



Equipment Handling Rules

Effective July 1, 2004

Equipment Handling Rules

Notice

The rules present in this book:

- Are effective July 1, 2004
- Are effective on properties owned and/or operated by CSX.
- Govern the handling of, placement of, and restrictions placed on various railroad rolling equipment.

Employees whose duties are prescribed by these rules must:

- Be conversant with and comply with them.
- Have a copy of this book accessible while on duty.

Conditions not covered by these rules and instructions demand sound judgement for the application of correct principles of safety, efficiency, and economy.

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General Rules

4001. Inspecting the Loading of Cars when Switching

Carefully examine the loading of cars when switching industrial tracks, team tracks, loading tracks, unloading tracks, or similar tracks where cars are being loaded or unloaded.

Do not move a car without instructions from the Mechanical Department if you find a car that:

- Is loaded heavily on one side or one end,
- Is overloaded, or
- Has lading projecting over the ends or sides.

Check any overhead or side clearances to make certain that the car will clear.

4002. Handling Machinery that has a Boom Attached

When handling machinery that has a boom attached, make certain that all booms are in the trailing position, except as provided below.

It will not be necessary to make certain that booms are in the trailing position when the machinery is:

- Moving in work trains or wreck trains over short distances to and from the work location.
- Engineering Department boom equipment traveling on or in rail cars in regular train service, as long as the Engineering Department employee-in-charge confirms that the lading is tied down properly and that any booms are properly secured.
- A military tank with its gun barrel attached.

4003. Securing CSXT Train Documentation

Freight train crews must have CSXT train documentation before the train departs its originating point.

A train may depart its originating station without CSXT train documentation when authorized to do so by the chief train dispatcher.

4004. Disposition of CSXT Train Documentation

When relieved before reaching your final destination, leave any CSXT train documentation and/or alternatives to CSXT train documents, except Emergency Response Guide, on the controlling locomotive in a location where it can be easily found.

4005. Possessing the Necessary Equipment and Tags

At the beginning of a trip, trainmen must have in their possession:

- A 200 degree temperature testing crayon (Tempilstik)
- Six Hot Box / Air Brake Cut-Out tags

4006. Setting out Defective Equipment for Repair

When setting out defective equipment, try to place it where it can be accessed by a vehicle for repair or inspection.

Car Inspection

4050. Making Certain that Cars Are Inspected

A. Conductor Responsibility

Conductors must know that the cars in their train have received a proper inspection.

B. Inspections Made by Mechanical Department

The conductor must accept the results of any inspection performed by the Mechanical Department.

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4051. Performing Car Inspection

Do not accept for movement in a train any car that is not in full compliance with the provisions of this rule, unless authorized in accordance with Rule 4052 (Discovering a Car that is Unsafe for Movement).

A. Inspecting Cars

Inspect cars being placed into a train to make certain that the:

- Car body does not:
 - Lean or list to the side.
 - Sag downward.
 - Have any object hanging below it.
 - Have any object extending from its side.
 - Have a door insecurely attached.
 - Have any broken or missing appliance.
- Car body is properly positioned on the trucks.
- Couplers are not cracked or broken.
- Bearings are not overheated.
- Wheels are not overheated, broken, or cracked.
- Hand brake releases.
- Car does not have any apparent safety hazards likely to cause an accident.
- Cables, chains, straps, and bands are properly applied to loads, or secured if the car is empty.

B. Inspecting Cars with Friction Bearings

Do not accept equipment that has friction bearings in interchange or in a key train.

In addition to the other inspections required by this rule, check freight cars with friction bearings to make certain that the bearing components are free from defects.

To check the cars:

Step	Action
1	Open the friction bearing box lids and check for missing or displaced components.
2	Check friction bearing box for contamination.
3	Check for at least 1 inch of visible oil.

4052. Discovering a Car that is Unsafe for Movement

When a car is unsafe for movement, ask the train dispatcher or yardmaster for instructions.

4053. Inspecting Re-Railed Cars

A. Performing Inspection

Unless relieved from doing so by Rule 4050B (Inspections Made by Mechanical Department), inspect re-railed cars before moving them.

Do not move a re-railed car if any of the following conditions exist:

- Cracked or broken wheels.
- Bent axles.
- Car body not properly positioned on the trucks.
- Improperly positioned brake shoes.
- Displaced or missing bearing adapter on cars with roller bearings.
- Displaced or missing brasses and/or wedges on cars with friction bearings.

B. Ensuring Inspection by Mechanical Department

In addition to performing the inspection required in Paragraph A of this rule, the conductor must arrange for an inspection of the equipment by Mechanical Department personnel at the first location the inspection can be performed.

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Hot Bearings

4100. Receiving a Report of a Hot Bearing or a Hot Wheel

Make a prompt inspection of any and all bearings or wheels reported hot. When the report is received from an equipment defect detector, comply with the rules and/or special instructions relating to defect detectors.

4101. Inspecting a Roller Bearing Reported Hot

When inspecting a roller bearing reported hot, comply with the following instructions.

A. Using a Tempilstik

When testing a bearing for excessive heat, make a visible mark at least three inches long with a Tempilstik. Make the mark at the location indicated in the following chart.

Location on Roller Bearing to Apply Mark of Tempilstik	
If the bearing is on a	Then apply the mark
Passenger car	Directly on the bearing housing (not on the bearing end cap).
Freight car with trucks having more than one axle	On the outside of the bearing (not on the bearing end cap).
Car equipped with single-axle trucks	On the face of the adapter either to the right or left of the bearing.
Locomotive	On the side of the bearing, or on the bearing end cap if the side of the bearing cannot be accessed.

When a walking inspection of the entire train is required, a Tempilstik need not be used on every bearing. When the heat emitted by a roller bearing indicates the possibility of an overheated bearing, use the Tempilstik.

B. Inspecting a Bearing Without a Tempilstik

If a Tempilstik is not available, carefully pass your hand near the bearing without touching it. If the bearing radiates more heat than other bearings, it is overheated.

C. Determining When to Set Out a Car

Set out the car if the:

- Tempilstik mark melts when applied.
- Bearing is overheated in accordance with Paragraph B, of this rule.
- Equipment has a hot box tag attached to it indicating that the bearing has been previously inspected, except passenger cars in accordance with Rule 4304B(f).

D. Setting out a Car with Hot Bearing

When setting out a car with a hot bearing, comply with Rule 4006 (Setting out Defective Equipment for Repair) and the following requirements:

- Carefully inspect any equipment set out because of a hot bearing.
- Remove the packing or lubricators.
- Make certain that the journal box lids are closed.
- Make certain that all signs of fire around the journal boxes, the body of the equipment, and the removed packing or lubricator are extinguished.
- Do not use fire extinguishers, liquids, or snow to cool hot bearings unless the journals have broken off.
- Do not set out equipment with hot bearings on tracks where flammable commodities may be endangered.

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4102. Inspecting a Friction Bearing Journal Reported Hot

When inspecting a friction bearing reported hot:

Step	Action
1	Pass your hand close to - but do not touch - the journal box.
2	If the journal box is noticeably hotter than other journal boxes on the car, use a tool to open the journal box lid and inspect the journal for heat.
3	Set out the car if the: <ul style="list-style-type: none"> • Journal is red hot. • Brass is broken. • The equipment has a Hot Box tag attached to it indicating that the journal has been previously inspected.
4	Unless instructed otherwise, the conductor must decide whether the car should be handled to the terminal if the: <ul style="list-style-type: none"> • Journal is not red hot. • Brass is not broken.

4103. Reporting Inspections of and Tagging Bearings Reported Hot

Even if the bearing is not overheated:

- Report inspections of a bearing reported hot to the train dispatcher.
- Attach a completed Hot Box Tag to the equipment near the bearing.

4104. Cooling a Friction Bearing Determined Hot

To cool friction bearings:

Step	Action
1	Stop movement.
2	Check the dust guard, decking, and side of the car for fire.
3	Use hot box compound to put out any fire.
4	If the pad is intact, place a stick of hot box compound along the sides of the journal.

Warning:

- Do not use dirt, sand, or other abrasive material to put out fires in journal boxes.
- Do not use water or snow to cool hot bearings, except in an emergency.

4105. Moving Equipment with a Hot Bearing

When moving equipment that has a hot bearing:

- Comply with Rule 4200 (Cutting Out Air Brakes).
- Do not exceed 4 MPH.

4106. Inspecting a Wheel Reported Hot

When inspecting a wheel reported hot, do not touch the wheel. Look for the cause of the hot wheel.

Correct the cause of the hot wheel by releasing the hand brake or by complying with Rule 4200 (Cutting out Air Brakes).

If the wheels have:

- Tread built up, consult with the Mechanical Desk.
- Flat spots, comply with Rule 4154 (Handling Equipment that has Flat Spots).

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Flat Spots

4150. Inspecting for Flat Spots

If a flat spot develops on a wheel of a locomotive or other equipment, make certain that a member of the crew inspects it.

4151. Wheel Impact Detectors

A. Passing Over a Wheel Impact Detector

When passing over a wheel impact detector, maintain, to the extent possible, the maximum speed permitted.

B. After Passing a Wheel Impact Detector

After passing a wheel impact detector, listen for an inspection results message concerning the inspection of the train, communicate the contents of the message with other crew members, and be governed as follows:

The Inspection Results Message	Then
(a) Indicated no high impact(s)	Proceed.
(b) Indicated high impact(s)	Stop, and inspect for the cause of the high impact(s). Report the results to the train dispatcher, including when nothing is found and be governed by the train dispatchers instructions.
(c) Was not received or was not clearly received	Contact the train dispatcher for instructions.

