



Locomotive Release from Shop Form

To be completed on every engine released from the Shop

I have reviewed the work packet for locomotive 5078 on this date 9-8-10 and take no exception to applicable laws, rules and or MMA standards, policies and standards.

Service Operations

THROTTLE 8 INBOUND LOAD TESTS

Eng RPM (100)	1-10	_____	Eng Oil Pwr	_____
Eng RPM (100)	01	_____	Water Temp	_____
HP (power)		<u>6.72V</u>	Over-speed Setting	_____
Volts (5-30)	B-23	_____	RACE SETTING	_____
Volts (7)	C-30	<u>72.37</u>		
Volts (720)	B-30	_____		

JRS

2863.71 Horsepower

THROTTLE #1 STALL TEST

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

TL 24T

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

B-23, B-39, C-30, GP-7 MO3 INSPECTION

In-Bound Loadtest Electrical/Mechanical	WORKED BY
ELECTRICAL	
VERIFY THE OPERATION OF THE GROUND RELAY	DS/PC
CHECK FOR LOW VOLTAGE GROUNDS (7 watt bulb)	DS/PC
WHILE IN THROTTLE 3 LOAD TEST. CHECK FOR AC GROUNDS	
CHECK OPERATION OF:	
A. HEATING	DS/PC
COMPLETE THE OUTBOUND LOAD TEST SHEETS	
GROUND RELAY-(TEST THREE TIMES TO VERY LOCK-OUT)(DYNAMIC & POWER)	DS/PC
IF EQUIPPED. VERIFY THE OPERATION OF THE LDVR CAMERA	NO CAMERA
MECHANICAL	
PROPER LUBRICATION? FUEL LEAKS? CAM ROLLER ROTATION? ETC.	DS/PC
INSPECT FUEL SYSTEM HOSES AND PIPES FOR LEAKS	DS/PC
INSPECT COOLING SYSTEM:	DS/PC
A: CHECK HOSES AND PIPES FOR LEAKS	DS/PC
CHECK OPERATION OF ENGINE PROTECTION DEVICES:	
A. CRANKCASE PRESSURE	DS/PC
VISUALLY INSPECT AIR COMPRESSOR FOR WATER, AIR OR OIL LEAKS	DS/PC
PERFORM MANUAL AIR BRAKE TEST	DS/PC
Verify Flow Gauge	NOTE: 120- 130-140 main
130 main reservoir is 64 + or - 3, reservoir is 60 + o	DS/PC
PERFORM PENALTY BRAKE TEST	DS/PC
CHECK FOR CORRECT AIR PRESSURE SETTINGS:	
A. MAIN RESERVOIR (130 - 140 PSI)	DS/PC
B. BRAKE PIPE (90 PSI)	DS/PC
C. EQUALIZING RESERVOIR (90 PSI)	DS/PC
D. BRAKE CYLINDER (72 - 74 PSI)	DS/PC
E. COMPRESSOR CONTROL (130 - 140 PSI +/-5 PSI)	DS/PC
CHECK FLUID LEVELS BEFORE LOADING:	
A: ENGINE OIL	DS/PC
B: COOLING WATER	DS/PC
C: AIR COMPRESSOR OIL	DS/PC
TEST OPERATION OF THE FOLLOWING DEVICES:	
A. BELL	DS/PC
B. SANDERS (FORWARD, REVERSE, EMERGENCY)	DS/PC
C. RADIATOR SHUTTERS	N/A

See Defect

B-23, B-39, C-30, GP-7 MO3 INSPECTION

Revision Date: 06/26/2010
 Issued By: Tim Scatta

ELECTRICAL IN HOUSE

WORKED BY:

SERVICE THE BATTERIES	
VERIFY EVENT RECORDER IS WORKING	SHEETS IN BACK
CHECK & RECORD THE DATE ON HEAD END DEVICE	NOT EQUIP.
CLOSELY INSPECT THE HEAD END DEVICE CONNECTOR. ENSURE IT IS TIGHTLY CONNECTED AND NOT CROSS THREADED	DS N/A
CHECK THE FOLLOWING EQUIPMENT AND THEIR RELATED GUARDS AND LENSES FOR PROPER OPERATION:	DS
CHECK ALL GROUND AND STEP LIGHTS, FRONT AND REAR HEADLIGHTS, DITCH LIGHTS, CAB LIGHTS, GAUGE LIGHTS, NUMBER PLATES, PLATFORM LIGHTS, ALL WARNING AND INDICATOR LIGHTS	DS/PC
TRACTION MOTORS AND UNDERFRAME	
CHECK THE TRACTION MOTOR LEADS, VERIFY NO LEADS ARE RUBBING ON THE FRAME	DRS
INSPECT TRACTION MOTOR COVERS AND ENSURE BOLTS ARE IN PLACE AND TIGHT	DRS
CHECK M.U. RECEPTACLE PINS AND LIDS. MAKE NECESSARY REPAIRS	DRS
MAKE SURE M.U. CABLES DO NOT FOUL COUPLERS	DS/PC

