

442D Non Complying Vehicle Authority

Asset identification:	DM8012, DM8029	442D Number:	442D-0594
Non-compliance description: Including references to any supporting documents or photographs (attach where necessary)			
Brakes:1. Lead break in two main EP protection is not occurring until MR pressure drops below 500kPa. 2. EPCU brake system power off test in lead only generates 400kPa of brake cylinder pressure. Vigilance:3. Independent brake does not suppress vigilance at 0 speed. 4. Vigilance cycle is not random timing unless "deadman pedal is maintained"			
Risk description and assessment: Including likelihood and consequence details (attach risk assessment where necessary)			
1. It is feasible that a break in two event would drain the MR air below 500kPa before the LE is able to respond.2. Risk of not generating sufficient BC pressure if the EPCU CB was to trip. 3. Risk of setting off vigilance when at a standstill. 4. Risk of vigilance cycle being predicted by the LE.			
Risk controls and other restrictions on operation: Including effect and reference to associated risks (attach risk assessment where necessary)			
Non-conformance is sought for type testing purposes ONLY. The locomotives are not being released into service. 1. Static testing has shown that the brake cylinders will still generate full pressure even when MR is < the target BC due to reservoirs behind a check valve feeding them. This non-conformance is simply a difference between the test procedure and actual reality. Despite this, NYAB are working on a longer term fix for this issue to maintain alignment with existing locomotives. 2. Project team need to carry out stopping distance testing. This will verify the performance of 400kPa BC pressure IF a EPCU power off was to occur. A longer term hardware fix is in the process with NYAB. 3/4. No single manning of the DM locomotives. It is expected that the locomotives will be always under the control of the project team. New proposal from Wabtec for longer term fix.			
Bad Order placed against asset: (Y/N & details)		No;	
ORA No: (if applicable)		[ORANumber]	

Certified by Competent Person			
Name:	Justin Young	Position:	RSAS Senior Mechanical Engineer
Date:	2025-01-14		
Expiry date:	2025-04-30		

Delegated Non-Compliance Authority			
442D Work Orders: (numbers & details)		7160515	
Name:	Tony Pepperell	Position:	Rolling Stock Mechanical Engineering and Design Professional Head
Date:	2025-01-14		

Distribution: Competent Person, Asset Manager, Document Controller: (Y / N)	
Distribution by: Competent Person to operating and maintenance staff: (Y / N)	