C. Inspecting for Reported High Impact Causes

When the inspection results message indicates a high impact,

- Stop the train promptly consistent with good train handling techniques,
- Inspect the reported high impact per the table below, and
- Report the results of the inspection to the train dispatcher, including when nothing is found and be governed by the train dispatchers instructions.

If	Then
(a) The car number is reported.	Inspect the wheels on reported car for the cause of a high wheel/rail impact.
(b) The axle number is reported instead of the car number.	Inspect the wheels on the reported axle. Do not use train documentation to locate reported axle.
(c) The axle number is reported and the high impact cause is not found at the reported location.	Inspect the 20 axles on each side of the reported axle.

D. Recording and Reporting Information

Record and report the following information to the train dispatcher:

- Results of any inspection made of reported high impacts including the results when nothing is found.
- Evidence that a wheel impact detector is not working properly.

4152. Reporting Flat Spots

When flat spots exceeding 2 inches in length are discovered:

- Tell the Mechanical Desk.
- Tell the train dispatcher or yardmaster, and
- If the flat spots are on a locomotive, record them on the Locomotive Work Report.

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4153. Flat Spots Meeting a Non-complying Condition for a Locomotive

A non-complying condition exists when:

- One or more flats spots are 2 1/2 inches long or longer, or
- Flat spots of at least 2 inches or more are within 1 1/2 inches of each other.

When flat spot(s) meeting the length requirements above are discovered during the first movement of the locomotive after performing a calendar day inspection, the non-complying condition will be considered as having been discovered during the calendar day inspection.

4154. Handling Equipment that has Flat Spots

When handling equipment that has flat spots, comply with the requirements of the chart below, unless instructed by the train dispatcher to reduce speed further.

Instructions Concerning Flat Wheels			
Length of Single Flat Spot	Length of the smallest flat spot when two flat spots are within 1 1/2 inches of each other one	Maximum speed	Other restrictions
Locomotives			
2" or less	1" or less	Normal Speed	None
2" to 2 1/4"	1" to 1 1/2"	40 MPH	None
2 1/4" to 2 1/2"	1 1/2" to 2"	25 MPH	None
2 1/2" or more	2" or more	10 MPH	Set out at first available point
Equipment other than a Locomotive			
2 1/4" or less	1 1/2" or less	Normal Speed	None
2 1/4" to 2 1/2"	1 1/2" to 2"	50 MPH	None
2 1/2" or more	2" or more	10 MPH	Set out at first available point

Car Air Brakes

4200. Cutting Out Air Brakes

Cut out the air brake on a car:

- If the brake does not release when it should.
- When the car must be moved with an overheated bearing.
- Before repairing or adjusting the brake equipment on the car.

To cut out an air brake on a car that does not have a cut-out cock in the brake cylinder pipe, follow the steps below:

Step	Action
1	Close the cut-out cock in the brake pipe branch pipe (place the handle in line with the pipe).
2	Release all air pressure from reservoirs by holding the brake cylinder release rod to its fullest travel until the air is exhausted completely.
3	Make certain that the brake cylinder piston retracts into the brake cylinder.
4	Make certain that the brake shoes are away from the wheels.

If the car has a cut-out cock in the brake cylinder pipe, follow the steps below:

Step	Action
1	Close the cut-out cock in the brake cylinder pipe (place the handle in line with the pipe).
2	Make certain that the brake cylinder piston retracts into the brake cylinder.
3	Make certain that the brake shoes are away from the wheels.

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4201. Reporting and Tagging Cut-Out Air Brakes

When you cut out the air brakes on a car, or when picking up a car that has been tagged due to inoperative air brakes:

- Tell the engineer and the train dispatcher.
- Apply a completed Air Brake Cut-Out Tag to the brake pipe branch pipe cut-out cock when you are performing the cut out.
- Check for the presence of a completed defective equipment tag on both sides of the freight car when picking up a car known to have inoperative air brakes.
- Provide information regarding the location of a freight car(s) having inoperative air brakes in Section 6 of the brake test certificate and on CSXT train documentation.

4202. Setting Out Car with an Air Brake Cut Out

When you cut out a car's air brake while en route, set the car out at the next forward terminal where the car can be repaired.

If the next forward terminal where the car can be repaired is beyond the end of your run, tell the train dispatcher about the car.

4203. Ensuring Safe Movement when the Last Car in the Train has its Air Brake Cut Out

When the air brake on the last car in the train is cut out and there are no operative control valves on the car, follow the steps below:

Step	Action
1	Make certain that the car has an operative hand brake.
2	Make certain that the air hoses are coupled and the angle cocks are positioned to have brake pipe pressure in the car or, at a minimum, in the hoses between the cars if the rear car has a broken brake pipe.
3	Secure the car against separation from the train. If the car is a passenger car, make certain that a trainman is in position to operate the hand brake.
4	At the first opportunity, switch the car ahead of at least one car with operative brakes, or set it out at the first auxiliary track.

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Observation of Trains, Defect Detectors and Clearance Detectors
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Observation of Trains

4250. Inspecting Trains Passing and Being Passed

When a train is passing or is being passed, visually inspect the train for defects and other unsafe conditions, such as:

- Hot bearings.
- Sticking brakes.
- Sliding wheels.
- Dragging equipment.
- Evidence of fire.
- Insecure or dangerously shifted lading.

A. Performing Inspection While Stationary

When there are two or more inspecting employees, one employee should be stationed on each side of the passing train, if possible. Engineers may inspect the passing train from the locomotive cab.

When inspecting a passing train from the ground, do not stand:

- closer than 30 feet from the passing train.
- between the rails of adjacent tracks.

B. Communicating Inspection Results

After inspecting a train, communicate the results of the inspection to the inspected train.

If a defect or unsafe condition is detected and communication cannot be established with the inspected train, immediately tell the train dispatcher.

C. Examining for Defects or Unsafe Conditions Reported from Visual Inspection

When a defect or unsafe condition is reported on your train, stop the train promptly, consistent with good train handling techniques, and inspect for the defect or unsafe condition.

When a specific location is given and the reported defect or unsafe condition is not found, inspect twenty (20) axles on each side of the reported location.

When a specific location is not provided, inspect the entire train for defects or unsafe conditions.

4251. Making Inspections and Observations from Rear of Train

When one or more employees are on the rear of a train, those employees must inspect as much of the train and track behind the train as can be seen from their normal positions.

A. Inspecting the Train

Inspect the train for conditions listed in Rule 4250 (Inspecting Trains Passing and Being Passed).

B. Inspecting the Track

Inspect the track for evidence of dragging equipment or derailed car(s).

C. Inspecting Signals, Signal Masts, and Bridges

Inspect signals, signal masts, and bridges for damage caused by objects protruding from the train.

Defect Detectors and Clearance Detectors

4300. General

A. Knowing the Type of Detector being Used

CSXT uses two types of defect detectors and clearance detectors, identified as Type-1 and Type-2. The type and location of the detectors are published in special instructions.

B. Making Inspections in Addition to Defect and Clearance Detectors

In addition to inspections made by defect detectors and clearance detectors, make:

- Frequent, on-board, visual inspections of both sides of your train.
- An immediate walking inspection of as much of the train as possible when your train is stopped on line-of-road.

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C. Investigating Reported Defects

Investigate reported defects or excessive dimensions through a walking inspection of your train. Do not use train documentation to locate defects.

D. Using On-Board Detector Systems

When your train is equipped with an on-board defect detector system – presently passenger trains only – be governed by the instructions for that system in addition to these rules.

E. Recording and Reporting Information

Record and report the following information to the train dispatcher:

- Results of inspections made of reported defects or excessive dimensions.
- Evidence that a detector is not working properly (examples: An axle count malfunction or not working message, a hot bearing detector malfunction or not working message, etc.)

4301. Approaching a Defect or Clearance Detector

When approaching a defect detector or clearance detector:

- Be alert for a greeting from the detector, which may be a voice message; or, if equipped, an indicator light.
- Communicate to other crew members the status of the indicator light or contents of the voice message.

4302. Passing Over a Defect Detector or by a Clearance Detector

As a train passes over a defect detector or by a clearance detector:

- Listen for an alarm, which will sound if a defect is detected.
- Maintain, to the extent possible, the maximum speed permitted.

If an alarm sounds, immediately reduce the train's speed to a level that will permit the train to be stopped promptly after passing over the defect detector.

4303. After Passing A Defect Detector

After a train passes over a defect detector, listen for an inspection results message concerning the inspection of the train, communicate with other crew members the contents of the inspection results message, and be governed as follows:

NOTE: Where used in these rules, the terms “hot box”, “hot journal”, and “hot bearing” are used interchangeably.

A. Conditions Applying to Type-1 Detectors

If greeting message	And inspection results message	Then
(a) Was or was not received	Indicated no defect(s)	Proceed.
(b) Was or was not received	Indicated defect(s)	Stop. Inspect for reported defects(s).
(c) Was or was not received	Indicates the: <ul style="list-style-type: none"> • Hot bearing detector has malfunctioned or is not working. • Dragging equipment detector has malfunctioned. • Defect detector has malfunctioned or is not working. 	Stop. Inspect entire train for defects.
(d) Indicates the: <ul style="list-style-type: none"> • Hot bearing detector has malfunctioned or is not working. • Dragging equipment detector has malfunctioned or is not working. 	Was not received or was not clearly received.	Proceed. Perform a visual, on-board inspection.

