employees can make a positive transfer of custody when:

- Physically located on site in reasonable proximity to the rail car
- Capable of responding to unauthorized access or activity at or near the rail car, including immediately contacting law enforcement or other authorities.
- They immediately respond to unauthorized access or activity at or near the rail car by contacting law enforcement or other authorities.

This requirement applies both to BNSF employees and representatives of shippers, consignees, and interchange carriers making positive transfers of custody. A positive transfer of custody can take place only if representatives of both companies are present.

When a representative of an interchange carrier is not available where required, "RC" shipments must not be delivered, but may be received if proper paperwork can be obtained per Hazardous Material Instructions Item II. Contact a supervisor for disposition of "RC" shipments when a representative is not available to accept delivery.

If an RSSM shipment is delivered by connecting carrier and left on the interchange transfer unattended, transfer of custody information must show connecting carrier employee's name as "unattended".

Any car identified an RSSM shipment will require "Chain of Custody" documentation. Empty "residue" cars will not be identified with this code.

BNSF employees must confer with the customer or interchange road representative to ensure both of their documentation records contain the same information. The chain of custody documentation must include the following:

- 1. The first six digits of the employee's ID (e.g. b123456)
- 2. The date and time of the actual custody transfer.
- 3. The station at which the "RC" cars are transferred.
- 4. The person's first and last name to or from whom custody is being transferred.
- 5. The car initials and numbers.

Completing the chain of custody documentation:

- 1. TSS, TSS Xpress, or Mobile Train Reporting (MTR) are the preferred methods for documentation.
- Utilize the Chain of Custody Form on the back of the GTB or work order when TSS, TSS Xpress, or MTR is not available due to work performed on line.
 - When documenting a written chain of custody, employees must enter the information in TSS or TSS Xpress when access to a computer system becomes

- available.
- If a computer system is not available, utilize the FAX number at top of printed chain of custody form.
- Hours of service employees must complete the chain of custody documentation before expiring from duty under the hours of service.
- d. When documenting the chain of custody in printed form, employees must deliver the chain of custody documentation to a relief crew or supervisor for entry in to the system via TSS, TSS Xpress, or fax prior to the completion of the tour of duty when possible. This delivery must also be documented on the chain of custody form.
- e. When not possible to deliver the printed chain of custody documentation to a relief crew or supervisor prior to completion of the tour of duty, employees must enter the chain of custody documentation into the system via TSS, TSS Xpress, or fax when returning for next tour of duty.

Chain of custody procedures when receiving an "RC" freight car in interchange:

- Loaded "RC" freight cars entering a yard from a foreign carrier must be recorded by the BNSF employee assuming responsibility to receive the "RC" car.
- Employees should use the new TSS or TSS Xpress function "CUSTODY" to record the person's name from which custody is received along with the date and time of custody interchange. If an advance waybill list is not available, documentation must be done on printed format and entered into TSS or TSS Xpress when available.
- Division Management will identify the point of contact for acceptance of interchange at each location.
- 4. A visual security inspection must take place with these cars when practical and must take place before departure from the interchange point. This is typically done during normal freight car safety inspections that are currently performed.

Locations of High Threat Urban Area (HTUA)

The following BNSF locations have been designated as HTUAs.

| Anaheim | Kansas City | Riverside, CA |
|-----------------|---------------|---------------|
| Bakersfield, CA | Los Angeles | San Antonio |
| Bay Area | Memphis | Sacramento |
| Chicago | New Orleans | San Diego |
| Dallas/Ft Worth | Oklahoma City | Seattle |
| Denver | Omaha | St Louis |
| El Paso | Phoenix | Tulsa |
| Houston | Portland | Twin Cities |

HTUA and associated boundaries will be identified by Division General Order.

Attendance Requirements

Shipments identified as "RSSM" must be attended at all times while inside an HTUA. RSSM shipments inside an HTUA are considered attended when:

- Located at an industry, when plant personnel have accepted chain of custody.
- · Located in a yard which is staffed 24 hours per day.
 - Employees in the yard must be able to routinely view cars

- physically or by camera.
- Employees designated as responsible for RSSM cars will be identified by Division General Order and must be able to respond to unauthorized access or activity by contacting law enforcement or other authorities.
- Located within a train with an on-duty crew, authorized employee or representative physically present.

Exceptions to above requirement will be identified by Division General Order.

Employees designated by Division General Order as responsible for location of RSSM cars inside HTUA are required to:

- Contact law enforcement or other authorities to report unauthorized access to RSSM cars.
- Know the placards and designations used to identify RSSM shipments.

