“ SAFETY FIRST ”

SAFETY PERFORMANCE GUIDE

- Daily Locomotive Inspection
- Initial Terminal Road Train Air-Brake Test
- Nullifying and Restoring Operating Controls
- Train Securement Rules

“ SAFETY FIRST ”

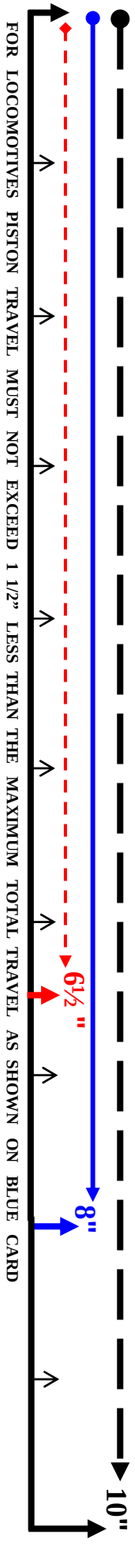
The nation’s railroads provide vital transportation services to every major metropolitan center across the country creating overlapping safety concerns for rail industry employees, shippers and the public. In response, “Safety First” was jointly developed by the UP General Committees of Adjustment and State Legislative Boards with the intent of seeking the most responsible and professional means of improving railroad related health and safety issues.

Accountability for operational safety is a shared responsibility. As the most skilled and highly trained operating craft employees in the rail industry, we are committed to doing everything within our power to ensure the safest possible railroad operating environment.

For more information or to report safety issues, visit:

www.bletsafetyfirst.org

International Brotherhood of Teamsters - Rail Conference
Brotherhood of Locomotive Engineers and Trainmen
Since 1863, A Tradition of Forward Thinking



31.2.2 – CONDUCTING A DAILY LOCOMOTIVE INSPECTION

Locomotive Cab

Not all defects are non-complying conditions. However, the following items are non-complying conditions if they do not function properly during the daily inspection.

Remote control locomotives must be in manual mode when conducting inspection.

Inspect these three general areas of each locomotive:
Note: B-units and units designated or modified not to be occupied, are not required to have or be equipped with all the devices included in the inspection.

A. Control Compartment/Locomotive Cab
Verify that FRA Form F 6180-49A (blue card) is displayed under a transparent cover in the cab of each locomotive. Operate sanders to deposit sand in front of each locomotive's lead wheels using the reverser position to determine the direction.
Ensure that:

1. Each air gauge registers correctly and is within 3 psi of the required pressure. See Rule 31.7 (Standard Air Pressures).
2. At least one headlight bulb is to be operational on each end of the locomotive consist.
3. At least one of two ditch lights is operational in the direction of travel.
4. Horn operates.
5. Bell operates.
6. Gauge lights and engineer's overhead cab light illuminate. If burned out and other available lighting is sufficient to allow visibility from the crews normal position, report as a defect but not a non-complying condition.
7. Speed indicator functions accurately. After a daily inspection, if the speed indicator failure is identified on the lead locomotive as soon as it begins moving, the failure is a non-complying condition discovered during the daily inspection.
8. Locomotive cab is free of stumbling or slipping hazards.
9. Windows provide a clear view. Small cracks that do not obscure view must be reported as a defect but not a non-complying condition.
10. No traction motors have been cut out. However, on GE AC, GE-8 DC, GE-9 DC & EMD AC locomotives, one or more traction motors/trucks may be cut out and not considered a non-complying condition.
11. Cab seats are properly secured.

Be conversant with the following rules:

- Rule 31.2.1 – Inspection Requirements
- Rule 31.2.3 – Complete Required Daily Inspection Forms
- Rule 31.2.4 – Locomotive With Non-complying Condition Safe To Move

Sanitation Compartment / Toilet Facilities:
Effective June 3, 2002 the FRA amended the locomotive daily inspection regulations by adding standards that address toilet and washing facilities for employees who work in locomotive cabs. ***With some exceptions, occupied locomotives are required to have an operative, sanitary toilet facility***.

