

# 2007 Ultra Mini Study Guide

Left Click on Rule Number while On Line to view full updated Rule

Version 1.5

Use this as a REFRESHER once you do the 2007 STUDY GUIDE

Question # correlate with 2007 Study Guide ( NO GUARANTEES answers are right )

| Q #                             | Rule                      | Description   | www.fogchart.com |
|---------------------------------|---------------------------|---|------------------|
| <b>SAFETY RULES</b>             |                           |   |                  |
| 1                               | <a href="#">70.3</a>      | Job Briefing ( DO Before Work, New Member arrives, Changes occur )  |                  |
| 2                               | <a href="#">70.8</a>      | Motioning Vehicles at Grade Crossings ( <b>NEVER</b> )  |                  |
| 3                               | <a href="#">71.2.2</a>    | Hearing Protection-Locomotives ( Ear Plugs within <b>100 feet</b> of Locomotives )  |                  |
| 4                               | <a href="#">74.8</a>      | Seat Belts ( <b>ALWAYS</b> )  |                  |
| 5                               | <a href="#">75.1</a>      | Lifting and Moving Material ( Good Footing & Grip, Close, erect, No Twist )   |                  |
| 6                               | <a href="#">80.1</a>      | Avoiding Slips, Trips and Falls ( Avoid creating hazards, good housekeeping, clean up, Signs or Cones )   |                  |
| 7                               | <a href="#">81.1.1</a>    | Walking On or Near Tracks ( Don't Stand, Sit, Foul, or Between rail )   |                  |
| 8                               | <a href="#">81.1.2</a>    | Precautions near Passing Trains or Equipment (Clear & Away of All Tracks, Not next to or between Equip)   |                  |
| 8                               | <a href="#">8.7</a>       | Clear of Main Track Switches ( Man on Ground must be away from switch, <b>Switching 20 ft, Meets 150 ft</b> )   |                  |
| 9                               | <a href="#">81.2.2</a>    | Sufficient Distance ( Around equipment 20 ft, Between equipment 50 ft )   |                  |
| 10                              | <a href="#">81.7.1</a>    | Designated Riding Places ( Designated Steps, Ladders. Face movement, 3 point contact )  |                  |
| 11                              | <a href="#">81.13.8</a>   | Coupling and Uncoupling Hoses ( 1 Foot in, 1 Foot Out or Rail, Close Cocks, Firm Grip, Face Away )  |                  |
| 12                              | <a href="#">82.3</a>      | Switch Operation ( Look Both Ways, Inspect, Remove Crap, Firm Stance, Keep Clear )  |                  |
| 13                              | <a href="#">81.11</a>     | Hand Brake ( Inspect, Good body Mechanics, Firm footing & Hand hold, thumb Out )  |                  |
| 14                              | <a href="#">81.2.2</a>    | Sufficient Distance ( <b>Around</b> equipment 20', <b>Between</b> 50', to <b>Open Coupler</b> 50' and to <b>adjust Coupler</b> 100'   |                  |
| 15                              | <a href="#">81.7.1</a>    | Designated Riding Places ( DO NOT Ride End of car, except to Operate Brake on cars cut away )   |                  |
| 16                              | <a href="#">81.13</a>     | Coupling and Uncoupling ( <b>Do Not Ride Cars</b> to a Joint )  |                  |
| 17                              | <a href="#">81.13</a>     | Coupling and Uncoupling ( <b>OK</b> to Ride <b>Power</b> to a Joint )   |                  |
| 18                              | <a href="#">81.13.1</a>   | Going between Cars To Make Adjustments ( Separate 100 ft, wait for Slack to Adjust, Hand Brakes )   |                  |
| 19                              | <a href="#">81.13.3</a>   | Coupler Adjustment ( 100 ft, No Kick, No excessive force, Avoid lifting full weight )   |                  |
| <b>GLOSSARY ( Definitions )</b> |                           |   |                  |
| 20                              | <a href="#">Glossary</a>  | <b>CTC</b> A block system that uses block signal indications to authorize train movements   |                  |
| 21                              | <a href="#">Glossary</a>  | Bull shit question and reference. Answer is <b>Authorized direction</b> , account shoving with Track & Time Authority   |                  |
| 22                              | <a href="#">Glossary</a>  | <b>Automatic Block Signal System (ABS)</b> A series of consecutive blocks governed by block signals, cab signals, or both. The signals are activated by a train or by certain conditions that affect the block use. |                  |
