



Locomotive Release from Shop Form

To be completed on every engine released from the Shop

I have reviewed the work packet for locomotive 5023 on this date 2-4-11 and take no exception to applicable laws, rules and or MMA standards, policies and standards.



Service Operations

UNIT _____

DATE _____

THROTTLE 8 INBOUND LOAD TESTS

Eng RPM (900)	EMD	_____	Lube Oil Pres	_____
Eng RPM (1050)	GE	_____	Water Temp	_____
Horsepower		_____	Overspeed Setting	_____
Volts (5.3)	B-23	_____	RACK SETTING	_____
Volts (7)	C-30	_____		
Volts (720)	B-39	_____		

THROTTLE #1 STALL TEST

OP Mode	(PWR)	_____	
AMPS	(300)	_____	
MGA	(1220)	_____	NOT APPLICABLE TO B-23 AND C-30
Charging Rate	(70v)	_____	

TL 24T

Throttle 1	(1V)	_____
Throttle 2		_____
Throttle 3		_____
Throttle 4		_____
Throttle 5		_____
Throttle 6		_____
Throttle 7		_____
Throttle 8	(72V)	_____



REVISION:
 REVISION DATE: 06/22/2010
 ISSUED BY: T. A. Scalia

B-23, B-39, C-30, GP-7 UNSCHEDULED

UNIT:

In-Bound Or Running Electrical

ITEM

ELECTRICAL

WORKED BY:

ONLY INBOUND LOAD BOX A SWITCHER IF IT'S NECESSARY AND REPORTED WITH LOADING ISSUES. OTHERWISE THE LOAD BOX ON A SWITCHER WILL BE DONE ON THE OUTBOUND

REVIEW COMPUTER ARCHIVE DATA AND NOTE ON DEFECT SHEETS IF APPLICABLE

NOTE SIGNIFICANT FAULTS ON DEFECT SHEETS.

DOWNLOAD & TEST EVENT RECORDER SYSTEM,

TEST RADIO ANTENNA WITH MFJ-269 ANALYZER

CLOSELY INSPECT THE HEAD END DEVICE CONNECTOR. ENSURE IT IS TIGHTLY CONNECTED AND NOT CROSS THREADED

PERFORM ALL LOCOMOTIVE SELF TEST FUNCTIONS

B. CHECK FOR AC GROUNDS IN COOLING FAN CIRCUIT WITH TEST LIGHT (30 watt bulb) ONLY APPLIES TO GP-7.

CHECK OPERATION OF GROUND RELAY

(TEST THREE TIMES TO VERY LOCK-OUT)(DYNAMIC & POWER)

CHECK FOR LOW VOLTAGE GROUNDS (7 watt bulb)

WHILE IN THROTTLE 3 LOAD TEST, CHECK FOR AC GROUNDS. DOES NOT APPLY TO C-30, B-23 AND B-39.

CHECK OPERATION OF:

A. HEATING

B. WINDSHIELD HEATERS/DEFOGGER (SEPTEMBER - FEBRUARY)

CHECK OPERATION OF ALERTNESS DEVICES

CHECK OPERATION OF ALL EMERGENCY FUEL SHUTOFF DEVICES

A. EMERGENCY FUEL CUTOFFS

B. MU ENGINE STOP



B-23, B-39, C-30, GP-7 UNSCHEDULED

UNIT:

ITEM	<i>In-Bound Or Running Mechanical</i> MECHANICAL	WORKED BY:
	INSPECT ENGINE OVERHEAD (WITH ENGINE AT IDLE):	
	PROPER LUBRICATION? FUEL LEAKS? CAM ROLLER ROTATION? ETC.	
	INSPECT FUEL SYSTEM HOSES AND PIPES FOR LEAKS	
	INSPECT COOLING SYSTEM:	
	A: CHECK HOSES AND PIPES FOR LEAKS	
	VISUALLY INSPECT AIR COMPRESSOR FOR WATER, AIR OR OIL LEAKS	
	TEST AIR BRAKE EQUIPMENT PER RULE 212	
	PERFORM PENALTY BRAKE TEST	
	CHECK FLUID LEVELS BEFORE LOADING:	
	A: ENGINE OIL	
	B: COOLING WATER	
	C: AIR COMPRESSOR OIL	
	TEST OPERATION OF THE FOLLOWING DEVICES:	
	A. BELL	
	B. SANDERS (FORWARD, REVERSE, EMERGENCY)	
	C. RADIATOR SHUTTERS	
	INSPECT AIR COMPRESSOR GOVERNOR SETTING. 135 TO 145 PSI	
	INSPECT SAFETY POP. 155 PSI	



English

B-23, B-39, C-30, GP-7 UNSCHEDULED

UNIT:

Out-Bound Loadtest Electrical/Mechanical

WORKED

ITEM

MECHANICAL

BY:

INSPECT ENGINE OVERHEAD (WITH ENGINE AT IDLE):

PROPER LUBRICATION? FUEL LEAKS? CAM ROLLER ROTATION? ETC.