Employees responsible for handling RSSM cars within the HTUA are required to:

- Know the contact information outlined by Division General Order for BNSF personnel who are responsible for location of cars within HTUA.
- Know the placards and designations used to identify RSSM shipments.

Note: BNSF Crews operating on foreign railroads must comply with these attendance requirements unless otherwise specified by the foreign railroad's instructions.

Appendix A - Track Flagging Examples

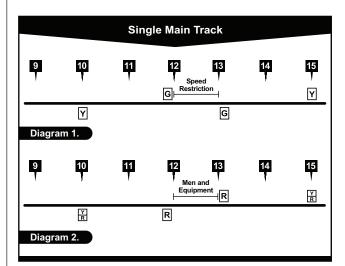
The figures in the appendix provide examples for protecting temporary speed restrictions and people or equipment working on or near the track. When reviewing these examples, keep in mind the following:

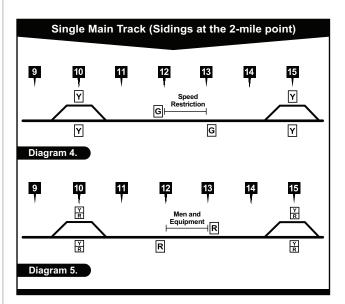
- The examples provided do not cover every situation.
- · The distances shown are those specified by rule.
- The examples provided may not represent exceptions allowed by rule

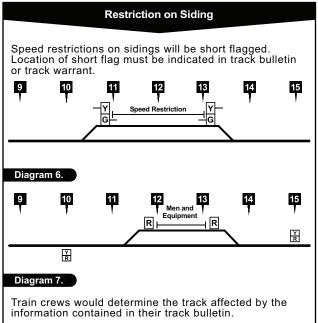
Yellow and yellow-red flags will be displayed on all main tracks and sidings leading to the track affected. Yellow and yellow-red flags will be placed 2 miles before each restriction with the exception of at foreign line junctions, areas where flags cannot be placed 2 miles in advance and in certain situations at crew change points.

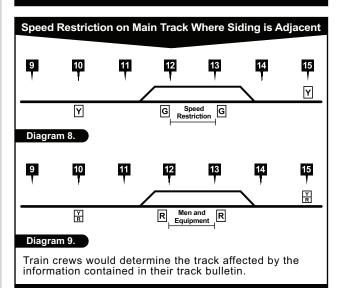
In multiple Main Track territory, when a restriction is placed on a crossover, or in single Main Track territory when a restriction is placed on a turnout not affecting the Main Track, no track flags will be displayed after the restriction is specified by track bulletin or track warrant. This information must be included on the track bulletin or track warrant.

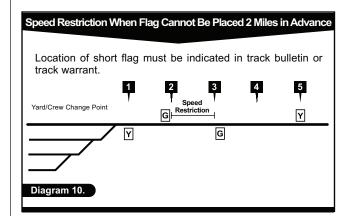
In situations in multiple Main Track or at sidings, when a train passes a yellow or yellow-red flag and a restriction is specified 2 miles in advance on track bulletin or track warrant, if the train takes a different route from the restricted track, this will not be considered as an unspecified restriction. Crew members must determine the track affected by comparing the flag location with the information contained in the track bulletin.

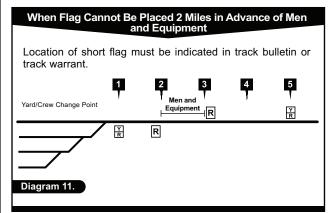


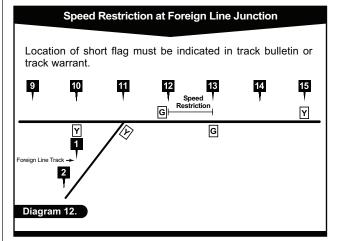


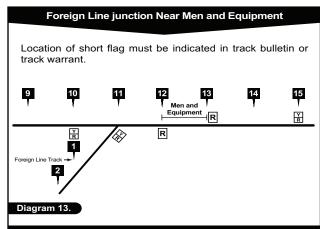


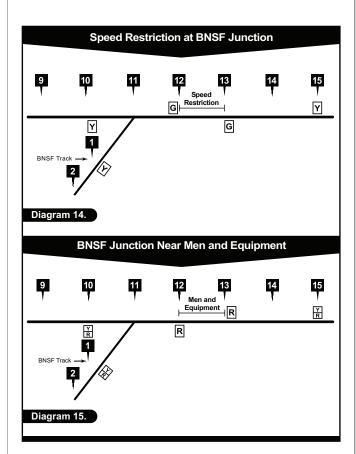


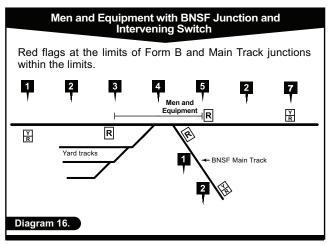














Train crews would determine the track affected by the information contained in their track bulletin.