| 23 A                            | <a href="#">Glossary</a>  | <b>YARD</b> A system of tracks, other than main & sidings, used for making up trains, storing cars, & other purposes.   |                  |
| 23 B                            | <a href="#">Glossary</a>  | <b>Yard Limits</b> portion of main track designated by yard limit signs & timetable special instructions or a trk bulletin  |                  |
| <b>General Responsibilities</b> |                           |   |                  |
| 24                              | <a href="#">1.3.2</a>     | General Orders ( Have Current Sys GO & Sub GO )   |                  |
| 25                              | <a href="#">1.10</a>      | Games, Reading, or Electronic Devices ( NO Games, Magazines, newspapers. NO Phone moving or working)  |                  |
| 26                              | <a href="#">1.30</a>      | Riding Engine ( Conductor Must Always ride in the controlling compartment )   |                  |
| 27                              | <a href="#">1.47</a>      | Duties of Crew Members ( Cndr Report <b>5</b> trips, and do on all Territories )  |                  |
| 28                              | <a href="#">1.47</a>      | Duties of Crew Members ( Cndr Report 5 trips, and signed )  |                  |
| 29                              | <a href="#">1.47</a>      | Duties of Crew Members ( CRZ record Location, Signal Name, Speed, and Verify Communication )  |                  |
| 30                              | <a href="#">1.47</a>      | Duties of Crew Members ( if CNDR is <b>running</b> , enter Time & Place beginning and ending. 10K still required )  |                  |
| 31                              | <a href="#">1.47</a>      | Duties of Crew Members ( CRZ for Directives, Restrictions, End of Authority, prepared to stop/restricted)   |                  |
| 32                              | <a href="#">1.47</a>      | Duties of Crew Members ( if Engineer none compliant, take charge or plug train, if need be )  |                  |
| 33                              | <a href="#">1.47</a>      | Duties of Crew Members ( Cndr Inform Engineer by <b>last station</b> but at least <b>2 miles</b> of any restrictions )  |                  |
| <b>Signals &amp; their Use</b>  |                           |   |                  |
| 34                              | <a href="#">5.3.6</a>     | Radio and Voice Communication ( use Radio when Hand not practical )   |                  |
| 35                              | <a href="#">5.3.7</a>     | Radio Response ( <b>Stop Half Distance</b> given unless more instructions given )   |                  |
| 36                              | <a href="#">5.8.2</a>     | Sounding Whistle ( two Shorts o o Acknowledgment of any signal not otherwise provided for )   |                  |
| 36                              | <a href="#">5.3.5</a>     | Acknowledge Stop Signal ( Except switching, <b>acknowledge hand stop signal</b> , Two Shorts o o )  |                  |
| 37                              | <a href="#">6.4</a>       | Reverse Movements ( Restricted Speed, within limits authorized )  |                  |
| 38                              | <a href="#">6.4.1</a>     | Permission for Reverse Movement ( Obtain permission unless within same signaled block )   |                  |
| 39                              | <a href="#">15.13</a>     | Voiding Track Bulletins ( <b>ONLY</b> Train Dispatcher can void )   |                  |
| 40                              | <a href="#">5.4.2</a>     | Display of Yellow Flag Not in Writing ( in <b>2 mi 10 MPH</b> , Resume after <b>Rear 4 mi</b> or green, Disp Verifies )   |                  |
| 41                              | <a href="#">15.2 D</a>    | Protection by Track Bulletin Form B (Obtain permission before entering or changing rout )   |                  |
| 42                              | <a href="#">5.4.3</a>     | Display of Yellow-Red Flag Not in writing ( in <b>2 mi Restricted</b> , Resume after <b>Head end 4 mi</b> , disp verifies)  |                  |
| 43                              | <a href="#">15.2 A</a>    | Protection by Track Bulletin Form B ( Forman's Name, Track Bull No., Line No., Mi Post & Sub )  |                  |
| 44                              | <a href="#">15.2 C</a>    | Protection by Track Bulletin Form B ( If stopped in limits, must contact Forman before moving )   |                  |
| 45                              | <a href="#">5.8.2 (8)</a> | Sounding Whistle for Men & Equip ( Long Short, followed by 2 shorts until past )  |                  |
| 46                              | <a href="#">5.13 A</a>    | Blue Signal Protection of Workmen ( <b>ONLY CRAFT</b> that placed may remove blue flag )  |                  |