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If greeting message	And inspection results message	Then
(e) Was not received	Was not received or was not clearly received.	Do not exceed 30 MPH until passing over the next detector that inspects for the same type of defect or contact the train dispatcher and after receiving their permission stop and inspect entire train.
(f) Was received	Was not received or was not clearly received.	Stop. Inspect entire train for defects.
(g) Was received	Indicated a defect at a location that is known to be inaccurate.	Stop. Inspect entire train for defects.
(h) Was received	Indicates an "Axle Count Malfunction" message.	Proceed. Perform a visual on-board inspection.
(i) Was or was not received	Provided an axle count different than the number of axles known to be in the train.	Comply with Rule 4307 (Comparing Axle Count Information).

B. Conditions Applying to Type-2 Detectors

If	Then
(a) No defects were indicated.	Proceed.
(b) Indicated defects.	Stop. Inspect for the reported defects.
(c) The inspection results message reports three defects.	Stop. Inspect for the reported defects and each of the cars positioned behind the third reported defect.
(d) A defect detector only inspects for dragging equipment and a warning alarm sounds but no location or defect is transmitted.	Stop. Inspect the entire train for dragging equipment.
(e) No transmission is received after passing over the defect detector location or a "detector not working" message is received as the train enters the defect detector location and again when the train completely passes over the detector (excluding high car detectors).	Do not exceed 30 MPH until passing over the next detector that inspects for the same type of defect or contact the train dispatcher and after receiving their permission stop and inspect entire train.
(f) A "detector not working" message is received one time while passing over the detector or immediately after passing over the defect detector.	Stop. Inspect the entire train. The train dispatcher may relieve a crew from inspecting their train, or verify that a defect detector is working, when office information is available confirming no defects.
(g) A defect detector has been removed from service and/or is under repair.	Proceed, performing a visual, on-board inspection.
(h) The axle count provided is different than the number of axles known to be in the train.	Comply with Rule 4307 (Comparing Axle Count Information).

4304. Inspecting the Train for Reported Defects

When a defect is reported by a defect detector, promptly stop the train consistent with good train handling techniques.

A. Making Required Walking Inspections

Perform a walking inspection of your entire train when your train:

- Is not inspected by two consecutive defect detectors, including defect detectors temporarily out of service.
- Passes over two consecutive defect detectors at less than 8 MPH and no defects are indicated by either defect detector.

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Observation of Trains, Defect Detectors and Clearance Detectors
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B. Reported Defect

When a defect is reported, be governed as follows:

Condition	Freight Trains	Passenger Trains
a) A defect is not found at the location identified and the train's speed was 8 MPH or more.	Inspect 20 axles before and after the reported defect. Both sides of the train must be inspected.	Inspect remaining axles on the same side of the car that the defect was reported on and two cars ahead of and behind the suspected car. If no side was indicated, or you are uncertain which side the reported defect is on, the same axles on both sides of the train must be inspected.
b) A defect is not found at the location identified and the train's speed was less than 8 MPH.	Make a walking inspection of the entire train.	Make a walking inspection of the entire train.
c) No defect is found during the required inspection	Proceed at authorized speed – Key trains refer to Eastern Code Hazardous Materials Section VII, Rule 4d.	Proceed at authorized speed
d) A "Hot Bearing" is found	Inspect bearing in accordance with Rule 4101 (Inspecting a Roller Bearing Reported Hot) or 4102 (Inspecting a Friction Bearing Reported Hot).	Inspect bearing in accordance with Rule 4101 (Inspecting a Roller Bearing Reported Hot) or 4102 (Inspecting a Friction Bearing Reported Hot).
e) A "Hot Bearing" is indicated at a bearing previously tagged with a "Hot Box" tag.	Set the equipment out even if there is no evidence of overheating.	This part (e) applies only to freight trains.
f) The same bearing actuates two or more defect detectors on the same trip and no defect is found	This part (f) applies only to passenger trains.	<ol style="list-style-type: none"> 1) Proceed not exceeding 30 MPH for 5 miles, 2) After 5 miles, inspect all bearings on the car that actuated the defect detector and the bearings on the 2 cars ahead of and behind it, 3) If no defect is found, the train may operate at authorized speed to the next authorized passenger equipment repair point where the car can be set out, and, 4) The car with the suspected hot bearing must be examined every 100 miles until the set out location is reached.
<p>NOTE: A red "Hot Box" tag must be used as required by Rule 4103 (Reporting Inspections of and Tagging Bearings Reported Hot) when a defective bearing is reported by any means.</p>		

Section 2
Observation of Trains, Defect Detectors and Clearance Detectors
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4305. After Passing A Clearance Detector

After passing a clearance detector, listen for an inspection results message, communicate with other crew members the contents of the inspection results message, and be governed as follows:

If greeting message	And inspection results message	Then
(a) Was received	Indicated no excessive clearances.	Proceed.
(b) Was received	Indicated excessive clearances.	Stop. Inspect for reported excessive clearances.
(c) Was received	Was not received or was not clearly received	Do not pass by a clearance-restricted location until it is determined that it is safe to do so.
(d) Was received	Indicated an excessive clearance at a location that is known to be inaccurate	Stop. Inspect entire train for excessive clearances.
(e) Was not received	Indicated no excessive clearances.	Proceed.
(f) Was not received	Was not received or was not clearly received	Do not pass by a clearance-restricted location until it is determined that it is safe to do so.
(g) Was not received	Indicated excessive clearances.	Stop. Inspect for reported excessive clearances.

4306. Inspecting the Train for Reported Excessive Dimensions

When an excessive dimension is reported by a clearance detector, promptly stop the train consistent with good train handling techniques and be governed as follows:

If	Then
(a) The location of the excessive dimension is given	Inspect the reported car and two cars or platforms before and after the reported location, whether the reported car is excessive dimension or not.
(b) The location of the excessive dimension is not given.	Inspect the entire train.

4307. Comparing Axle Count Information

When a detector provides an axle count, compare the axle count provided to the number of axles known to be in the train. If the axle count provided is at least two axles more or less than the number of axles known to be in the train, be governed as follows:

A. When the Axle Count is Less than the Number Known to be in the Train

When the axle count provided by the detector is less than the number of axles known to be in the train, tell the train dispatcher, who will tell the Customer Service Center, and proceed.

B. When the Axle Count is More than the Number Known to be in the Train

When the axle count provided by the detector is more than the number of axles known to be in the train continue movement; tell the train dispatcher, who will tell the Customer Service Center; and be governed as follows:

1. If the Customer Service Center Can Identify the Cars

If the Customer Service Center can identify the extra cars in the train and one or more of those cars require hazardous material documents, the train dispatcher will:

- Notify the crew where new CSX train documentation may be obtained not to exceed 5 miles from point of notification; or
- Issue a radio waybill for those cars containing hazardous materials.

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Observation of Trains, Defect Detectors and Clearance Detectors
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2. If the Customer Service Center Cannot Identify the Cars

If the Customer Service Center cannot identify the extra cars:

- The train dispatcher will instruct the crew to stop and inspect their train for the extra cars.
- The crew will record and report to the train dispatcher the initials and numbers of each extra car found.
- If any of the extra cars in the train require hazardous material documentation, the train dispatcher will:
 - Notify the train crew where new CSXT train documentation may be obtained, not to exceed 5 miles from point of inspection, or
 - Issue a radio waybill for those cars containing hazardous materials.

NOTE: A radio waybill may be transmitted to a moving train, but it must not be copied or repeated by an employee operating the controls of a moving engine.

Section 3
Locomotives
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Locomotives

4350. Locomotive Speed Restrictions

Do not exceed:

- 30 MPH with a single-unit locomotive consist without cars attached.
- 70 MPH with a locomotive consist containing a road freight locomotive.
- Freight train speed when handling a multiple-unit locomotive consist without cars attached.
- The speed authorized by the passenger railroad or agency when handling an Amtrak and/or a commuter railroad locomotive.

4351. Locomotive Operational Restrictions

Do not operate a locomotive consist:

- on the live rails of any scale that is equipped with "dead rails".
- with more locomotives than permitted in the following chart.

Maximum Locomotives	Conditions
15	When moving without cars or with only a caboose/shoving platform.
12	When moving cars or cars and a caboose/shoving platform.
8	When moving on industrial spurs or industrial tracks.

4352. Handling Maintenance-of-Way Locomotives

This rule has been deleted.

4353. Handling Dead Locomotives that are not Part of the Locomotive Consist

When handling one or more dead locomotives that are not part of your locomotive consist:

- Make certain that the movement is authorized by the Clearance Bureau.
- Comply with Rule 4356 (Handling Locomotives that are not Equipped with Alignment Control) if the locomotives are not equipped with alignment control couplers or coupler limiting blocks.

4354. Operating a Locomotive that is not Equipped with an Event Recorder

When operating any one of the following locomotives as a controlling locomotive, do not exceed 30 MPH.

Initials	Numbers
CSXT	1021 through 1241, 2400, 2426, 2450 through 2467, and 8972

4355. Handling Short Wheel-Base Locomotives

Do not operate any of the following locomotives over a railroad crossing at grade, unless it is coupled to another locomotive or a car.

Initials	Numbers
CSXT	1100 through 1128

4356. Handling Locomotives that are not Equipped with Alignment Control

This rule applies to locomotives that are not equipped with alignment control couplers or coupler limiting blocks.