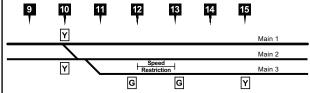
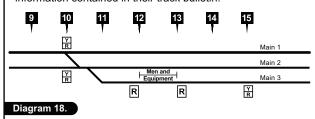


Diagram 17.

Men and Equipment just Beyond Turnout to Third Main Track

Train crews would determine the track affected by the information contained in their track bulletin.



Speed Restriction Just Beyond Turnout to Main 1

Train crews would determine the track affected by the information contained in their track bulletin.

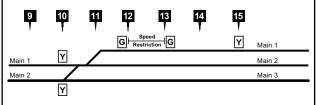
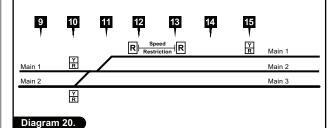


Diagram 19.

Men and Equipment Just Beyond Turnout to Main 1



Speed Restriction on Multiple Main Track

Train crews would determine the track affected by the information contained in their track bulletin.

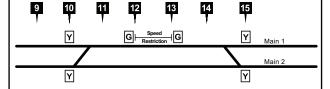


Diagram 21.

Men and Equipment on Multiple Main Track

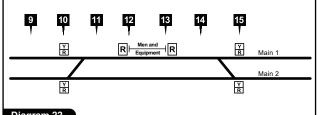
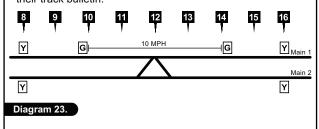


Diagram 22.

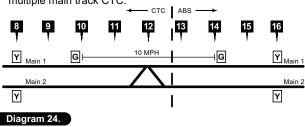
Speed Restriction on Main 1 (CTC Territory)

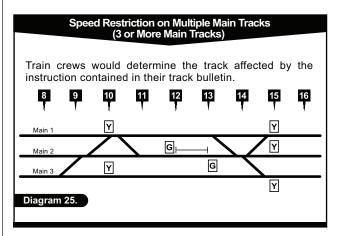
Yellow flags are placed 2 miles from the point of the restriction on both tracks because crews determine the track affected by comparing yellow flag with information on their track bulletin.

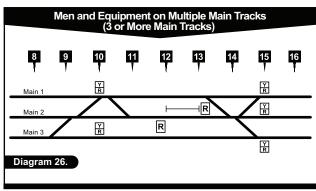


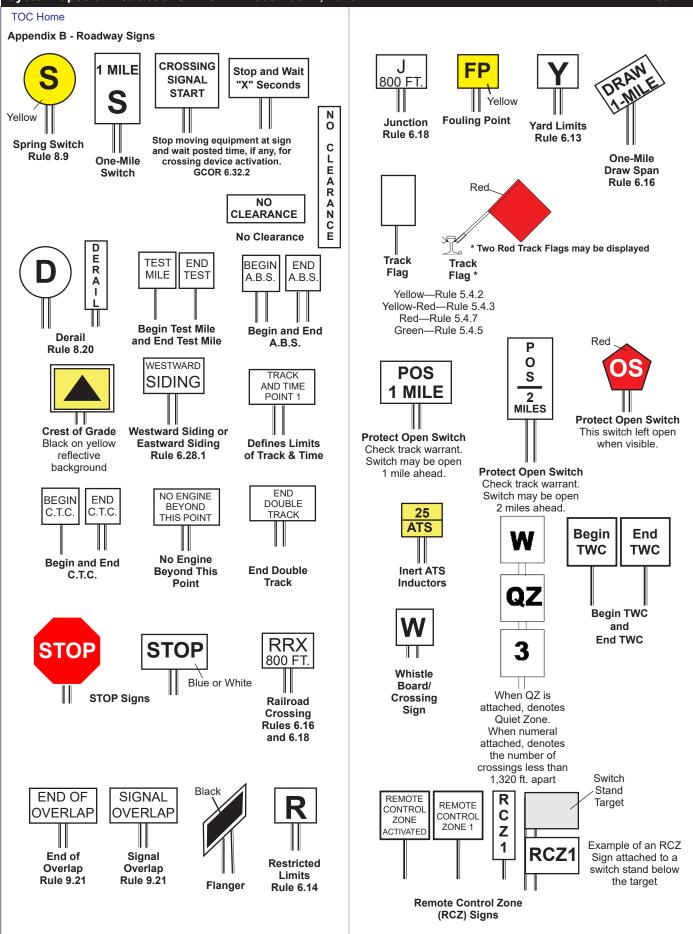
Speed Restriction on Main 1 (CTC and ABS Territory)

