

2.3 Testing

2.3.1 Preparation

1. Secure loco (Handbrake on, chocks on both sides of a wheel, sand magnet valve cutout. Set reverser to forward to get Cab signals activated.)
2. System charged (BP to 110psi, Main Res to 130-140 psi). AB released.
3. IB released.

2.3.2 IB test

1. Move IB to Full Application. (Note BC to 72 psi)
2. Move IB to Release.
3. (As you move towards Release, stop briefly every 10 psi of BC pressure and..)
Note that pressure holds at 10psi increments. (This tests the self-lapping feature if IB)

2.3.3 Brake Pipe Leakage Test

1. Make a 10psi AB reduction of the BP pressure.
2. Cutout AB cutout valve.
3. Leakage must not exceed 3psi per minute. (Use watch to verify.)
4. Cut in AB cutout valve.
5. Make a AB full service reduction. (AB -> Service. Go down to BP=110-32=78 psi. AB -> Lap. Observe gauges: BP to 78)
6. Confirm proper BC pressure. (Must be 50-65 psi) (Leave AB applied for next test.)

2.3.4 Dynamic Brake Interlock Test

1. (Simulate if you have no DB handle) Set DB properly. (DB switch on control stand=ON; DB c/b on control panel=ON; Engine Run = ON; Generator Field Switch =ON. Isolate Switch =RUN. DB handle -> Setup for 10 sec to set DB circuits up.)
2. Move DB handle to notch 2. (This should release the AB. Simulate that by using the IB Actuate feature which does the same.) and confirm BC pressure drops to zero.
3. Leave DB handle in No. 2 position until step 1 of Emergency Brake test is completed. (To test that Emergency Application nullifies DB.)

2.3.5 Emergency Brake Test

1. Place the AB handle to emergency and note that brakes apply in emergency. (BC to 20% above full service, BP to zero.)
2. Note PCS (light is ON).
3. Note emergency sanding (and brakes applied – usually by someone on the ground).
4. Recover from emergency. (On 26E1, move AB to emergency and leave for one minute to reset the A-1 Charging Cutoff Pilot Valve. Then AB-> Handle Off, at

which point PCS light goes out. Repeat if unsuccessful. Also, reset the switches set for the DB test)

2.3.6 Deadman/Alerter Test

1. Initiate a penalty application (by not ackn the alerter) and note that a full service application occurs. (BP and Equ Res to 78, BC between 50 and 65)
2. Note PCS (light is ON).
3. Activate independent quick release feature (actuate IB) and note that BC pressure drops to zero.
4. Recover from penalty application. (On 26E1, move AB handle to Lap for one minute to reset P2A valve, until PCS light goes out, then release)

2.3.7 Emergency Valve Test

1. Open the emergency brake valve and note that brakes apply in emergency. (BC to 20% above full service, BP to zero.)
2. Note PCS (light is ON).
3. Note emergency sanding (and brakes applied – usually by someone on the ground).
4. Recover from emergency. (On 26E1, move AB to emergency and leave for one minute to reset the A-1 Charging Cutoff Pilot Valve. Then AB-> Handle Off, at which point PCS light goes out. Repeat if unsuccessful.)

2.3.8 Power Test

1. Apply the AB and IB. (BP to 78)
2. Properly position controls. (Engine Run = ON; Generator Field Switch =ON. Isolate Switch =RUN.) Reverser forward or reverse.
3. Position throttle or controller to apply power (Notch 1 or 2). Note the ammeter (shows amperage to #2 TM).
4. Shut off throttle or controller.
5. Power test in the opposite direction.

2.3.9 Cab Signal Test (TBD)

2.3.10 Radio Test

Make voice test of radio by simulating: “NJ Rail Engine 4133 to MMC Yardmaster for radio check, over” “Loud and clear engine 4133. MMC Yardmaster out.”