See Cab Sanitation Guide handout for general guidelines and exceptions.
To report defective / non-complying toilet facilities go to:
www.bletsafetyfirst.org

Walk Way & Engine Compartment (Both Sides)

B. Walkway and Engine Compartment
Inspect both sides of each locomotive to ensure that:

1. Walkways and walk-in compartments (car body-type locomotives) are clear of debris, tools, and accumulated oil or grease that present a hazard to the crew.
2. Handrails, hand holds, steps, ladders, safety chains, and guards are secured and ready for service. Inspect for broken, bent, damaged, or loose equipment. Make sure safety chains are connected high enough for safe passage.
3. All electrical and rotating equipment guards are in place.
4. The diesel engine has no apparent exhaust, oil, water, or fuel leaks.
5. The hand brake is operational.

Ground Level (Both Sides)

C. Ground Level
Inspect the exposed areas for apparent defects, but **do not crawl under or between locomotives** to make the visual inspection.
Set hand brakes, if necessary, and walk around both sides of the locomotive to ensure that:

1. Sand is deposited on the rail in front of the lead wheels of each locomotive in consist.
2. Fuel tank is not leaking.
3. No defects such as cracks and broken or missing parts are on the:
   - Locomotive trucks
   - Wheels
   - Gear cases
   - Draft gears
4. Brake cylinder piston travel is:
   - Minimum: *Sufficient to provide brake shoe clearance when the brakes are released.*
   - Maximum: *1-1/2 inches less than the travel entered on FRA Form F 6180-49A (blue card) in the locomotive cab.*
5. Foundation brake rigging is secured and all components other than wheels and sand hoses are at least 2 1/2 inches above the top of the rail.
6. Snowplow, pilot, or endplate is properly secured and is between 3 inches and 6 inches above the top of the rail.
7. Brake shoes are secured and approximately in line with the tread of the wheel. Make sure the shoe has no obvious lips or overhangs.
8. No part of the electrical cable is lying on the coupler.
9. Unused electrical cables are stowed, or the disconnected ends are placed into a dummy receptacle or a multiple-unit cable holder.
10. Manually drain oil and water from main reservoirs that are not equipped with automatic drains. If equipped with automatic drains, ensure the valve handles are then turned fully clockwise to the automatic position, with the stem extending beyond the valve handle.

INITIAL TERMINAL & ROAD AIR-BRAKE TEST (Class 1)

Air-Flow Method (AFM) Rule 30.9.1

AFM is the preferred method to test brake pipe leakage. To qualify a train's air brake system using AFM, the train must be equipped as follows:

- ✓ The controlling locomotive has a maintaining-type automatic brake valve.
- ✓ The train has a gauge or device at the rear of the train.
- ✓ The locomotive has an air flow indicator with a direct reading of air flow increments no greater than 10 cubic feet per minute (CFM).

Conduct an AFM test as follows:

1. Charge the brake system to within 15 psi of the regulating valve setting as indicated by a gauge or device at the rear of the train.
   - After receiving proper notification to set the brakes, make a twenty (20) pound brake-pipe reduction with the automatic-brake valve. (Rule 30.10.2)
   - After the brake-pipe air has stopped exhausting at the automatic-brake valve, notify the inspector that the brakes are applied for the test. (Rule 30.10.2)
   - After receiving proper notification to release the brakes, place the automatic-brake valve handle in RELEASE position. (Rule 30.10.2)
   - Notify the inspector that the brakes have been released. (Rule 30.10.2)
2. When air flow does not exceed 60 CFM, AFM test is complete. If air flow exceeds 60 CFM, train must be inspected for leakage, leakage corrected, and re-tested.

Brake Pipe Leakage Method Rule 30.9.2

If the train does not meet AFM test conditions conduct a brake pipe leakage test as follows:

1. Charge the brake system to within 15 psi of the regulating valve setting as indicated by a gauge or device at the rear of the train.
2. Wait for the signal to apply the brakes.
3. When the signal is received, reduce brake pipe pressure by 20 psi.
4. Allow the brake pipe exhaust to stop.
5. Wait 1 minute.
6. Cut out the automatic brake valve maintaining feature.
7. Wait an additional 1 minute for the brake pipe pressure to equalize
8. Time the brake pipe leakage for 1 minute. If the leakage exceeds 5 psi, the train must be inspected for leakage, leakage corrected, and re-tested.
9. When the signal to release the brakes is received, move the automatic brake valve to RELEASE position. Cut in the automatic brake valve maintaining feature.

