



Inspection Form

Form WMSC-IR-1

Washington Metrorail Safety Commission

Agency/Department Information

Inspection Date	YYYY/MM/DD 2024/05/25	Report Number	20240522-WMSC-MAL-1
Rail Agency Name	Washington Metropolitan Area Transit Authority	Rail Agency Department	Name
Rail Agency Department	CMNT	Contact Information	
Inspection Location	Brentwood S&I Shop - Railyard B99 601 T Street NE Washington DC 20002		

Inspection Summary

Inspection Activity #	1
Activity Code	VM-WI-PI
Inspection Units	1
Inspection Subunits	1
Defects (Number)	1
Recommended Finding	Yes
Remedial Action Required¹	No
Recommended Reinspection	No

Activity Summaries

Inspection Activity #	1	Inspection Subject	Observation 7K Scheduled Maintenance Program				Activity Code	VM-WI-PI			
Job Briefing Employee Name/Title	WMATA Inspection	Accompanied Inspector?	Yes	Out Brief Conducted	Yes	Time	07:30 AM	Outside Shift	No		
Related Reports	N/A	Related CAPS / Findings			N/A						
Related Rules, SOPs, Standards, or Other	Ref	Rule or SOP		Standard		Other / Title		Checklist Reference			
	METRORAIL OPERATING RULEBOOK FIRST EDITION Effective: Sept 1, 2023, Safety Rules	N/A		N/A		N/A		N/A			
Inspection Location	Main Track	Yard	Station	OCC	RTA Facility	WMSC Office	Track Type	At-grade	Tunnel	Elevated	N/A
		X									X
Line(s) & Track Number	Brentwood S&I Shop - Railyard B99 601 T Street NE Washington DC 20002			Chain Marker and/or Station(s)		From		To			
						N/A		N/A			
Vehicles	Head Car Number		Number of Cars		Equipment		N/A				
	N/A		N/A								
Description	<p>WMSC Inspectors conducted a rules compliance inspection of the wheelset replacement process and the start of the SMP process at the Brentwood S&I Shop in compliance with the Metrorail Operating Rules and Procedures Handbook (MOR), including Preventive Maintenance Inspections (PI) activities. General Information: Conducted an observation of the wheelset replacement process and the start of the SMP process at the Brentwood S&I shop. WMSC met with personnel from the CMNT Inspection Office, truck shop, and quality assurance. The following observations were noted. The 7K Wheelset Replacement Process (WRP). - Observed a successful 7K wheel pressing process. The number of misfits has improved and is down to only 20%. Misfits occur when the wheel pressing process does not achieve the wheels required press tonnage of 80-120 tons. It was stated that Brentwood's wheel pressing machine is having successes with an interference fit of 6.7 mils between the wheels bore and axles. MSI 000005 requires an interference fit ranging from 6.2 to 8.0 mils. - 7K railcars require metal spacers between the journal bearing and the housing to prevent damage to either the truck journal bearing and housing unit when the railcar is lifted by the jacking pads. Unlike the legacy fleet where the journal bearing is captured by the housing unit, on 7K railcars, the journal bearing is not captured by the housing, and there is an approximate half an inch play. The spacer prevents the wheelset assembly from dropping half an inch from the housing when the railcar is lifted by the jacking pads. This is an area of concern that needs to be investigated further as a potential contributor to wheels out of round. See Attached Photos #1 and #2. - Spacers are also being used around the secondary suspension truck support structure to prevent damage to the secondary suspension leveling mechanism when the railcar is lifted by the jacking pads. See Attached Photo #3. - Defect #1 - Observed a truck with the center pin bolster bushing slid out of place by approximately 1/4 of an inch above top of the truck surface. This truck needs an EMI implemented to install a new ring retainer to prevent the bushing from sliding out of place. ETR 140114 Installation of Ring Retainer for Bolster Bushing was completed, and EMI 140443 is being developed to install a new support plate.</p>							Number of Defects		1	
								Recommended Finding?		Yes	
								Remedial Action Required?		No	
								Recommended Reinspection?		No	
Remedial Action											

¹ The rail transit agency must provide WMSC with the necessary evidence (e.g. maintenance work order system records, photos, documentation, records, data, or other evidence) to close out the Remedial Action. Closeout of Remedial Actions may also be subject to ongoing WMSC verification inspections to ensure corrections are sufficient and effective.



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Inspector in Charge's Signature		Date 2024/05/25
Inspector in Charge's Name Manuel Lopez	Inspection Team Paul Smith	