| <b>Movement of Trains &amp; Engines</b>  |                         |  |
|--|-------------------------|--|
| 47                                       | <a href="#">15.12</a>   | Relief of Engineer or Conductor During Trip ( Compare Warrants, Bulletins, Inst, Pert Info + <b>Compare w/ Disp</b> )      |
| 48                                       | <a href="#">6.3</a>     | Main Track Authorization ( Joint with train, attempt to contact. Joint with Men Must Contact )                             |
| 49                                       | <a href="#">6.5</a>     | Handling Cars Ahead of Engine ( <b>Protect Shoves</b> unless local instructions, just pulled more than putting )           |
| 50                                       | <a href="#">6.13</a>    | Yard Limits ( to enter must have Warrants, bulletins and Dispatchers AUTHORITY )   |
| 51                                       | <a href="#">6.13</a>    | Yard Limits ( Restricted speed until head end past signal more favorable than approach )                                   |
| 52                                       | <a href="#">6.21.1</a>  | Protection Against Defects ( immediately notify Disp and Protect if Necessary )  |
| 53                                       | <a href="#">6.22</a>    | Maintaining Control of Train or Engine ( CREW members must consider Speed, Grade, Air, for safe run )                      |
| 54                                       | <a href="#">6.23</a>    | Emergency Stop or Severe Slack Action (adjacent track Warn trains by radio, Fusee, Notify Train Dispatcher )               |
| 55                                       | <a href="#">6.23</a>    | Emergency Stop or Severe Slack Action ( Inspect all cars )   |
| 55                                       | <a href="#">33.3.2</a>  | Delayed Departure ( if brakes released, reapply and release before pulling )   |
| 56                                       | <a href="#">6.27</a>    | Movement at Restricted Speed & <a href="#">6.28</a> : Movement on Other than Main Track ( Stop 1/2 Range Vision )          |
| 57                                       | <a href="#">6.29.1</a>  | Inspecting Passing Trains ( Employees must inspect passing trains on the GROUND if safe to do so )                         |
| 58                                       | <a href="#">6.32.1</a>  | Cars Shoved, Kicked, or Dropped ( Over road crossing crew must protect until occupied )                                    |
| 59                                       | <a href="#">6.32.2</a>  | Automatic Warning Devices ( within <b>3000 ft</b> speed increase of <b>5 MPH</b> Max )                                     |
| 60                                       | <a href="#">6.32.2</a>  | Automatic Warning Devices ( <b>XG</b> Stop before occupying & Protect, unless Signal Department OK's )                     |
| 61                                       | <a href="#">6.32.2</a>  | Automatic Warning Devices ( Don't foul until warning devices have time to warn & stop traffic )                            |
| <b>Switching</b>                         |                         |  |
| 62                                       | <a href="#">7.1</a>     | Switching Safely and Efficiently ( Do Not leave cars or engines to FOUL )  |
| 63                                       | <a href="#">7.4</a>     | Precautions for Coupling or Moving Cars or Engines ( Verify secured & can be coupled to & moved Safely )                   |
| 64                                       | <a href="#">7.8</a>     | Coupling or Moving Cars on Tracks Where Cars are Being Loaded or Unloaded ( Verify all is Clear )                          |
| 65                                       | <a href="#">7.11</a>    | Charging Necessary Air Brakes ( Do not handle cars without air, unless can be handled safely )                             |
| 66                                       | <a href="#">7.12</a>    | Movements Into Spur Tracks ( Stop <b>150 ft</b> from end, tie hand brake, Precede movement, move on crew ok                |
| <b>Switches</b>                          |                         |  |
| 67                                       | <a href="#">8.2</a>     | Position of Switches ( Don't Foul Switch, until lined in your favor )  |
| 68                                       | <a href="#">8.3</a>     | Main Track Switches ( Leave lined for MAIN, unless crew member can attend to switch )                                      |
| 69                                       | <a href="#">8.8</a>     | Switches Equipped with Locks, Hooks, or Latches ( Facing point move, lock the switch )                                     |
| 70                                       | <a href="#">8.9.1</a>   | Testing Spring Switch ( on STOP, Stop & Proceed, Restricted or no protection. Line over & back check points                |
| <b>Block System Rules</b>                |                         |  |
| 71                                       | <a href="#">9.3</a>     | What Signals Govern ( If signaled past interlocking, interlocking signal is also a block signal )                          |
| 72                                       | <a href="#">9.8</a>     | Next Governing Signal ( comply with when can clearly be seen, UNLESS working at restricted speed )                         |