Yellow flags are placed 2 miles from the point of the restriction on both tracks. When a restriction, or flags placed for a restriction, includes both CTC and DT ABS, flags will be placed in accordance with rules for flag placement in multiple main track CTC.









| 70 System | Special Instructions | —No. 4—December | 1, 2023 (Updated | 12/1/24) | |
|------------|------------------------|------------------|------------------|--------------------|----------------------|
| TOC Home | | Mantana (agatla) | | Dad Diver (contid) | DDDV |
| • • • | sion/Subdivision Index | Montana (cont'd) | | Red River (cont'd) | |
| Division | Subdivisions | | Forsyth | | Chickasha |
| California | Alameda Corridor | | Ft. Benton | | Conroe |
| | Bakersfield | | Glasgow | | Creek |
| | Cajon | | Great Falls | | DFW |
| | Harbor | | Grenora | | Ft. Worth |
| | Lucerne Valley | | Helena | | Galveston |
| | Mojave | | Hettinger | | Houston |
| | Needles | | Hi Line | | Lafayette |
| | San Bernardino | | Kalispell | | Lampasas |
| | San Diego | | Kootenai River | | Longview |
| | Stockton | | Laurel | | Madill |
| Chicago | Auroro | | Lewistown | | Mykawa |
| Chicago | | | Milk River | | Plainview |
| | Barstow | | Mobridge | | Red River Valley |
| | Beardstown | | MRL First | | Red Rock |
| | Brookfield | | MRL Second | | Silsbee |
| | Chicago | | MRL Third | | Slaton |
| | Chillicothe | | MRL Fourth | | Sooner |
| | Des Moines | | MRL Fifth | | Venus |
| | Marceline | | MRL Tenth | | Wichita Falls |
| | Mendota | | Niobe | Southwest | . Carlsbad |
| | Ottumwa | | Sarpy Line | COULINGS! | Clovis |
| | Peoria | | Scobey | | Coronado |
| | St. Croix | | Sidney Line | | Coronado Defiance |
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| | Yates City | | Valier | | El Paso |
| Heartland | Afton | Nambharast | Dallinaham | | Gallup |
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| | Bellwod | | Columbia River | | Mines |
| | Birmingham | | Fallbridge | | Phoenix |
| | Cherokee | | Gateway | | Seligman |
| | Council Bluffs | | Kettle Falls | | Springerville |
| | Creston | | Lakeside | Twin Cities | . Aberdeen |
| | Cuba | | New Westminster | | Allouez |
| | Fort Scott | | Oregon Trunk | | Appleton |
| | Giltner | | Scenic | | Brainerd |
| | Hannibal | | Seattle | | Browns Valley |
| | Napier | | Spokane | | Canton |
| | Neb City | | Stampede | | Casco |
| | Omaha | | Sumas | | Corson |
| | Ravenna | | Yakima Valley | | Devils Lake |
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| | St. Joseph | | Angora | | Glasston |
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| | Dalhart | | Campbell | | Hinckley |
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| | Emporia | | Casper | | KO |
| | Hereford | | Cody | | Lakes |
| | La Junta | | Dutch | | Madison |
| | Panhandle | | Front Range | | Marshall |
| | Raton | | Golden | | Mayville |
| | Strong City | | Hastings | | Midway |
| | Topeka | | Lester | | Mitchell |
| | Twin Peaks | | Orin | | Monticello |
| Montana | Big Sandy | | Pikes Peak | | Moorhead |
| WOITCHIA | Broadview | | Pueblo | | Morris |
| | Choteau | | Sand Hills | | Noyes |
| | Circle | | Spanish Peaks | | O'Neill |
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| System Special Instructions—No. 4- | —December 1, 2023 (Added 12/1/24) | 70a |
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| Twin Cities (cont'd) Staples | | |
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| Brush | Montana |
| Butte | Northwest |
| | Southwest |
| CampbellPowder River KalispellMontana Sidney Line | |
| | Red River |
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| CasperPowder River LafayetteRed River Spanish Peaks | Powder River |
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| Chicago Lampasas Red River St. Croix | |
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| · | Northwest |
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| Clovis | California |
| Cody | Kansas |
| | Northwest |
| Columbia River Northwest Madison | |
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| Conroe Red River Marceline Chicago Thayer North | |
| Copper CityMontana MarshallTwin Cities Thayer South | |
| CoronadoSouthwest MayvilleTwin Cities Thomas Hill | |
| CorsonTwin Cities MendotaChicago Topeka | Kansas |
| Council BluffsHeartland MidwayTwin Cities Twin Peaks | Kansas |
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| | Northwest |
| Douglass | |
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| Dutch Powder River MRL Fifth Montana | |