When handling one or more locomotives that are not equipped with alignment control, make certain:

- To comply with Rule 5502 (Tractive Effort).
- That none of the locomotives are coupled to a car with a length of more than 55 feet or less than 40 feet.
- That the trailing tonnage behind the most forward non-alignment control locomotive does not exceed 5000.

Section 3
Locomotives
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A. Moving as part of the locomotive consist

When the locomotive consist contains one or more locomotives that are not equipped with alignment control, comply with the following in addition to the above:

- Do not use dynamic braking.
- Limit locomotive brake cylinder pressure to 25 PSI
- Make certain that each locomotive that is not equipped with alignment control is separated by an alignment control equipped locomotive.

B. Moving as Part of the Train

When moving locomotives that are not equipped with alignment control as part of the train:

- Make certain that the locomotives are either within twenty cars from the head end, or within the rear twenty cars.
- Make certain that a car separates each locomotive.
- If one or more of the locomotives are within the first twenty cars:
 - Do not use dynamic braking.
 - Limit locomotive brake cylinder pressure to 25 PSI.
- If one or more of the locomotives are within the rear 20 cars of the train, do not permit a helper to assist from the rear of the train.

4357. Identifying the Ends of Locomotives

Determine the front of a locomotive by locating an "F" stenciled on the side of the locomotive frame at the steps. The opposite end is the rear.

4358. Identifying Wheels and Journals on Locomotives

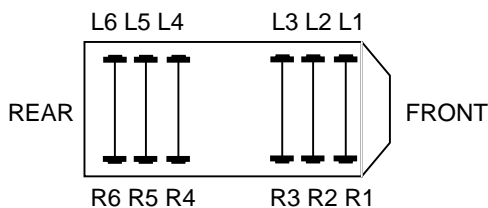
Identify the wheels and journals on a locomotive by:

1. Determining the side of the locomotive by facing the same direction as the locomotive. The left side "L" of the locomotive corresponds to your left and the right side "R" of the locomotive corresponds to your right.
2. Counting the axles from the front of the locomotive to the subject axle. Axles are numbered beginning with one at the front "F" end.

Example: The L3 wheel or journal would be found on the:

- left side of the locomotive (L) as you were facing the same direction that the locomotive was headed, and
- third axle (3) from the front.

Illustration Identifying Locomotive Ends, Wheels, and Journals



Section 4
Train Rules, Car Rules
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Train Rules

4400. Train Speed Restrictions

When handling any of the following trains, do not exceed the maximum speed listed:

Type Of Train	Maximum Speed	Remarks
Amtrak passenger trains handling Amtrak TOW (trailer-on-wheels) equipment	90 MPH	None.
Trains handling Amtrak mail handling cars (MHC) 1400 through 1569	60 MPH	None
TOW Train	60 MPH	TOW Trains may operate at the speed for intermodal trains, but not exceeding 60 MPH.
Trains handling one or more railcars loaded with engineering equipment	50 MPH	None.
Trains handling one or more wood rack cars or bulk head flats	50 MPH	None.
Circus/Carnival Trains	50 MPH	RBXX 001-999 series cars JESX 001-100 series cars.
Freight trains handling one or more empty cars, except solid intermodal trains with empty TOFC/COFC and multilevel auto rack cars.	50 MPH	Applies if the train has any empty car that is not included in the 60 MPH category below.
	60 MPH	Freight trains whose only empty cars are Tropicana TPIX cars of any series, CSXT 198000 and 199000 series cars, or TOFC/COFC or multi-level auto rack cars.
Unit Trains	50 MPH	Applies to solid loaded unit trains of coal, coke, grain, or minerals.
Trains handling gondolas loaded with stump wood	50 MPH	None.
Trains handling one or more empty cars in the UTLX 83000-83080 series	40 MPH.	None.
Trains handling one or more loaded coal cars	40 MPH	Applies only if restricted by train documentation due to weight.
Trains handling camp cars	40 MPH	Includes Univan Camp Cars.
Trains handling snow plows or ditcher spreaders	25 MPH	None.
Locomotives being shoved	30 MPH	Does not apply to helper operations.
Trains shoving cars	30 MPH	Does not apply to helper operations.
Trains handling ice breaker cars	10 MPH	Applies only when being used to break ice, moving through tunnels.
Trains handling air dump cars	As indicated in Remarks	50 MPH, except cars listed in Rule 4556 (Handling Air Dump Cars), which are restricted to 30 MPH.
Trains handling welded or continuously jointed rail.	As indicated in Remarks	40 MPH and further restricted to 10 MPH when crossing thru-truss bridges and going through turnouts, crossovers, or tunnels.
Trains handling wreck cranes or derricks	As indicated in Remarks	35 MPH, when pulling 20 MPH, when shoving
Trains handling Type SF1A, SF1B, and/or SF2A flangers	See Rule 4558	None
Loaded Box Car	60 MPH	None

4401. Handling Circus Trains or Carnival Trains

CSXT Operations Planning must authorize and issue instructions prior to movement.

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Train Rules, Car Rules
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4402. Limiting the Size of Intermodal Trains on Other than the Water Level Route

Do not operate an intermodal train on other than the Water Level Route that is more than 9000 tons or 10,000 feet.

4403. Intermodal Train Placement Requirements on Other than the Water Level Route

Before operating an intermodal train on other than the Water Level Route, make certain that the train is made-up as follows:

A. When the train size is less than 9,000 feet and between 6001 and 7500 tons

1	Locomotive Consist	
2	Loaded double-stack or spine cars	Which Includes: - Loaded multi-platform double-stack cars - Loaded spine cars - Loaded single double-stack cars
3	Other intermodal equipment, not exceeding 6000 tons	Which Includes: - Loaded or empty single double-stack cars - Loaded or empty spine cars - Loaded or empty conventional COFC/TOFC cars - Loaded or empty multi-platform double-stack cars

B. When the train is 9001 to 10000 feet long and between 7501 and 9000 tons

1	Locomotive Consist	
2	First ten (10) platforms or wells must be loaded with at least one trailer or container.	
3	Loaded double-stack or spine cars	Which Includes: - Loaded multi-platform double-stack cars - Loaded spine cars - Loaded single double-stack cars
4	Other intermodal equipment, not exceeding 6000 tons	Which Includes: - Loaded or empty single double-stack cars - Loaded or empty spine cars - Loaded or empty conventional COFC/TOFC cars - Empty multi-platform double-stack cars Loaded multi-platform double-stack cars can be placed in this section, if they are placed ahead of loaded or empty conventional COFC/TOFC cars and all other empties.

4404. Limiting the Size of Intermodal Trains on the Water Level Route

Do not operate an intermodal train on the Water Level Route that exceeds 12,000 tons or 14,000 feet.

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Train Rules, Car Rules
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4405. Intermodal Train Placement Requirements on the Water Level Route

Before operating an intermodal train on the Water Level Route and the train is between 6001 and 12,000 tons and/or 12,001 to 14,000 feet, make certain that the train is arranged from the engine as follows:

1	Locomotive Consist	
2	Loaded double-stack or spine cars up to 6000 tons	Which includes: - Loaded multi-platform double-stack cars - Loaded spine cars
3	Other intermodal equipment, not exceeding 6000 tons	Which includes: - Loaded or empty single double-stack cars - Loaded or empty spine cars - Loaded or empty conventional TOFC cars - Loaded or empty multi-platform double-stack cars.

4406. Handling a Coal or Ballast Train that is Equipped with an Air Dump System

When handling a coal or ballast train that is equipped with an air dump system, make certain that:

- The air dump system is not charged, except when preparing to unload.
- All cars and air hoses are coupled and the associated angle cocks are properly positioned.
- The charging hose remains with the train when the train's power is changed, except for cars with SMEX initials.

4407. Handling Passenger Trains

A passenger train may consist of a combination of passenger equipment as defined by Rule 4475 (Handling Passenger Equipment), if the cars are cleared to operate at passenger train speeds.

Do not operate a passenger train, other than an Auto Train®, that contains more than thirty (30) cars.

Do not operate an Auto-Train® that contains more than fifty (50) cars.

4408. Handling Trailers-on-Wheels (TOW)Trains - (RoadRailer® and similar type equipment)

A. TOW Equipment that is Banned from CSXT

Unless the following TOW equipment is equipped with a blue, 3-inch diameter, round sticker located on the nose of the trailer immediately above the vehicle identification number, do not operate the equipment on CSXT.

Initials	Number
AMTZ	460000 through 460253, 462000 through 462039, and 462997 through 462999
ECOZ	533000 through 533199
SWFZ	465001 through 465100
TCSZ	All, except those moving on NS Trains NS251, NS261, NS262, NS263, or NS264
In addition to the equipment listed above, all TOW equipment owned by Schneider is prohibited from operating on CSXT, unless it is equipped with the blue sticker.	

B. Limiting Train Size

Do not operate a TOW train that has more than 125 trailers or exceeds 4800 tons.

C. Handling TOW Equipment in other Trains

1. Freight Trains

Do not operate TOW equipment with other freight cars, except intermodal trains. When handling TOW equipment in intermodal trains, make certain that the TOW equipment is on the rear of the train and the train's total tonnage is 5000 tons or less.

2. Passenger Trains

When handling TOW equipment in passenger trains, make certain that the TOW equipment is on the rear of the train.