| 74                                       | <a href="#">9.9</a>     | Train Delayed Within a Block ( CTC Prepared to stop until next signal is visible with proceed indication )                 |
| 75                                       | <a href="#">9.9.1</a>   | Passing Approach to Automatic Interlocking ( Ready to stop, if below <b>25 MPH</b> within <b>1000 ft</b> of interlocking ) |
| 76                                       | <a href="#">9.10</a>    | Initiating Movement Between Signals ( Restricted Speed until Head End past next signal or end of block sys)                |
| 77                                       | <a href="#">9.11</a>    | Movement from Signal Requiring Restricted Speed ( Until Head End past next signal or end of block sys)                     |
| 78                                       | <a href="#">9.13.1</a>  | Hand Operation of Dual Control Switches ( Unlock, Lever to Hand, Line, Restore, Lock, Notify Dispatcher )                  |
| 79                                       | <a href="#">9.12.2</a>  | Manual Interlocking ( Contact Disp, Disp may Authorize Proceed, Restricted Speed, Check Bridge lined )                     |
| 80                                       | <a href="#">9.12.3</a>  | Automatic Interlocking ( comply with posted instruction, Restricted speed if red, if conflict both crews agree             |
| 81                                       | <a href="#">9.12.4</a>  | ABS Territory ( at STOP indication, after Stopping and Authorized, Restricted Speed )                                      |
| 82                                       | <a href="#">9.13.1</a>  | Hand Operation of Dual Control Switches ( Must get permission from Control Operator to place in hand )                     |
| 83                                       | <a href="#">9.16 e</a>  | Stop and Proceed Indication ( Continue at Restricted speed if already under restricted speed rule )                        |
| 84                                       | <a href="#">9.16 f</a>  | Stop and Proceed Indication ( Continue at Restricted speed in Track & Time, Work & Time, Track Permit )                    |
| 85                                       | <a href="#">9.17 A</a>  | Entering Signaled Track at Hand-Operated or Spring Switch ( NO 5 Minute Wait with WORK BETWEEN )                           |
| 86                                       | <a href="#">9.2.6</a>   | Approach ( Proceed prepared to stop at next signal. Freight exceeding 30 MPH reduce to 30 MPH.)                            |
| 87                                       | <a href="#">9.2.14</a>  | Stop and Proceed ( Stop before passing the signal then proceed at restricted speed to next signal )                        |
| 88                                       | <a href="#">9.2.4</a>   | Advance Approach ( prepared to stop at second signal. Freight exceeding 40 MPH reduce to 40 MPH )                          |
| 89                                       | <a href="#">9.2.11</a>  | Diverging Approach ( prescribed speed through turnout prepared to stop, Over 30 MPH reduce to 30 MPH.)                     |
| 90                                       | <a href="#">9.2.5</a>   | Approach Diverging ( prepared to advance on diverging route next signal at prescribed speed through turnout                |
| 91                                       | <a href="#">9.2.13</a>  | Restricting ( Proceed at restricted speed, not exceeding prescribed speed through turnout )                                |
| <b>Centralized Traffic Control (CTC)</b> |                         |  |
| 92                                       | <a href="#">10.1</a>    | Authority to Enter CTC Limits ( need Proceed Controlled Signal, or Verbal Authority, or Track and Time )                   |
| 93                                       | <a href="#">10.1</a>    | Authority to Enter CTC ( Hand switch w/ Red sig, with Authority, Wait 5 Minutes, Restricted Speed, Notify Disp )           |
| 94                                       | <a href="#">10.2</a>    | Clearing Through Hand-Operated Switches ( CTC need electric switch lock or 20 MPH Max Main or Signal )                     |
| 95                                       | <a href="#">10.3 A1</a> | Track and Time ( Must Stop for <b>STOP</b> signal, but do not need dispatchers authority to pass, restrited speed )        |
| 96                                       | <a href="#">10.3 A3</a> | Track and Time ( May pass signal within limits displaying <b>Stop and Proceed</b> indication without stopping )            |
| 97                                       | <a href="#">10.3.3</a>  | Joint Track and Time ( Notify ALL TRAINS in same limits they are JOINT track and time )                                    |
| 98                                       | <a href="#">10.3</a>    | Track and Time ( You need verbal Authority to pass signal to enter limits from control operator )                          |
| <b>Track Warrant Control (TWC)</b>       |                         |  |
| 99                                       | <a href="#">14.2</a>    | Designated Limits ( last named point, authority extends to and includes the first siding switch )                          |
| 100                                      | <a href="#">14.2</a>    | Designated Limits ( first named point, authority extends from and includes the last siding switch )                        |