Reference Information

Speed Tables

| | SPEED TABLE | | | | | | | |
|---------------|-------------|--------------|---------------|------|--------------|---------------|------|--------------|
| Time Per Mile | | Miles Per | Time Per Mile | | Miles Per | Time Per Mile | | Miles Per |
| Min. | Sec. | Hour | Min. | Sec. | Hour | Min. | Sec. | Hour |
| - | 36 | 100 | - | 58 | 62.1 | 1 | 40 | 36.0 |
| - | 37 | 97.3 | - | 59 | 61.0 | 1 | 42 | 35.3 |
| - | 38 | 94.7 | 1 | - | 60.0 | 1 | 44 | 34.6 |
| - | 39 | 92.3 | 1 | 02 | 58.0 | 1 | 46 | 34.0 |
| - | 40 | 90.0 | 1 | 04 | 56.2 | 1 | 48 | 33.3 |
| - | 41 | 87.8 | 1 | 06 | 54.5 | 1 | 50 | 32.7 |
| - | 42 | 85.7 | 1 | 08 | 52.9 | 1 | 52 | 32.1 |
| - | 43 | 83.7 | 1 | 10 | 51.4 | 1 | 54 | 31.6 |
| - | 44 | 81.8 | 1 | 12 | 50.0 | 1 | 56 | 31.0 |
| - | 45 | 80.0 | 1 | 14 | 48.6 | 1 | 58 | 30.5 |
| - | 46 | 78.3 | 1 | 16 | 47.4 | 2 | - | 30.0 |
| - | 47 | 76.6 | 1 | 18 | 46.1 | 2 | 05 | 28.8 |
| - | 48 | 75.0 | 1 | 20 | 45.0 | 2 | 10 | 27.7 |
| - | 49 | 73.5 | 1 | 22 | 43.9 | 2 | 15 | 26.7 |
| - | 50 | 72.0 | 1 | 24 | 42.9 | 2 | 30 | 24.0 |
| - | 51 | 70.6 | 1 | 26 | 41.9 | 2 | 45 | 21.8 |
| - | 52 | 69.2 | 1 | 28 | 40.9 | 3 | - | 20.0 |
| - | 53 | 67.9 | 1 | 30 | 40.0 | 3 | 30 | 17.1 |
| - | 54 | 66.6 | 1 | 32 | 39.1 | 4 | - | 15.0 |
| - | 55 | 65.5 | 1 | 34 | 38.3 | 5 | - | 12.0 |
| - | 56 | 64.2 | 1 | 36 | 37.5 | 6 | - | 10.0 |
| - | 57 | 63.2 | 1 | 38 | 36.8 | 12 | - | 5.0 |

| FEET | TENTHS OF A MILE |
|-------|---------------------|
| 528 | .1 |
| 1,056 | .2 |
| 1,584 | .3 |
| 2,112 | .4 |
| 2,640 | .5 |
| 3,168 | .6 |
| 3,696 | .7 |
| 4,224 | .8 |
| 4,752 | .9 |

TERMSDXO

- T Trains
- E Engines
- R Railroad cars
- M Men & equipment fouling track
- S Stop signal
- D Derail or switch lined improperly
- X Crossings at grade
- O Other crew movements

Remember "TERMSDXO" when shoving cars

To assist in determining where to start sounding the whistle as described in Whistle Signal 7, use the following:

At the speed indicated in the left column, wait the time indicated in the right column before sounding the whistle.

| Train Speed | Delay to Sound Whistle |
|-------------|------------------------|
| 40 MPH | 3 seconds |
| 35 MPH | 6 seconds |
| 30 MPH | 10 seconds |
| 25 MPH | 16 seconds |
| 20 MPH | 25 seconds |
| 15 MPH | 40 seconds |
| 10 MPH | 1 minute 10 seconds |