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Train Rules, Car Rules
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D. Additional Operating Rule-Related Concerns

When handling TOW equipment, comply with the following:

- Do not hump the equipment.
- Do not couple with or to TOW train equipment at more than two (2) MPH.
- Do not leave a single TOW trailer on a track in signaled territory, unless the train dispatcher is notified and provides protection.
- Do not make a reverse movement with TOW train equipment, unless the movement is absolutely necessary.
- When making a reverse movement with TOW Train equipment, protect the movement by an employee riding a coupler mate bogie designed to be ridden and not exceeding 10 MPH, or an employee walking with the movement and not exceeding the speed the employee is walking.

E. Additional Air Brake and Train Handling Rule-Related Concerns

When handling TOW equipment, comply with the following:

- Use the independent and dynamic brake with extreme caution to minimize in-train forces.
- When making a shoving movement:
 - Use only the controlling locomotive unless additional locomotive(s) are required by terrain or tonnage.
 - Limit the locomotive's output to the minimum required to move the equipment. Make throttle changes slowly and cautiously.

F. Inspecting TOW Equipment Brakes

When performing an Initial Terminal Air Brake Inspection and Test, make certain that the piston travel is between 1-1/4 and 3-1/2 inches.

An air brake with piston travel of more than 3-5/8 inches is ineffective.

When leaving TOW equipment on a grade of 1% or more, inspect at least 50 percent, but not less than 10 units, of the equipment's brakes to ensure that they are applied.

G. Detaching Locomotives from or Separating TOW Equipment

Comply with the following when detaching locomotives from or separating TOW equipment:

- Do not detach the locomotive from TOW equipment, unless under the direction of the Mechanical Department.
- Leave at least one locomotive, with its hand brake fully applied, coupled to unattended TOW equipment.
- Before making a cut on TOW equipment, make certain that the landing gear of the trailer behind the cut is down to ensure the nose of the trailer is fully supported.
- Before detaching from TOW equipment, place the automatic brake in the EMERGENCY position to reduce the brake pipe pressure to zero.
- After cutting away from the equipment, make certain that the angle cock is left in the open position.

H. TOW Parking Brakes

The truck-mounted spring parking brake functions differently from a conventional rail car hand brake. The spring parking brake cylinder contains a heavy coil spring that acts to extend the brake cylinder piston any time brake cylinder pressure to the truck is lost. Spring parking brakes also apply after an emergency brake application to keep the train from rolling away if the air pressure in the brake cylinder bleeds off.

When bleeding the air from the brake system, pull the Brake Release Handle.

I. Handling TOW Equipment Mechanical Problems

Comply with the following:

- Do not bypass any TOW train equipment with a run-around hose, unless there is no other option available.
- When applying a run-around hose to any TOW train equipment, set out the equipment at the next forward terminal where the TOW equipment can be repaired.
- When disabling a bogie spring brake and when Mechanical Department personnel are not available to disable it, set the equipment out at the first available location.
- Set out TOW equipment if the highway wheels are on the rail and the condition cannot be corrected.

Car Rules

4450. Handling Cars Doors

- **Box Cars**
Unless otherwise instructed doors must be closed and secured before departing customer track.

- **Cars with Plug Doors**
When handling cars with plug doors, inspect to insure all doors are closed and secured before moving.

- **Hopper Cars**
Except for switching movements, do not accept hopper cars for movement with hopper door or bottom discharge outlets open.

4451. Handling Overweight Cars

Do not move any car that is flagged as being overweight on CSXT train documentation, unless either the Customer Service Center or the Clearance Bureau authorizes the movement.

Do not move cars with a gross weight exceeding 220,000 pounds on track scales with a capacity of less than 200 tons.

4452. Handling “No Hump” Cars

When handling, or coupling to, one or more cars identified by train or yard documents as “Do Not Hump”, do not:

- Hump or kick the cars.
- Switch with the cars.
- Switch into the cars.
- Couple into the cars with more force than is necessary to complete the coupling.

4453. Handling Cars that are Prone to Rocking

When handling one or more Plate F box cars, high-sided gondolas, open top hoppers, or covered hoppers with a cubic foot capacity of at least 4000 that are loaded with more than 95 tons and identified by tonnage graph, comply with the following:

- Observe these cars for excessive rocking.
- Take immediate action to reduce speed if you see excessive rocking motion.
- Avoid operation between 14 and 21 MPH in locations designated by special instructions. If the train's speed cannot be maintained at or above 22 MPH, the speed of the train must be reduced to below 14 MPH.

4454. Handling Heavy Bad Order Cars

When handling one or more heavy bad ordered cars, comply with any Mechanical Department instructions provided.

4455. Identifying the Ends of Cars

Identify the ends of a car as follows:

- If the car has only one hand brake, the B-end of the car is the end with the hand brake. The other end is the A-end.
- If the car has more than one hand brake, the letters "A" and "B" are stenciled on the appropriate ends of the car

4456. Identifying Wheels and Journals on Cars

Each wheel and journal is designated by a combination of a letter for the side of the car and the number or letter of the axle that the wheel or journal is on;

Identify the wheels and journals on a car by:

1. Determining the side of the car by facing the car from the B-end. The left side “L” of the car corresponds to your left and the right side “R” of the car corresponds to your right.
2. Counting the axles from the B-end of the car to the subject axle. Axles are numbered one through nine beginning at the B-end. After nine, the axles are lettered beginning with “Z” and continuing toward “A” until the last axle on the A-unit.

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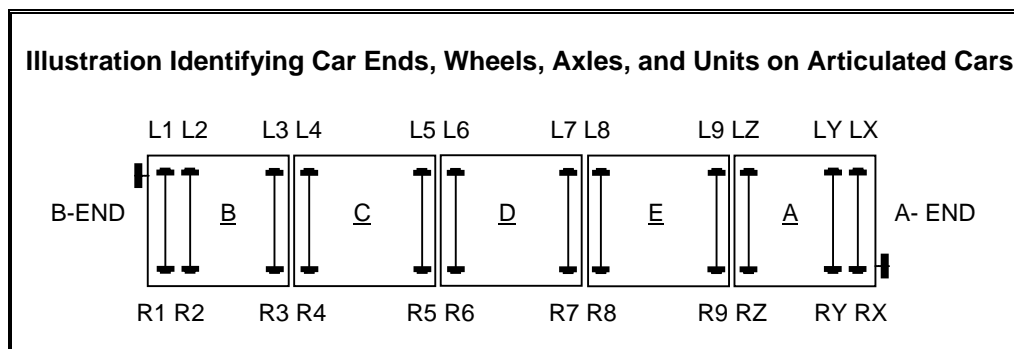
Example: The RX wheel or journal would be found on the:

- right side of the car (R) as the car was being viewed from the B-end, and
- twelfth axle (X) from the B-end.

4457. Identifying Units on Articulated Cars

Identify the units of an articulated car as follows:

- The B-unit of the car is the unit that is stenciled "B end".
- The A-unit is the end unit opposite the B-unit and stenciled "A end".
- Intermediate units are stenciled consecutively and alphabetically beginning with "C" from the B-unit toward the A-unit.



4458. Moving Defective or Damaged Cars

Before moving a defective or damaged car:

- Get instructions from the Mechanical and Transportation Departments, and
- Tell the train dispatcher of such movements.

4459. Reporting Defective, Damaged, or Improperly Loaded Cars at an Interchange Location where there is No Car Inspector On-Duty

When a defective, damaged, or improperly loaded car is offered for delivery to CSXT, inform the train dispatcher of the following items:

- The car's initials and number.
- The nature of the defect(s).
- The identification of the contents.
- The destination of the car, if known.

4460. Spotting TOFC or COFC Cars for Drive-on Loading or Unloading

When spotting TOFC or COFC cars for drive-on loading or unloading, make certain that:

- All the cars are coupled.
- The slack is adjusted to permit the proper positioning of bridge plates.
- The hand brake is applied on each car.

4461. Spotting Auto Rack Cars for Loading or Unloading

When spotting auto rack cars for loading or unloading, make certain that:

- All the cars are coupled.
- The slack is not bunched so as to permit proper placement of portable bridge plates.
- The hand brake is applied on the first, last, and every fourth car in the group of cars.

4462. Handling Loaded Auto Rack Cars

When handling loaded auto rack cars, make certain that none of those cars are placed directly behind an open top car loaded with sand, gravel, coal, or similar commodity. This rule is in addition to Rule 4471 (Handling Cars Loaded with a Shiftable Commodity).

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4463. Handling Double-Stack Cars other than EPIX, MERX, or MHFX Cars

When handling double-stack cars other than EPIX, MERX, or MHFX cars, make certain that the double-stack cars are not:

- Humped.
- Cut off in motion with the intent of coupling into another car.
- Struck by any car moving under its own momentum.
- Coupled into with more force than is necessary to complete the coupling.

A. In Mixed Freight Trains

When handling these cars in a mixed freight train with 6000 tons or more, make certain that the double-stack cars with containers on them (loaded or empty) are placed ahead of cars without containers on them.

B. In Unit Trains

When handling these cars in a unit train, make certain that the double-stack cars are placed behind the unit train cars and other cars of similar weight.

4464. Handling Single-Axle Cars - (Single-Platform TTOX and Four-Platform TTFX)

A. Limiting Trailing Tonnage

When handling one or more single axle cars, make certain that the maximum tonnage behind these cars does not exceed:

- 3000 tons, if the cars are empty.
- 5000 tons, if the cars are empty and operating on the Water Level Route.
- 6000 tons, when the cars are loaded.

B. Restricting Dynamic Brake Axles

When handling one or more loaded, single-axle cars, make certain that the dynamic brake axle value is 18 axles or less.