|     |                           |   |
|-----|---------------------------|---|
| 101 | <a href="#">6.2.1</a>     | Train Location ( ascertain location by Visual, Direct Communication with train, or informed by dispatcher )       |
| 102 | <a href="#">14.12</a>     | Voiding Track Warrants ( Write " <b>VOID</b> " when clear of limits. Rule 2.14 Keep until <b>end of shift</b> )   |
| 103 | <a href="#">14.4</a>      | Occupying Same Track Warrant Limits ( Non-Signl territory, all trains Joint & same direction & Restricted speed ) |
| 104 | <a href="#">14.5</a>      | Protecting Men or Equipment ( Must NOT enter limits until contacting ALL Foremen Listed on line 18 )              |
| 105 | <a href="#">14.7</a>      | Reporting Clear of Limits ( Verify train is in the clear, and switch is lined and locked for main line movement ) |
| 106 | <a href="#">6.7</a>       | Remote Control Zone ( Timetable designates limits, and signs will be posted at access locations )                 |
| 107 | <a href="#">6.7.1</a>     | Zone Activation ( Only RCO may activate, unless timetable special instructions specify hours zone active )        |
| 108 | <a href="#">6.5.1</a>     | Remote Control Movements ( relieved of protecting, if Zone Active, Know switches OK, Know track is clear )        |
| 109 | <a href="#">6.7</a>       | Remote Control Zone ( Determine if ZONE is active, if active get permission to enter from RCO )                   |
| 110 | <a href="#">81.5.4</a>    | Understanding Between Crew Members Before Fouling Equipment ( RCO notify ALL, Set & Centered )                    |
| 111 | <a href="#">Item 10-B</a> | Remote Control Operations Instructions ( Monitor transmitter message to verify PSP is working )                   |