Note: Utilize the Distributed Power systems automated brake pipe leakage mode when checking leakage on DP trains.

31.6.2 – Procedure for Conducting Locomotive Air Brake Test

Ensure locomotive is properly secured.

From the ground, observe that the locomotive brakes apply and release during this procedure:

1. With the independent and automatic brake valve handles in RELEASE, apply the independent brake.
2. After observing that the brakes apply on each locomotive, release the independent brakes.
3. When the brakes are released on all locomotives, apply the automatic brakes by making a 10-psi brake pipe reduction.
4. After the brakes apply on all locomotives, actuate and observe that the brakes release.
5. Reduce brake pipe pressure an additional 10 psi to reapply the brakes.
6. Determine that all brakes apply on all locomotives.
7. Cut out the automatic brake.
8. Observe gauges and verify that equalizing reservoir indicates no leakage and that brake pipe leakage does not exceed 5 psi per minute.
9. Cut in automatic brake and move automatic brake valve handle to RELEASE position.
10. Determine that all brakes release.

31.19.1 – Cut Out Operating Controls
31.19.2 – Restore Operating Controls

To cut out operating controls, do the following:

1. Apply sufficient hand brakes to hold locomotive consist.
2. Place the throttle in IDLE.
3. Place the reverse lever in NEUTRAL and remove the handle.
4. Fully apply the independent brake.
5. Cut out the independent brake.
6. Place the independent brake valve handle in RELEASE.
7. Make a 20-psi brake pipe reduction.
8. Cut out the automatic brake.
9. Place the automatic brake valve handle in HANDLE OFF/CONTINUOUS SERVICE.
10. Place the generator field switch in the OFF position.
11. Disarm 2-way EOT, if equipped.

To restore operating controls, position equipment on the control stand as follows:

1. Replace the reverse lever.
2. Place the independent brake valve handle in FULL APPLICATION.
3. Cut in the independent brake.
4. Place the automatic brake valve handle in RELEASE.
5. Cut in the automatic brake.
6. Place the generator field switch in the ON position.
7. Place the engine run switch in the ON position.
8. Place the control/fuel pump switch in the ON position.
9. Conduct the test as specified in Rule 31.6 (Locomotive Air Brake Test).

TRAIN & LOCOMOTIVE SECUREMENT RULES

7.6 Securing Cars or Engines

Do not depend on air brakes to hold a train, engine, or cars in place when left unattended. Apply a sufficient number of hand brakes to prevent movement. If hand brakes are not adequate, block the wheels.

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

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

32.1.1 – Securing an Unattended Train or Portion of Train with Locomotive Attached

To secure a train or a portion of a train with the lead locomotive consist attached, perform the steps below:

1. Secure equipment against undesired movement as outlined in Rule 32.1 (Securing Equipment Against Undesired Movement).
2. Secure the lead locomotive consist and apply the air brakes as outlined in Rule 32.1.3 (Unattended Locomotives).

32.1.2 – Securing an Unattended Train Before Detaching Locomotive

When any part of a train is left standing do not depend on the air brake system to secure the cars.

When detaching locomotives or locomotives and cars:

1. Secure equipment against undesired movement as outlined in Rule 32.1 (Securing Equipment Against Undesired Movement).
2. Release air brakes to ensure hand brakes will prevent movement.
3. Make a 20-psi brake pipe reduction.
4. Close angle cock on rear locomotive or last car to be detached from portion left standing. Leave angle cock open on portion left standing.
5. Allow brakes on any standing portion to apply in emergency. When available, use the end-of-train telemetry device to make sure that brake pipe pressure drops to 0 psi.
6. Do not bottle air or maintain air pressure in the brake pipe when locomotives are detached or yard air is uncoupled. However, if cars will not be left unattended and the locomotive will immediately couple to the cars at the opposite end; after the brake pipe pressure has completely exhausted, wait 1 minute, then the angle cock on the standing portion of the train may be closed to allow a locomotive to switch the cars from the opposite end.

Exception: When separating a train in temperatures below 25 degrees F and the train is on a light grade, (see Glossary) follow the steps in Rule 30.17 (Inbound Train Inspection) to prevent vent valves from sticking open.