C. Placement Restriction

When handling one or more single-axle cars make certain that:

- None of the cars are the rear car of train.
- The single-axle cars are at least five (5) cars or platforms ahead of a helper that is on the rear of the train.
- If it is necessary to cut a helper into the train and the single-axle cars are ahead of the helper, the single-axle cars are at least five (5) cars or platforms ahead of the helper.

D. Helper Locomotive Operating Restrictions

When a train handling one or more TTOX or TTFX single-axle cars requires a helper locomotive on the rear, limit the helper as follows:

1. When using an AC Locomotive

When using an AC locomotive, make certain that:

- Only one locomotive is used.
- The locomotive's output is limited to 100 Kilopounds.
- All other locomotives in the helper locomotive consist are isolated, or weather permitting, shutdown.

2. When using one or more DC locomotives, make certain that the:

- Working horsepower is limited to 6000.
- Number of powered axles is limited to 12.
- All other locomotives in the helper locomotive consist are isolated, or weather permitting, shutdown.
- Tractive effort is limited as follows:
 - 1000 amps, when the helper has less than 4000 total working horsepower.
 - 900 amps, when the helper has between 4000 and 5000 total working horsepower.
 - 800 amps, when the helper has over 5000 working horsepower.

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4465. Handling Blocks of 30 or more “Heavy” Loads

Handle blocks of thirty (30) or more heavy loaded cars, or commodities of similar weight, on the head end of the train next behind the engine. The following commodities are considered “heavy” loads:

- Coal
- Coke
- Grain
- Ore
- Phosphates
- Limerock
- Sand
- Salt
- Minerals
- Aggregates
- Steel or lead ingots

4466. Placing Empty Cars in Trains

A. Empty flat cars over 80 feet –

For the purposes of this rule, consider the following 80 foot or longer cars as empty:

- cars weighing less than 50 tons gross weight
- flat cars with a single loaded trailer/container
- flat cars with only empty trailers/containers
- TOFC/COFC cars without any lading, trailers, or containers

B. Placement Restrictions for Empty Cars

This rule does not apply to intermodal trains handling empty TOFC, COFC, or multi-level cars.

Comply with the following when placing empty cars in trains:

- When the train’s tonnage exceeds 6000, do not place one or more empty flat cars over 80 feet long within the first five (5) cars.
- When moving empty 80 feet or longer cars in unit trains, place the cars on the rear of the train, unless the cars are boxcars. When picking up cars on line-of-road, determine the length of the car(s) being picked up by adding five (5) feet to the inside length stenciled on the side of the car.
- When your train contains a block 30 or more empty cars, make certain that the cars are placed near the rear of trains with not more than five (5) loaded cars trailing the rear car in this block.
- When your train contains one or more flat cars with initials GTTX and car-type codes of either F126 or F226, make certain that those cars are placed on the rear of the train.

4467. Handling Rotary Coupler Equipped Cars

When handling one or more cars with any of the following reporting marks, make certain that those cars are not coupled together at the rotary coupler ends when in a train or at a rotary dumping facility:

Car Initials: CPOX, SJRX, CSCX, DEEX, SEMX, HLMX, SCWX, and PLMX.

Car Initials and Number Series: CSXT or SBD series 370000, and CR or NYC 508002 – 509201.

4468. Identifying Rotary Coupler Equipped Cars

Identify cars with rotary couplers by the stenciling on the car body at the rotary coupler end.

4470. Handling Wood Rack and Bulk Head Flat Cars

Except for switching, do not handle a partly loaded wood rack car, unless the movement is:

- In a work train, or
- Authorized by the superintendent.

When switching partly loaded wood rack cars, handle the cars carefully to prevent damage and minimize movement of partial load.

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4471. Handling Cars Loaded with a Shiftable Commodity

Examples of a shiftable commodity are:

- Pipe
- Lumber
- Logs
- Poles
- A commodity similar to one of the above with a tendency to shift.

When handling one or more flat cars or open top cars loaded with a shiftable commodity that protrudes beyond the car ends or extends above the car ends and is liable to protrude beyond the car ends, make certain that the cars are not positioned next to a:

- Hazardous material shipment, as indicated in Section VI of the Eastern Code Hazardous Material Rules.
- Loaded auto-rack car.
- Locomotive.
- Caboose/shoving platform.

4472. Handling Heavy Duty Flat Cars, Schnabel Cars, and Span-Bolstered Cars

This rule addresses only the cars listed in the following chart.

Car Identity	Axles	Car Identity	Axles	Car Identity	Axles	Car Identity	Axles
APWX 1004	12	CWEX 1016	12	GEX 40010	20	PTDX 201	14
BBCX 1000	20	DODX 38870-85	8	GEX 80000	16	PTDX 202	20
CAPX 1001	20	DODX 39898-99	8	GEX 80002	16	PTDX 203	14
CEBX 100	12	EL 7600	8	GEX 80003	20	PTDX 204	12
CEBX 101	12	EL 7601	8	GPUX 100	12	TETX 20002	12
CEBX 800	36	GEX 40013	12	HEPX 200	20	WECX 101	20
CPOX 820	20	GEX 40017-18	12	KWUX 10	10	WECX 102	22
CR 766078	8	GEGX 21154-55	16	PTDX 200	12	WECX 301	22
ETMX 1001	18	KRL 16450	16	KRL 163200	16		

Before forwarding any of these cars in a train, get authorization from the chief train dispatcher.

When handling loaded cars, make certain that:

- The movement is authorized by the Clearance Bureau.
- They are placed at or near the head end of train.

When handling empty cars:

- Do not exceed 40 MPH.
- Place them at the rear of the train.

4473. Handling Caboose, Shoving Platforms or Push Cars

When handling a caboose, shoving platform or push cars, make certain that the equipment is:

- Placed at the rear of the train, unless the superintendent authorizes a different location.
- Not subjected to pusher or helper service.

4474. Handling Rapid Transit Cars

When handling rapid transit cars on their own wheels, move the cars in:

- Special train service,
- Dimensional train service, or
- Local freight train service.

When one or more rapid transit cars move in local freight train service, make certain that the train's length does not exceed 1,200 feet.

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4475. Handling Passenger Equipment

For the purposes of this rule, passenger equipment includes:

- Amtrak-owned or operated passenger and mail/express cars.
- TOW equipment mounted on Amtrak bogies and coupler mates
- Office-type cars.
- Commuter cars.

A. Handling Passenger Equipment in a Freight Train

When handling passenger equipment in a freight train:

- Make certain that the equipment is placed on the rear of the train, unless otherwise authorized by CSX Clearance Bureau.
- Do not permit the train to be shoved when the passenger equipment is on the rear of the train.
- When handling passenger equipment in an intermodal train, do not exceed the speed for intermodal trains.

B. Switching Passenger Equipment

When switching passenger equipment:

- Do not hump or flat switch the equipment with the locomotive detached.
- Do not couple the equipment to any car with a top shelf-type coupler.
- Handle the equipment separately when it is being switched and/or spotted in yards.

C. Handling Commuter Cars

When handling commuter cars, make certain that the cars have appropriate couplers and/or heavy duty knuckle adapters.

4476. Handling Commuter Cars

This rule has been deleted.

4477. Handling Wreck Cranes and Derricks

This rule has been deleted.

4478. Handling Special Series Cars Restricted by a Truck Condition

When handling any of the cars listed below, do not exceed the speed listed with them when they are restricted by train documents:

- Gondolas with stenciling NYC, CR, PRC, 40 MPH.
- CP CWP cars 45 MPH.
- DRGW cars 40 MPH empty and 50 MPH loaded.

4479. Slowing or Stopping TTEX Solid Draw Bar Cars

When slowing or stopping one or more TTEX solid draw bar cars in turnouts and crossovers in a terminal, keep the train's slack stretched.

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4480. Handling Scale Test Cars

When handling one or more scale test cars, do not hump the cars.

A. Handling Composite Scale Test Cars

The following chart contains the initials and numbers of composite scale test cars. When you have one or more of these cars in your train:

- Do not exceed 30 MPH
- Make certain that it is at the rear of your train positioned ahead of one (1) car with operative air brakes.
- Make certain that when a helper engine is required, that the helper engine is positioned ahead of these cars.

Initials	Numbers
BO	914220 through 914227
CO	914201
CR	80004, 80012, 80015, and 80070
CSXT	914203, 914228, 914229, and 914240
NYC	80062, 80063, and 80067

B. Handling Non-Composite Scale Test Cars on the Rear of Train

The following chart contains the initials and numbers of non-composite scale test cars. When you have one or more of these cars in your train, make certain that:

- It is positioned on the rear of your train.
- When a helper engine is required, that the helper engine is positioned ahead of these cars.

Initials	Numbers
CO	914204 and 914205
SBD	971498

C. Handling Non-Composite Scale Test Cars on the Head or Rear of Train

The following chart contains the initials and numbers of non-composite scale test cars. When you have one or more of these cars in your train, it may be positioned on either the head or rear of your train.

Initials	Numbers
CR	80091 and 80095
CSXT	914207, 914208, 991815, 914219 and 914220
SBD	979751, 991816 through 991818
NYC	80088 and 80093

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Clearance-Implicated Shipment Rules

4500. Ensuring Authorization to Move Shipment

Except in yards and terminal as provided for in Rule 4501 (Moving in Yards and Terminals), make certain that the movement of any clearance-implication shipment in your train is authorized by the Clearance Bureau.