### Air Brakes & Train Handling

|     |                          |  |
|-----|--------------------------|--|
| 112 | <a href="#">Glossary</a> | Dynamic Brake Interlock ( Device that automatically bails engine brakes when automatic brakes set )                                |
| 113 | <a href="#">Glossary</a> | Independent Brake Valve ( Controls locomotive brakes independent of automatic brake valve position )                               |
| 114 | <a href="#">30.5</a>     | Person in Charge During Air Brake Test ( person performing the air brake test is in charge of the train )                          |
| 115 | <a href="#">30.9</a>     | Brake Pipe Leakage Test ( if excessive, inspect and correct, and retest )  |
| 116 | <a href="#">30.4</a>     | Operative Brakes ( <b>100%</b> at terminals, and <b>85%</b> in route )   |
| 117 | <a href="#">30.10.2</a>  | Procedure for Initial Terminal and Road Air Brake Test and Inspection (retest once, remain applied 3 minutes )                     |
| 118 | <a href="#">30.10.3</a>  | Engineer Notification ( Air slip can be given Verbally if not present otherwise test )   |
| 119 | <a href="#">30.10.2</a>  | Initial Air Brake Test ( Inspect Cocks, Hoses, valves. charge 15# regulating, 20# set, inspect set, inspect release )              |
| 120 | <a href="#">30.10.3</a>  | Engineer Notification ( Air slip does not need modified by work in route )   |
| 121 | <a href="#">30.11</a>    | Transfer Train Movements Test ( <b>under 20 miles</b> , Charge <b>60 PSI</b> min, make <b>20#</b> reduction, verify brakes apply ) |
| 122 | <a href="#">30.15</a>    | Application and Release Test ( is required after setting out cars )  |
| 123 | <a href="#">30.10.2</a>  | Initial Air Brake Test ( Release can be inspected as train departs not to exceed <b>10 MPH</b> )                                   |
| 124 | <a href="#">32.7</a>     | Cutting Out Air Brake Equipment ( Tag both sides, Notify Dispatcher, Noted on Train Documents, rule 30.4 )                         |
| 125 | <a href="#">30.11</a>    | Transfer Train Movements Test (Cars picked up in route TRAIN must be tested before proceeding )                                    |
| 126 | <a href="#">30.11</a>    | Transfer Train Movements Test (Cars picked up in route TRAIN must be tested before proceeding )                                    |
| 127 | <a href="#">30.14</a>    | Test When Cutting Off and Recoupling ( <b>under 4 hrs</b> know air restored to rear, <b>Over 4 Hrs</b> initial Air Brk Test )      |
| 128 | <a href="#">30.15.2</a>  | Appl & Release & Initial Terminal Air test both require Charge brake syst to within <b>15 psi of regulating valve</b> )            |
| 129 | <a href="#">30.18</a>    | Piston Travel Limits ( <b>Body-Mounted</b> in route <b>10 1/2"</b> at Terminal <b>7"-9"</b> and for <b>Truck-Mounted 4"</b> max )  |
| 130 | <a href="#">30.19.2</a>  | Controlling Dynamic Brake from Lead Locomotive (if equipped must have, or ability to control trailing units )                      |
| 131 | <a href="#">31.2.1 A</a> | Inspection Requirements ( if done previous day, inspect before 2359. contact authorities for when & where )                        |
| 132 | <a href="#">31.2.1</a>   | Inspection Requirements ( May <b>assume</b> all trailing Power inspected <b>same date as leader</b> )                              |
| 133 | <a href="#">31.2.1</a>   | Inspection Requirements ( <b>No locomotive</b> in consist may have a date <b>older than the lead locomotive.</b> )                 |
| 134 | <a href="#">31.2.3</a>   | Complete Required Daily Inspection Forms ( Complying or non-complying checked, date, location, time, Sign )                        |
| 135 | <a href="#">32.1.1</a>   | Securing an Unattended Train ( secure cars per rule <b>32.1</b> , secure power per rule <b>32.1.3</b> , leave check list )         |
| 136 | <a href="#">32.1.2</a>   | Securing an Unattended Trn Before Detaching Power ( for Run-Around, To Bottle air, Exhaust all air, wait 1 min )                   |
| 137 | <a href="#">32.1.3</a>   | Unattended Locomotive(s) ( Not left on Main Line, except for DP Power making up DP train but all brakes tied )                     |
| 138 | <a href="#">31.17.2</a>  | Locomotives Not Equipped with Alignment Control Couplers ( <b>2nd</b> in consist & <b>only One</b> )                               |
| 139 | <a href="#">32.1</a>     | Securing Equipment Against Undesired Movement ( single car, Handbrake, Release, Move, block or 2nd car )                           |
| 140 | <a href="#">32.13</a>    | End of Train Telemetry System ( any changes in equipment, Arm & Test EOT system )  |
| 141 | <a href="#">32.11</a>    | Powered Axle Limitation ( <b>52</b> Max powered axles, except entirely intermodal then <b>62</b> Max )                             |
| 142 | <a href="#">32.14.1</a>  | Loss of Emergency Application Capability from Rear of Train ( 2% grade, stop, Report, fix ) ( 1 train length )                     |
| 143 | <a href="#">32.13.1</a>  | EOT Installation ( All EOT battery requirements do not apply to an air powered EOT )   |
| 144 | <a href="#">33.2.1</a>   | Dynamic Brake Limitations ( <b>28</b> Axles, except loaded & empty Bulk commodity unit trains <b>33</b> EDDBA )                    |
| 145 | <a href="#">33.2.1</a>   | Dynamic Brake Limitations ( 28 Axles, except loaded & empty Bulk commodity unit trains 33 EDDBA )                                  |
| 146 | <a href="#">33.2.1</a>   | Dynamic Brake Limitations ( Turnouts & Disturbed track 50% max <b>throttle 4</b> , until half train is past )                      |
| 147 | <a href="#">33.3.2</a>   | Delayed Departure ( Leave brakes <b>applied 10 #</b> min until departing, verify air to rear is restored on release )              |
| 148 | <a href="#">33.6.1</a>   | Starting Train ( with auto start/stop, reverser direction of travel, open throttle to run 1 briefly, wait 2 minutes )              |
| 149 | <a href="#">33.6.3</a>   | Slowing or Controlling Speed ( preferred order, throttle mod, dynamic, dynamic supplemented with air )                             |
| 150 | <a href="#">33.6.6</a>   | Shoving Movements ( 12 Axles + use minimum amount of tractive effort necessary to begin movement )                                 |
| 151 | <a href="#">33.7.4</a>   | Balance Braking on Grade ( Greater than 18 PSI reduction required, Plug the train, find & fix problem )                            |
| 152 | <a href="#">33.8.1</a>   | Emergency Brake Application by Crew Member ( Engineer not responding, plug train, plug rear also )                                 |
| 153 | <a href="#">33.12.1</a>  | Heat Restrictions ( conductor must remind engineer sufficiently in advance of any restriction or conditions )                      |
| 154 | <a href="#">33.13</a>    | Thermal Misalignment ( EOT Equipped, plug from rear & rule <b>33.8</b> ) ( Dups on rear Full Service & Rule <b>33.12</b> )         |