INSPECT FUEL SYSTEM HOSES AND PIPES FOR LEAKS

INSPECT COOLING SYSTEM:

A: CHECK HOSES AND PIPES FOR LEAKS

VISUALLY INSPECT AIR COMPRESSOR FOR WATER, AIR OR OIL LEAKS

TEST AIR BRAKE EQUIPMENT PER RULE 212

PERFORM PENALTY BRAKE TEST

CHECK FLUID LEVELS BEFORE LOADING:

A: ENGINE OIL

B: COOLING WATER

C: AIR COMPRESSOR OIL

INSPECT SAND TRAP, NOZZLES, HOSES AND BRACKETS

TEST OPERATION OF THE FOLLOWING DEVICES:

A. BELL

B. SANDERS (FORWARD, REVERSE, EMERGENCY)

C. RADIATOR SHUTTERS

ELECTRICAL

CHECK FOR LOW VOLTAGE GROUNDS (7 watt bulb)

IF A TRACTION MOTOR WAS REPAIRED, ROLL TEST THE LOCOMOTIVE TO ENSURE THE TM LEADS ARE PROPERLY HOOKED UP

WHILE IN THROTTLE 3 LOAD TEST, CHECK FOR AC GROUNDS. DOES NOT APPLY TO C-30, B-23 AND B-39.

CHECK OPERATION OF:

A. HEATING

COMPLETE THE LOAD TEST SHEETS

INSPECT AIR COMPRESSOR GOVERNOR SETTING. 135 TO 145 PSI

INSPECT SAFETY POP. 155 PSI

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Service Operations

THROTTLE & OUTBOUND LOAD TESTS

UNIT _____

DATE _____

Eng RPM (900)	EMD	<u> </u>	Lube Oil Pres	<u> </u>
Eng RPM (1050)	GE	<u>1050</u>	Water Temp	<u>170</u>
Horsepower		<u>3052</u>	Overspeed Setting	<u>1090</u>
Volts (5.3)	B-23	<u> </u>	RACK SETTING	<u>19.5</u>
Volts (7)	C-30	<u>7.2</u>		
Volts (720)	B-39	<u> </u>		

THROTTLE #1 STALL TEST

OP Mode	(PWR)	<u>F</u>	
AMPS	(300)	<u>280</u>	
MGA	(1220)	<u> </u>	NOT APPLICABLE TO B-23 AND C-30
Charging Rate	(70v)	<u>74</u>	

TL 24T

Throttle 1	(1V)	<u>6</u>
Throttle 2		<u>17.2</u>
Throttle 3		<u>24.8</u>
Throttle 4		<u>35.7</u>
Throttle 5		<u>46.9</u>
Throttle 6		<u>56.6</u>
Throttle 7		<u>68.2</u>
Throttle 8	(72V)	<u>70.1</u>

Unit: 5023

Date: 2-4-11

DEFECTS FOUND DURING INSPECTION

DEFECT <u>Auxillary Drive Gear Train Bad</u>	INSPECTED BY: <u>M. Woods / B. Cleary</u>
REPAIR <u>REPLACED GENERATOR (New Rebuilt From AC) Generator Alignment dialed into Electric .003</u>	CORRECTED BY: <u>M. Woods / B. Cleary</u>

DEFECT <u>Auxillary Drive Hub Bad</u>	INSPECTED BY: <u>M. Woods / B. Cleary</u>
REPAIR <u>REPLACED WITH USED ONE DFF 5021</u>	CORRECTED BY: <u>M. Woods / B. Cleary</u>

DEFECT <u>Eng. CRANKSHAFT LATERAL .040 (only allowed .030)</u>	INSPECTED BY: <u>M. Woods / B. Cleary</u>
REPAIR <u>REPLACED THRUST WASHERS + (2) MAIN BEARINGS on #7</u>	CORRECTED BY: <u>M. Woods / B. Cleary</u>

DEFECT <u>LF HANDRAIL MOUNTING BOLT LOOSE</u>	INSPECTED BY: <u>M. Woods</u>
REPAIR <u>REPLACED BOLT</u>	CORRECTED BY: <u>M. Woods</u>

DEFECT <u>Locomotive Been Down since Dec 28, 2010</u>	INSPECTED BY: <u>M. Woods</u>
REPAIR <u>Replaced Michiana Filters / new seal Torgued cover plate bolts to 125 ft lbs</u>	CORRECTED BY: <u>B. Cleary</u>

Unit: _____

Date: _____

DEFECTS FOUND DURING INSPECTION

DEFECT <u>Ammeter reading Low/erratic</u>	INSPECTED BY: <u>J.H</u>
REPAIR <u>Changed and retested meter</u>	CORRECTED BY: <u>J.H</u>

DEFECT _____	INSPECTED BY: _____
REPAIR _____	CORRECTED BY: _____

DEFECT _____	INSPECTED BY: _____
REPAIR _____	CORRECTED BY: _____

DEFECT _____	INSPECTED BY: _____
REPAIR _____	CORRECTED BY: _____

DEFECT _____	INSPECTED BY: _____
REPAIR _____	CORRECTED BY: _____

Description of Work Performed

Locomotive ID 5023 Time Started 1-24-11 Time Finished 2-5-11

Main Generator Auxillary drive gear system bad -

Removed Roof/ Engineer side carbody section

Removed Diode Bank

Removed Exciter/Aux motors

Removed Generator

Excessive crankshaft lateral (.040) Replaced Thrust Washers & 2 main bearings

Lateral now (.020)

cleaned up Generator room before reinstallation

Installed New Generator - dialed in to .003

installed Brushes

Installed wiring Harness

Installed Diode bank

Installed Exciter/Auxillary motor + drive hub

Hooked up Auxillary drive shaft and guards

Put Carbody back on & roof

Filled Auxillary drive unit with oil

Unit was drained / capped compressor / Gurn plugs - Filled with water