Any train that is detoured or has its route extended must have new train documents issued prior to departure for the detoured territory or the extended territory.

Cars classified as QHOL (a code that indicates the car is in "hold" status) in yard system must not depart any terminal until properly classed by customer service operations, who will obtain approval from the Clearance Bureau.

4501. Moving Clearance-Implicated Shipments in Yards or Terminals

Do not move a clearance-implicated shipment within a yard or terminal without Clearance Bureau authorization, unless the shipment is being placed for measurement. When moving a clearance-implicated shipment for measurement, make certain that it is:

- Protected by the train dispatcher or yardmaster controlling the movement.
- Positioned so that the crew can observe it.
- Placed in a track with sufficient clearance for the shipment.

4502. Picking up or Setting Off on Line-of-Road

Before picking up a clearance-implicated shipment on the line-of-road, make certain that you receive instructions from the Clearance Bureau.

When handling a train containing a dimensional or valuable clearance-implicated shipment, get permission from the appropriate Transportation Department supervisor before making any pick-up or set-off.

4503. Verifying Inspection

Before moving a clearance-implicated shipment from its point of origination or an interchange point, make certain that the shipment has been inspected by Mechanical Department personnel.

4504. Notifying Necessary Personnel about Clearance-Implicated Shipments

A. Notifications Required by the Superintendent

Superintendents, or their designee must notify the:

- Mechanical Department supervisor on-duty when tendering a clearance-implicated shipment requiring inspection at origin or interchange.
- Chief train dispatcher for authority to add the shipment to a particular train after the Clearance Bureau has authorized and protected a clearance-implicated shipment.
- Appropriate representative of the foreign line whenever one or more clearance-implicated shipments are being interchanged with that railroad.

B. Notifications Required by the Chief Train Dispatcher

Chief train dispatchers, after authorizing the movement of a clearance-implicated shipment, must issue a qualifier number to the crew handling the shipment advising them to have the proper clearance protect message in their possession.

4505. Confirming Written Instructions

When handling a train containing one or more clearance-implicated shipments, make certain that you have Clearance Bureau instructions as part of your CSXT train documentation for each shipment that has not been authorized verbally.

4506. Placing Clearance-Implicated Shipments in a Train

When a clearance-implicated shipment is placed in a train at its originating yard or terminal, either the yardmaster or train dispatcher must make certain that the shipment is placed:

- On a train moving over correct route of movement as outlined in the Clearance Bureau's authorization.
- Properly within the train it is moving.

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4507. Handling Dimensional or Valuable Clearance-Implicated Shipments

When handling dimensional or valuable clearance-implicated shipments, do not:

- Hump or flat switch the shipment.
- Flat switch with or against the equipment.
- Move in a train if it will be necessary to switch against the equipment.

4508. Controlling the Safe Movement of Clearance-Implicated Shipments

The chief train dispatcher must:

- Control the safe movement of clearance-implicated shipment(s) over main tracks, sidings, or other segments of track under his or her jurisdiction.
- Notify other chief train dispatchers along the route of the movement to protect trains handling clearance-implicated shipments over adjoining territories.

4509. Notifying Yardmaster of Clearance-Implicated Shipments

When handling one or more clearance-implicated shipments in your train, do not enter a yard or terminal where a yardmaster is on-duty until you tell the yardmaster of the shipment.

4510. Securing Permission Before Loading a Clearance-Implicated Shipment

A. Adjacent to Main Tracks

Before loading a clearance-implicated shipment onto a car on a track adjacent to a main track, get permission from the chief train dispatcher.

B. In Yards or Terminal Areas

Before loading a clearance-implicated shipment onto a car on a track in a yard or terminal area, get permission from the yardmaster.

Engineering Department Work Equipment Rules

4550. Requirements of the Employee-in-Charge

A. Responsibilities

The employee-in-charge is responsible for movements of Engineering Department work equipment that is:

- Loaded in or on cars.
- Moving under its own power.
- Being moved in a train on its own wheels.

B. Making Clearance Determination

The employee-in-charge must determine whether the shipment is clearance-implicated, based on the:

- type of equipment being moved
- type of train service
- lading dimensions

C. Furnishing Shipping Information

The employee-in-charge must give the appropriate Transportation Department employee or Customer Service Center employee:

- shipping instructions
- lading information

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4551. Moving Large Engineering Equipment

This rule does not apply to hi-rail equipment, but does apply to Burro cranes, undercutters, ditchers, Jordan spreaders, and snow plows.

When moving large engineering equipment, comply with the following:

- Unless being moved in work train service or to or from the work location and the move does not require a crew change, consider the equipment a clearance-implicated shipment.
- Do not exceed 25 MPH, unless specifically cleared for a higher speed.
- Place the equipment on the head end of the train with no more than 3500 tons trailing the equipment or at the rear of the train immediately ahead of an occupied caboose/shoving platform, unless being moved in work train service or to or from the work location.
- If the equipment has a counter balance, make certain that the counter balance end is positioned toward the leading end of the train.
- Do not:
 - Hump or flat switch the equipment.
 - Permit the equipment to be shoved from the rear.

4552. Handling Rail Cars Loaded with Engineering Equipment

A. Inspecting the Equipment

The Engineering Department employee-in-charge must make certain that the lading and any booms are properly secured.

A qualified Engineering Department or Mechanical Department must inspect the car to confirm that the dimensions are within Plate C. If not within Plate C, handle the car as a clearance-implicated shipment.

B. Placing the Equipment in Regular Freight Service

Make certain that railcars loaded with engineering equipment are placed within five (5) cars of the engine; or, if the train has an occupied caboose/shoving platform, within five (5) cars of the caboose/shoving platform.

4553. Handling Material Handlers

The employee-in-charge must determine if a material handler is loaded on a "home" car.

If the material loader is not loaded on a "home" car, the employee-in-charge must tell the Transportation Department and the Clearance Bureau to handle the shipment as a clearance-implicated shipment.

A. Handling CSXT 999130

When handling CSXT 999130, make certain that it is handled as a clearance-implicated shipment.

4554. Handling Welded Rail Equipment

When handling a train containing welded rail equipment, make certain that there is a means of preventing any rail movement beyond the end of the equipment by:

- Bulkhead doors, which must be closed and locked before movement
- Designated buffer cars
- Loaded hopper cars

A. Handling Welded Rail Equipment as a Separate Movement

When the number of loaded welded rail equipment cars, including the cars preventing rail movement, exceeds 12, make certain that no other equipment is moved in the train except for cars relating to the rail, such as: loading and unloading cars and buffer cars.

B. Handling Welded Rail Equipment in Freight Trains

Do not move more than 12 loaded welded rail equipment cars in a freight train.

When loaded welded rail equipment is moved in regular freight service, make certain that the rail equipment is next to the locomotive consist.

When empty welded rail equipment is moved in regular freight service, make certain that the empty welded rail equipment is handled on the rear of the train.

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C. Limiting the Number of Rail Trains in a Single Movement

Do not handle more than two rail trains, either loaded, empty, or in combination, in the same train. When one train is loaded and one is empty, make certain that the empty train is on the rear.

4555. Handling Equipment with Air Activated Systems

Before moving equipment with air activated systems (such as air dump cars, spreaders, etc.) in a train other than a work train, make certain that:

- All moveable components are secured.
- The dumping line hoses on each end of the car are disconnected.
- The cut-off valves in the dumping line are closed.

A. Charging the Equipment's Dump Reservoir System

Before charging the equipment's dump reservoir system, make certain that both dump valve handles (one on each side of the car) are in the OFF position.

4556. Handling Air Dump Cars

Do not exceed 30 MPH when handling the following air dump cars:

Initials	Numbers					
BO	913801 through 913829					
CRR	1632 through 1635					
CSXT	913301 through 913304	913311	913321	913322	913324	913425
	913306 through 913308	970201	970221	970206	970210	970603
	913800 through 913829	970606	995289	995290	995322	995327
	913980 through 913983	995334	995337	995339	995340	995342
	995297 through 995299	995347				
SBD	995338, 995343, 995344, and 995352					
SCL	465326 through 465355					
WM	913980, 913983					

4557. Handling Camp Cars (including Univan Camp Cars)

When handling camp cars:

- Comply with Rule 4400 (Train Speed Restrictions).
- Make certain that the cars are placed at the rear of the train only trailed by a caboose/shoving platform, unless a different placement is authorized by the superintendent.
- When camp cars are handled in trains requiring a helper engine (s) at the rear, make certain that the helper is placed ahead of the camp cars.

4558. Handling Type SFIA, SFIB, and/or SF2A Flangers

When handling Type SFIA, SFIB, or SF2A flangers, comply with the following:

- When in a train for movement:
 - Make certain that the flanger is secured for movement.
 - Do not exceed 50 MPH.
- When handled behind the locomotive flanging, do not exceed 30 MPH.
- Do not exceed 5 MPH when working and:
 - Passing station platforms.
 - Passing over highway crossings at grade.
 - Passing equipment on adjacent tracks.
 - Backing up.

4559. Moving Engineering Department Specialized Equipment

"Specialized Equipment" means Sperry Cars, gauge restraint measurement system (GRMS) cars, rail grinders, undercutters, ballast cleaners, and/or ditchers.

A. Responsibilities of the Engineering Department

If the specialized equipment is other than GRMS equipment, a representative of the Engineering Department must tell the chief train dispatcher how the specialized equipment will be operated, either as on-track equipment or as a train.