### System Special Instructions

|     |                        |  |
|-----|------------------------|--|
| 155 | <a href="#">ITEM 2</a> | SPEED RESTRICTIONS ( dual control switch turnouts not connected to a siding 30 MPH )   |
| 156 | <a href="#">ITEM 2</a> | SPEED RESTRICTIONS ( Tracks other than main tracks and sidings 10 MPH )                |
| 157 | <a href="#">ITEM 2</a> | SPEED RESTRICTIONS ( Lite Power dynamic brake not sufficient to control speed 45 MPH ) |

|     |                          |  |
|-----|--------------------------|--|
| 158 | <a href="#">ITEM 2-C</a> | Maximum Speeds: Hot Weather ( Level 2, averaging 90 tons or more per car = 40 MPH )  |
| 159 | <a href="#">Item 2-E</a> | Max Speeds:(all empty coal, grain, soda ash, rock or intermodal trains <2% grade 24 EPA, 2% > grade 36 EPA                         |
| 160 | <a href="#">Item 2-F</a> | Max Speeds per TPOB ( 7450 Tons / 80 cars = 93.125 rounded up = 94 Tons per Operative Brake )                                      |
| 161 | <a href="#">Item 2-F</a> | Max Speed ( 120 TPOB or less for 140 or less Intermodal Platform cars there are No speed Restrictions )                            |
| 162 | <a href="#">Item 2-F</a> | Table C item 4. Spine Cars ( Five platform articulated in series NTTX, TTAX, TTLX, UTTX = 2 Brakes )                               |
| 163 | <a href="#">Item 4-A</a> | Locomotive Instructions ( freight <b>8</b> Locomotives max on the lead consist unless Management Authorizes more )                 |
| 164 | <a href="#">Item 5</a>   | Hi/wide ( if you have a Hi-Wide and are meeting train with Hi-Wide, notify disp & your crew before moving )                        |
| 165 | <a href="#">Item 5-A</a> | Train Make up Req ( car <b>85 ft+</b> weighing <b>45 tons</b> or less, no closer than <b>11th car</b> behind lead power consist )  |
| 166 | <a href="#">Item 5-A</a> | TRAIN MAKE-UP REQUIREMENTS ( Do not couple freight cars <b>85 feet</b> or longer to any car <b>39 feet</b> or shorter )            |
| 167 | <a href="#">Item 5-A</a> | Trn Make-up Reqrmts ( Don't place blocks of <b>20</b> continuous empties <b>anywhere ahead</b> of <b>20</b> continuous <b>lds</b>  |
| 168 | <a href="#">Item 7</a>   | Ref Documents (may utilize <b>electronic media</b> w/ most recent versions on the UP Website <b>in lieu of books</b>               |
| 169 | <a href="#">Item 8</a>   | EOT ( <b>NO EOT</b> required on Locals under <b>4000 tons</b> , Under <b>30 MPH</b> , Not on <b>2% Grade</b> ) see rule 32.14 also |
| 170 | <a href="#">Item 13</a>  | Train Defect Detectors ( " <b>No AC Power</b> " message, notify dispatcher. <b>not</b> considered a detector <b>failure</b> .)     |
| 171 | <a href="#">Item 13</a>  | Train Defect Detectors ( <b>Hot Box</b> if hand brake tied, release, check for Hot Journal, Flat spots & Tread build up            |
| 172 | <a href="#">Item 13</a>  | Train Defect Detectors ( <b>HBD #</b> if Integrity Failure w/ tone, Stop clear of detector, inspect both sides, call disp          |
| 173 | <a href="#">Item 13</a>  | Train Defect Detectors ( <b>Hot Box</b> if two detectors indicate same axle, Set Out Car and notify dispatcher )                   |
| 174 | <a href="#">Item 13</a>  | Train Defect Detectors ( <b>Hot Box</b> Transmits Defect tone or message, Stop once train clears detector & inspect                |
| 175 | <a href="#">Item 13</a>  | Train Defect Det ( <b>Dragger</b> concrete ties, STOP at once & inspect. Audible inspection 10 ahead of for 20 cars)               |
| 176 | <a href="#">Item 13</a>  | Train Defect Det ( # identifies Hot Journal at axle location, If nothing found, inspect 20 axles ahead and behind )                |
| 177 | <a href="#">Item 13</a>  | Train Defect Det ( <b>Hi-Wide/Shifted load</b> STOP at once & inspect. Ok to move 5 MPH to assist in inspection                    |