Check T.M. brushes

B.wiles

B-23, B-39, GP-7 MO3 INSPECTION

MECHANICAL IN HOUSE

WORKED BY:

REVIEW LAB CODE AND PERFORM A COMPLETE AIRBOX CRANKCASE INSPECTION IF A LAB CODE EXISTS	OR
WITH THE ENGINE WARM, PRESSURE TEST COOLING SYSTEM AT 20 PSI FOR 15 MINUTES AND IF THE PRESSURE ON THE GAUGE DOES NOT DROP, THEN NO FURTHER ACTION IS REQUIRED	DRS/PC
CHANGE THE FOLLOWING FILTERS AND ASSOCIATED GASKETS:	X-N/A
FUEL SPIN ON FILTERS, END ONLY	
SOAK BACK FILTER, END ONLY	
TURBO SPIN ON FILTER, END ONLY	
COMPLETE FRA INSPECTION (DAILY INSPECTION CHECKLIST)	
CARBODY	
INSURE SAND NOZZLES AND HOSES ARE IN PLACE AND SECURED. MAKE SURE THEY ARE ALIGNED WITH WHEEL AND TRACK. INSPECT SAND TRAPS AND REPAIR AS NEEDED.	DRS/PC
INSPECT COUPLERS & DRAFT GEARS. MAKE REPAIRS AS NECESSARY	DRS/PC
CHECK KNUCKLE CLEARANCE AND KNUCKLE THROWER. MAKE REPAIRS AS NEEDED AND APPLY SPARE KNUCKLES (E AND F TYPE) (2.5")	DRS/IPC
INSPECT PIN LIFTERS CHECKING FOR PROPER HAND CLEARANCE AND ANTI-CREEP	DRS/IPC
CHECK SNOWPLOW (IF EQUIPPED) FOR HANDHOLDS AND PROPER DISTANCE	DRS/PC
CHECK AUTO BLOWDOWNS FOR PROPER OPERATIONS IN AUTOMATIC MODE	
ENSURE SUMP DRAINS ARE OPEN AND FREE OF DEBRIS	DRS/PC
TRUCKS	
INSPECT WICK BOLT SECUREMENT AND REPAIR IF NECESSARY	DRS/PC
CHECK SUSPENSION BEARING OIL LEVEL	
CHECK JOURNAL BOX OIL LEVEL (FILL TO POINT OF OVERFLOW)	DRS/PC
CHECK GEAR CASES AND INSPECT BULL GEAR (ADD 6lbs. OF GEARCASE GREASE)	DRS/PC
CHECK OIL FILLED GEAR CASES AND FILL (RECORD USAGE BELOW)	
# 1 TRACTION MOTOR: OIL USED	2 gal Plug type
# 2 TRACTION MOTOR: OIL USED	4#
# 3 TRACTION MOTOR: OIL USED	4#
# 4 TRACTION MOTOR: OIL USED	4#
# 5 TRACTION MOTOR: OIL USED	4#
# 6 TRACTION MOTOR: OIL USED	4#
INSPECT ALL BRAKE HANGERS, HEADS, GUIDES AND STRAPS ENSURING BRAKE SHOES ARE IN LINE WITH WHEELS	DRS/PC
CAB	
CHECK FIRE EXTINGUISHERS, DATE AND TAG, REPLACE IF USED OR OUT OF DATE.	
CHECK CAB SEATS FOR PROPER OPERATION INSURING ALL BOLTS ARE IN PLACE AND TIGHT.	PC see defect
CHECK HANDBRAKE AND INSPECT DATE, MAKE REPAIRS AS NECESSARY	PC/DRS
MISC	
IN ACCORDANCE WITH FRA 229.23, VERIFY AIR GAUGES (+/- 3PSI) (CALIBRATE AT +/- 1PSI, REQUIRES 130 PSI MR)	PC
CHECK ALL FLUID LEVELS, ENGINE OIL, COOLING WATER, AIR COMPRESSOR OIL	DRS/PC see defect
DRAIN RETENTION TANK	DRS/PC
TOILET MAINTENANCE:	see defect
A. INSPECT/REPAIR AS NEEDED TOILET DRAIN VALVE & FLOOR SEALS	DRS/PC
INSPECT CAB SEATS, REPAIR AND LUBRICATE AS REQUIRED	DRS/PC
INSPECT AND REPAIR AS REQUIRED:	
A. CAB / CARBODY: DOORS/HINGES/WINDOWS/LATCH SEALS/WEATHER STRIPPING AND SEALS/MIRRORS, ALSO LUBRICATE/CHANGE AS NEEDED	PC/DRS
A. CLEAN THE CAB, WINDOWS, AND EQUIPMENT	PC
COMPLETE WINTERIZATION SHEET (SEPTEMBER-FEBRUARY)	
WASH LOCOMOTIVE ENGINE/ENGINE ROOM/AND AIR COMPRESSOR ROOM	
WASH THE LOCOMOTIVE	

