

**NORFOLK SOUTHERN CORPORATION  
OPERATIONS BULLETIN**

Atlanta, GA  
July 7, 2023

OB-21

All Concerned:

Reference NS Operating Rules for Defective Equipment Detectors, new System Special Instructions are issued to provide additional clarification and requirements for (1) when a detector defect alarm is received, and (2) responding to hot bearing and dragging equipment detectors.

The below System Special Instructions relate to existing NS Operating Rules 147 and 150. Special instructions supersede existing rules and instructions and govern for compliance.

The below System Special Instructions are effective immediately as follows:

**1. Defect Message For All Detectors (Except Stress State Detectors)**

When notified of any detector defect alarm, immediately notify the Train Dispatcher and contact the Wayside Detector Help Desk for instruction.

If a **“CRITICAL”** alarm is received, the train must be immediately stopped for inspection, consistent with safe train handling procedures.

If a non-critical defect message is received, the train must immediately reduce speed to not less than 8 MPH until the rear of the train clears the detector at which point the train must be stopped for inspection.

**2. Hot Bearing (HBD) and Dragging Equipment (DED) Detectors**

(a) Inspections for bearing defects must be made using a 169-degree temperature indicator and/or approved temperature inspection device. Each device must be operated in accordance with the specific respective operating instructions to properly assess bearing temperature to determine if a bearing is over heated and the car cannot continue in service. If the temperature indicator confirms an overheated condition, the Wayside Detector Help Desk must be informed and consulted for movement instructions to set the car(s) out at the next available location. Any authorized movement must not exceed 10 mph and the defective car(s) must be re-inspected at least every 3 miles until set out.

(b) A visual inspection of the bearing, associated wheel and brakes must be performed whenever responding to a defect alarm. When visual inspection of the bearing defect(s) reveals exceptions (e.g. leaking grease, visible damage, heat discoloration, missing or damaged end cap, misaligned or distorted components, etc.), the Wayside Detector Help Desk must be notified and ATC-Mechanical Department personnel must perform a visual inspection before moving the car(s).

(c) If visual inspection reveals a brake-related issue, the Wayside Detector Help Desk may permit the train to proceed with the car(s) once the brake-related issue is resolved and no other visual exceptions are noted to the bearing or any other components.

- (d)** When physical conditions do not allow walking access to perform visual inspection(s), the Wayside Detector Help Desk may authorize the train, after stopping, to be advanced at a speed not to exceed 10 MPH, to make the designated defective axle(s) safely accessible for an on-ground visual inspection and temperature determination.
- (e)** If no apparent bearing or dragging equipment defects are found where indicated by the detector, 20 axles ahead and behind of the designated axle(s) on both sides must be inspected for the noted defect.
- (f)** If there are no defects noted from inspection, the Wayside Detector Help Desk may permit continued movement with any required speed restrictions.
- (g)** The inspection results and corrective actions must be provided to the Wayside Detector Help Desk prior to the crewmember departing the car location.

Paul Duncan  
Executive Vice President, and  
Chief Operating Officer