### Hazardous Materials

|     |                        |   |
|-----|------------------------|---|
| 178 | <a href="#">HAZMAT</a> | 4 Placards required 1 each end & side. Must have shipping paper or RR Docs or Customer Docs or Hand print               |
| 179 | <a href="#">HAZMAT</a> | Section VI pg 37 & 38 ( Dangerous & Poison Gas Zone A <b>can NOT</b> be placed next to each other )                     |
| 180 | <a href="#">HAZMAT</a> | Any Load car with <b>EXPLOSIVE 1.1</b> <b>CAN NOT</b> be next to <b>CORROSIVE</b> , Dangerous, Poison, or Radioactive ) |
| 181 | <a href="#">HAZMAT</a> | crew must have in their possession a paper copy of an <b>acceptable shipping paper</b>                                  |
| 182 | <a href="#">HAZMAT</a> | any loaded or residue / empty cars of <b>PGIII</b> has <b>NO Restrictions</b>   |
| 183 | <a href="#">HAZMAT</a> | HOT no restrictions, 1993 OK next to Combustible 4, Inhalation Hazard 2 can't go next to 1993 or Combustible 4          |

### 30.10.2 Procedure for Initial Terminal and Road Air Brake Test and Inspection

- 1 ) Charge the air brake system to within **15 pounds** of the locomotive regulating valve setting as indicated by a gauge or device at the **rear of the train**.
- 2 ) Perform a leakage test per Rule 30.9 (Brake Pipe Leakage Test).
  - Air Flow method:** When air flow does not exceed **60 CFM**
  - Brk Pipe Leakage:** 20 # set, exhaust to stops, wait 1 min, cut out automatic, wait 1 min, test 1 min, 5 # max leak
- 3 ) When proper notification is received to apply the brakes for the test, **reduce** brake pipe pressure by **20 psi**.
- 4 ) Inspect the entire train or cars added not pre-tested to determine that:
  - Brakes are applied & remain applied until signal is given to release & piston travel meets the requirements
  - \*Any car whose brakes release prior to signal given to release the brakes may be **re-tested once**
  - On retest the brakes must remain applied for at least **3 minutes**. Release will be initiated after 3 minute period.
- 5 ) Inspect each brake to make sure all brakes have released. This inspection may be made as the train departs at a speed not exceeding **10 MPH**.

### 30.11 Transfer Train Movements Test

A train making transfer movements that **does not exceed 20 miles** in one direction is considered a transfer train.

Intermediate switching is permitted on Transfer Train movements.

- 1 ) Couple brake pipe hoses between all cars.
- 2 ) Charge the brake system to at least **60 psi** as indicated by a gauge or device at the **rear of the train**.
- 3 ) Make a **20 psi** brake pipe reduction.
- 4 ) Verify that the brakes apply and remain applied on each car until release signal is given.

**YOU DO NOT HAVE TO CHECK the RELEASE**

any cars that don't remain applied, do same as rule 30.10.2 for Re-Test. One Re-Test only, must hold for 3 min

**Note:** Cars added to the transfer train must be tested as outlined above at that location before proceeding.

If cars are set out during a transfer train and yard movement, determine that brake pipe pressure at the **rear car** has been restored before proceeding