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B. Locomotive Engineer Responsibilities

When called to pilot the movement of this equipment, the locomotive engineer must monitor and ensure compliance with speeds, signals indications, applicable rules, and special instructions.

4560. Handling Measurement Cars

When handling measurement cars, make certain that they are being handled in special train service and comply with the following:

A. Track Geometry Cars

Track geometry cars are:

- CSXT 999302.
- CR 21 and CR 22.
- NS 31, NS 33, and NS 34.

Do not exceed the following speeds.

Railroad	Speed when not Testing	Speed While Testing
CSXT	Passenger Speed	60 MPH
Conrail	Passenger Speed	60 MPH
NS	60 MPH	60 MPH

B. Research Cars

Research cars include:

- CSXT 994501.
- CR 19.
- NS 32 and NS 49
- GECX 90
- BNSF 82 and BNSF 83.

Railroad research/test cars may move in freight trains positioned as follows:

- When not testing:
 - Place the research/test car on the head end of the train.
 - Do not exceed 20 powered axles on the head end of train (count 'AC' locomotives as 9 axles when calculating this restriction).
- When testing, the equipment may be placed anywhere in the train.

When handling railroad research/test cars:

- You may permit CSX-designated riders to occupy these cars, when the cars are in a freight train.
- Do not hump or flat switch this equipment with the locomotive detached.
- Do not couple the equipment to any car with a top shelf coupler.
- Handle the equipment separately when it is being switched and/or spotted in yards.
- Do not exceed the following speeds:

Railroad	Speed when not Testing	Speed While Testing
CSX	Passenger Speed	70 MPH
Conrail	Passenger Speed	60 MPH
NS	60 MPH	60 MPH

C. GRMS/TSAV Equipment (Gauge Restraint Measurement System)

GRMS/TSAV equipment includes:

- GRMS 1.
- GRMS 2.

Do not exceed 35 MPH.

4561. Moving GRMS Equipment

When handling GRMS equipment in:

- other than cab signal territory, operate the equipment as a train.
- cab signal territory, operate the equipment as on-track equipment.

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4562. Requirements of Moving Specialized Equipment

The following table details the requirements of operating specialized equipment.

Equipment	Activity	Speed	Pilot
GRMS in non-cab signal territory	Working or traveling as a train.	35	Engineer
GRMS in cab signal territory	Working or traveling as on-track equipment	35	MofW
Sperry Car	Working	40	MofW
	Traveling as:		
	A train	35	Engineer
	On-track equipment	40	MofW
Rail Grinders	Working	30	MofW
	Traveling as:		
	A train	50	Engineer
	On-track equipment	30	MofW
Undercutter	Working	30	MofW
	Traveling as:		
	A train	40	Engineer
	On-track equipment	30	MofW
Ballast Cleaner	Working	30	MofW
	Traveling as:		
	A train	40	Engineer
	On-track equipment	30	MofW
Ditcher Cleaner	Working	30	MofW
	Traveling as:		
	A train	40	Engineer
	On-track equipment	30	MofW

Surveillance Service

4600. Handling Shipments Requiring Rail Inspection Service

When handling one or more cars requiring Rail Inspection Service, tell the train dispatcher:

- when taking charge of the train, or when the cars are picked up.
- when stopped between terminals.
- each thirty minutes while stopped.

Glossary

These definitions are in addition to those found in the Safety Rules, Operating Rules, Air Brake and Train Handling Rules, and Hazardous Material Rules. Where the definitions differ, the definition in the individual books apply.

Articulated Car –

A multi-car bodied car whose adjacent car bodies share a common truck.

Bogie–

A freight car truck equipped with an adapter to accommodate TOW equipment on top of the bolster/adapter plate with holes in sides to permit trailer locking. A brake control valve mounted on the bogie brake cylinder incorporates a spring brake that automatically applies when no brake pipe pressure is present.

Caging–

A means of mechanically releasing the spring parking brake on a bogie. The caging tool compresses the parking brake spring and releases the brake.

Clearance-Implicated Shipment –

Any shipment that exceeds a published clearance limitation for the specified route of movement and/or requires specific operating handling procedures for safe movement, including:

- Load on a flat car, or in a gondola that extends beyond the car's sides or end sills in height, width, or length, including all overhanging and bolstered load shipments.
- Dead locomotive moving on waybill authority and on its own wheels.
- Maintenance-of-way work equipment moving on its own wheels (e.g. wreck cranes, bridge department cranes, pile drivers, snow plows, undercutters, and ditcher spreaders).
- Shipments requiring a movement restriction (e.g. radioactive material, damaged equipment).
- Intermodal shipment, including loaded double-stack container cars.
- Multi-level auto rack shipment measuring at least 20 feet 2 inches above the top of the rail.
- Shipments of restricted span-bolstered heavy-duty cars covered by AAR Circular #0t-2B.
- Free movement for nonprofit agencies.
- Open load exceeding \$1 million dollars in value.
- Railcars loaded with engineering equipment exceeding Plate C.
- CSXT 999130 material handler.

Circus/Carnival Train –

A train consisting entirely of cars belonging to a circus or carnival.

COFC –

This is an acronym for a Container On a Flat Car.

Coupler Mate Bogie–

A freight car truck that permits the locomotive to couple to the head end of a TOW train. The coupler mate freight car truck has a coupler/socket on one end to connect to a trailer and a railroad coupler on other end to connect to a locomotive. Each coupler mate bogie shall be equipped with a tool box containing appropriate instructions, job aids, and the necessary tools and equipment required to address problems that may be encountered en route.

CSX Train Documentation —

A computer-generated document consisting of some or all of the following:

- Tonnage Graph
- Restricted and Special Handling List
- CT-168 Report
- Clearance Bureau Instructions
- Train Listing and Hazardous Material Descriptions
- Hazardous Special Handling Instructions
- Hazardous Materials Radio Waybill Form

Double Stack Car (DS) –

A car designed to carry a trailer or container(s). When carrying containers, one container may be placed on top of another.

Flanger –

A piece of equipment used to clear flangeways of snow.

Glossary

Heavy Duty Flat Car—

A flat car with eight or more axles.

Hump –

A method of switching cars by pushing them over a hill and letting gravity propel them into classification tracks.

Intermodal (Trailer Van – TV) Train—

A freight train consisting entirely of equipment designed to carry trailers, containers, motor vehicles, automotive frames and/or loaded box cars.

Locomotive Consist—

A locomotive or combination of locomotives properly coupled for multiple-unit operation and operated from a single control.

Multi-Platform Car –

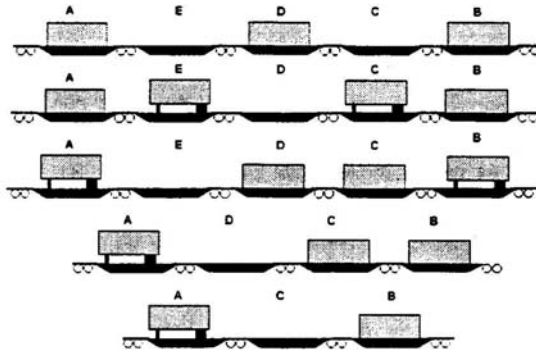
A double-stack or spine car with three or more platforms.

Loaded – each end platform is occupied and no two adjoining platforms are unoccupied.

Empty – either end or any adjoining platforms unoccupied.

Examples of Loaded Multi-Platform Stack/Spine Car Configurations

Shown below are examples of container/trailer loading configurations that would be considered a loaded car. This applies to both stack and spine cars, and to both articulated (shown below) and solid drawbar connected equipment. The containers/trailers can be loaded or empty. (The configurations shown below are in addition to all platforms being loaded.)



Rail Train –

A freight train consisting of more than 12 cars designed to transport, load, or unload welded or continuously jointed rail.

Scale Test Car –

A compact car equipped with weights for the testing of track scales.

Composite –

A non-self-propelled car with either 2 or 4 axles and a wheelbase of seven (7) feet or less used to test scale accuracy.

Non-Composite – A self-propelled car with either 2 or 4 axles and truck centers not exceeding 50 feet used to test scale accuracy.

Schnabel Car –

A car having two separable interlocking units that form a car body. Units may be separated and load interposed between and locked in place to form a complete unit.

Short Car –

A single car that is 40 feet or shorter over the pulling faces of the couplers.

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Span Bolster –

A beam-like structure with each end resting on a conventional truck bolster and arranged to support a car body through a center plate at or near its mid-point. Span bolsters can also be used with two six-wheel trucks to provide 24-wheel (12-axle) support under extremely heavy cars.

Spine Car –

A car with only a center sill structure designed to carry containers or trailers. When a spine car has multiple platforms, see definition for Multi-Platform car. (VTTX 30XXXX series cars are not considered spine cars).

TOFC –

Trailer on a Flat Car.

Trailer-on-Wheels (TOW) Train –

A freight train consisting entirely of highway trailers/container on chassis equipped with railroad wheels, such as RoadRailer® and similar type equipment.

Thru-Truss Bridge –

A bridge span in which the steel framework extends above and over the top of rail.

Unit Train –

A train having thirty (30) or more cars designed to carry grain or minerals.

Water Level Route –

A section of CSXT trackage extending between:

- Chicago, IL and Greenwich, OH,
- Greenwich and Buffalo, NY, and
- Buffalo and North Bergen, NJ

Work Train –

A freight train handling maintenance-of-way work equipment and working on the roadway.

Wreck Crane –

A locomotive derrick used primarily in clearing train accidents.