B-23, B-39, C-30, GP-7 MO3 INSPECTION

Out-Bound Loadtest Electrical/Mechanical	WORKED BY:
ELECTRICAL	
VERIFY THE OPERATION OF THE GROUND RELAY	PC/DS
CHECK FOR LOW VOLTAGE GROUNDS (7 watt bulb)	PC/DS
WHILE IN THROTTLE 3 LOAD TEST. CHECK FOR AC GROUNDS	PC/DS
CHECK OPERATION OF:	
A. HEATING	PC/DS
COMPLETE THE OUTBOUND LOAD TEST SHEETS	
GROUND RELAY-(TEST THREE TIMES TO VERY LOCK-OUT)(DYNAMIC & POWER)	PC/DS
IF EQUIPPED. VERIFY THE OPERATION OF THE LDVR CAMERA	
MECHANICAL	
PROPER LUBRICATION? FUEL LEAKS? CAM ROLLER ROTATION? ETC.	PC/DS
INSPECT FUEL SYSTEM HOSES AND PIPES FOR LEAKS	PC/DS
INSPECT COOLING SYSTEM:	
A. CHECK HOSES AND PIPES FOR LEAKS	PC/DS
CHECK OPERATION OF ENGINE PROTECTION DEVICES:	
A. CRANKCASE PRESSURE	
VISUALLY INSPECT AIR COMPRESSOR FOR WATER, AIR OR OIL LEAKS	DIAS
PERFORM MANUAL AIR BRAKE TEST	PC/KIT
Verify Flow Gauge	NOTE: 120-
130 main reservoir is 64 + or - 3,	130-140 main
reservoir is 60 + 0	
PERFORM PENALTY BRAKE TEST	PC
CHECK FOR CORRECT AIR PRESSURE SETTINGS:	
A. MAIN RESERVOIR (130 - 140 PSI)	PC/KIT
B. BRAKE PIPE (90 PSI)	PC/KIT
C. EQUALIZING RESERVOIR (90 PSI)	PC/KIT
D. BRAKE CYLINDER (72 - 74 PSI)	PC/KIT
E. COMPRESSOR CONTROL (130 - 140 PSI +/-5 PSI)	
CHECK FLUID LEVELS BEFORE LOADING:	
A: ENGINE OIL	PC/DS
B: COOLING WATER	PC/DS
C: AIR COMPRESSOR OIL	PC/DS
TEST OPERATION OF THE FOLLOWING DEVICES:	
A. BELL	PC/KIT
B. SANDERS (FORWARD, REVERSE, EMERGENCY)	PC/DS
C. RADIATOR SHUTTERS	Not Equipped

Service Operations

5078
9-8-10

THROTTLE 8 OUTBOUND LOAD TESTS

Eng RPM (50)	(720)	_____	Take Oil Pres	_____
Eng RPM (100)	(1440)	_____	Water Temp	_____
Horsepower		_____	Over speed Setting	_____
Volt (53)	(B-23)	_____	RACE SETTING	_____
Volt (7)	(C-30)	_____		
Volt (720)	(B-30)	6.85		