32.1 - Securing Equipment Against Undesired Movement

Crew members are responsible for securing standing equipment with hand brakes to prevent undesired movement. The air brake system must not be depended upon to prevent an undesired movement.

When leaving cars unattended use the following steps to determine the number of hand brakes to be applied:

- On a descending grade with slack bunched, apply the hand brakes on the low end of the cut of cars. To verify the hand brake(s) applied will prevent movement, release all air brakes. (See guideline below when unable to verify sufficient hand brakes applied).
- On an ascending grade with slack stretched, apply the hand brakes on the high end of the cut of cars. To verify the hand brake(s) applied will prevent movement, release all air brakes. (See guideline below when unable to verify sufficient hand brakes applied).
- At other locations where the crew has determined that equipment will not move with all brakes released, after slack is adjusted, apply enough hand brakes to hold the equipment. Sufficient hand brakes must be applied to prevent undesired movement of equipment from outside forces or when coupled to by other equipment.

  Note: Retaining valves on the cars to be left must be in the EXHAUST position.

The number of hand brakes to be applied depends on:

- Grade.
- Number of loaded and empty cars, and type of car.

Note: *Solid drawbar articulated cars and heavy duty flatcar, 8 axles or more, and most 5-unit articulated intermodal cars have two or more hand brakes. When applying hand brakes on one of these cars, all of the hand brakes must be applied. Most of the intermodal cars having two hand brakes have the hand brake painted orange and/or are stenciled "SECOND HAND BRAKE AT OPPOSITE END".*

- Weather conditions (wind and temperature).

The following guideline is for the minimum number of hand brakes required if unable to verify that sufficient hand brakes have been applied by release of the air brakes (i.e. only rear of train being left unattended). Additional special instructions may be in effect on some subdivisions.

Guideline Chart When Unable to Verify Required Hand Brakes by Release of Air Brake (Go to rule book (Rule 32.1) to see the '**Guideline Chart**' for minimum number of hand brakes required).

Terminal Areas:
Terminals, classification bowl tracks, car and locomotive facility service and repair tracks may have their own minimum number of hand brakes to be applied at each location.

Check Superintendent's Bulletins for specific requirements for your location.

32.1.3 – Unattended Locomotive(s)

When securing locomotives:

1. Place the throttle in IDLE unless you are protecting the engine from freezing.
2. Place the transition handle (if equipped) in the OFF position.
3. Place the generator field switch or the circuit breaker on the control stand (if equipped) in the OFF position.
4. Remove the reverser handle from the reverser slot on the control stand and place it in the receptacle, if equipped. Do not remove the reverser handle if you need to increase the throttle position to prevent freezing.
5. On locomotives coupled to other equipment, apply hand brakes on all locomotives. Release air brakes to determine hand brakes will prevent Movement. However, hand brakes on remote control locomotives are not required when equipment remote control locomotive is coupled to is properly secured.
6. Make a 20-psi brake pipe reduction after allowing the brake system to charge.
7. Leave the automatic brake valve cut in.
8. Fully apply the independent brake.
9. Place engine control switch to ISOLATE on all locomotives.

Additional securement guidelines for unattended locomotives not coupled to other equipment:

10. Must not be left unattended on a main track.
11. When left unattended on auxiliary tracks must be protected by derail(s) or a facing point switch lined and locked to prevent movement to the main track.
12. Must have all hand brakes applied. Release locomotive brakes to determine hand brakes will prevent movement.

Exception: Distributed power remote locomotives, when on unattended trains, do not require hand brakes to be applied or engine control switch to be placed in ISOLATE when train is otherwise properly secured. Distributed power remote consists may be left standing with all hand brakes applied at any location, even on the main track, when in the process of making up a DP train. At mechanical facilities, when locomotives are protected by outbound derails on designated servicing tracks, apply a sufficient number of hand brakes to prevent undesired movement, but a minimum of one per locomotive consist.

Air Conditioning

To date, the FRA has refused to issue mandatory air conditioning regulations.

It continues to be our responsibility to report these defects to the carrier and to our "Safety First" website at:

www.bletsafetyfirst.org