2897 Horsepower
PWC/KH

THROTTLE #1 STALL TEST

OP Mode	(PWR)	_____
AMPS	(300)	OK
MGA	(1220)	_____
Charging Rate	(70v)	71.2

NOT APPLICABLE TO B-23 AND C-30

DM

TL 24T

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

WINTERIZATION	
	Signature
Winterization – All MMA Locomotives. (August - April)	
Inspect front and rear cab door seals replace as needed (NO TAPE)	PC
Inspect left and right side window seals replace as needed.	PC
Inspect Electric cabinet door seals replace as needed.	DRS
Operate Cab Heaters-Check condition of Heater Assembly @ 45o F above Ambient Temperature.	DRS
Operate Window Defrosters-Check condition of Defroster @ 45o F above Ambient Temperature	
If equipped, test the Auto Dump valve for proper operation.	
Test Manual Water Dump Valves. Proper Handle. Location, Orifice is Open.	
Close Winter/ Summer doors if equipped.	PC
Check Traction Motor cover gaskets, install as needed.	DRS
Check condition of Cab Door Hinges (Lubricate all Hinges)	PC
Check condition of Cab Door Locks (Lubricate all Locks)	PC
Inspect Cab Windows Slider Rail, Adjust Top Rail as needed, Lubricate with Silicone Grease.	PC
Renew all Wiper Blades.	OK DRS
Criteria for Door seal Replacement: A. Seal shows signs of Deterioration and or Medium to Heavy Cracking. B. Door seal is Torn or Loose from Door. C. With Door in the fully closed position has noticeable crack between door jam and cab carbody.	PWC
Criteria for Window seal Replacement: A. Seals shows signs of Deterioration and or Medium to Heavy Cracking. B. Seal is Torn or Loose from window seal. C. With windows fully in the closed position there is a gap between window frame and carbody.	DRS

open

Unit: _____

Date: _____

DEFECTS FOUND DURING INSPECTION

DEFECT <i>Both Fire extinguishers expire before next service</i>	INSPECTED BY: <i>DRS/PL</i>
REPAIR <i>Replaced</i>	CORRECTED BY: <i>DRS</i>

DEFECT <i>engine oil low</i>	INSPECTED BY: <i>DRS/PC</i>
REPAIR <i>Added 4" oil</i>	CORRECTED BY: <i>DRS/PC</i>

DEFECT <i>engine coolant low</i>	INSPECTED BY: <i>DRS/PC</i>
REPAIR <i>Filled sys</i>	CORRECTED BY: <i>DRS/PC</i>

DEFECT <i>No Water treatment</i>	INSPECTED BY: <i>DRS</i>
REPAIR <i>Add Water Treatment</i>	CORRECTED BY: <i>PWC</i>

DEFECT <i>Several lite bulbs out</i>	INSPECTED BY: <i>DRS</i>
REPAIR <i>clo 6 lite bulbs</i>	CORRECTED BY: <i>DRS</i>

Unit: _____

Date: _____

DEFECTS FOUND DURING INSPECTION

DEFECT	Toilet needs low temp	INSPECTED BY:	DRS
REPAIR	filled toilet	CORRECTED BY:	DRS

DEFECT	Several Brake shoes B/D	INSPECTED BY:	PC
REPAIR	c/o Brake shoes (4)	CORRECTED BY:	PC

DEFECT	Brake cyl press too high	INSPECTED BY:	DRS/PC
REPAIR	Adjusted cyl press	CORRECTED BY:	DRS

DEFECT	Air Box swollen/leaks R3	INSPECTED BY:	DRS
REPAIR	Replace Box And Seals	CORRECTED BY:	PC

DEFECT	Air Box gasket blowed out R8	INSPECTED BY:	DRS
REPAIR	Replaced	CORRECTED BY:	PC

Description of Work Performed

Locomotive ID _____ Time Started _____ Time Finished _____

Frt Pilot	Broke in middle ✓	Repaired	DRH
LS Support Box	Cracked		
#2 L GC Bolt	Safety wire missing ✓	Repaired	PWC
#3 Both (Frt & rear)	GC Bolt bolts loose	Replaced	DRH
#6 G.C. top insp. cover	gasket gone + #5	Tightened	PWC
#1 G.C. top insp. cover	gasket gone	Replace	PWC
#6		replace	PWC
#6 Support box arm	cracked by G.C. bolt		
	Welded plate on Arm	Repaired	PWC/KH
#R4 Sharp flange	OK	DM	

Description of Work Performed

Locomotive ID

Time Started

Time Finished

Employee Signature _____ Form to fill out completely and Signature must be legible.

