



UN 5.

Locomotive Release from Shop Form
To be completed on every engine released from the Shop

I have reviewed the work packet for locomotive 5016 on this date 1-20-12 and take no exception to applicable laws, rules and or MMA standards, policies and standards.



Service Operations

THROTTLE 8 INBOUND LOAD TESTS

UNIT _____

DATE _____

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

N/A

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)	_____

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

<i>In-Bound Loadtest Electrical/Mechanical</i>	WORKED BY:
ELECTRICAL	
VERIFY THE OPERATION OF THE GROUND RELAY	
CHECK FOR LOW VOLTAGE GROUNDS (7 watt bulb)	
WHILE IN THROTTLE 3 LOAD TEST, CHECK FOR AC GROUNDS	
CHECK OPERATION OF:	
A. HEATING	
COMPLETE THE OUTBOUND LOAD TEST SHEETS	
GROUND RELAY-(TEST THREE TIMES TO VERY LOCK-OUT)(DYNAMIC & POWER)	N/A
IF EQUIPPED, VERIFY THE OPERATION OF THE LDVR CAMERA	
MECHANICAL	
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	
CHECK OPERATION OF ENGINE PROTECTION DEVICES:	
A. CRANKCASE PRESSURE	
VISUALLY INSPECT AIR COMPRESSOR FOR WATER, AIR OR OIL LEAKS	
PERFORM MANUAL AIR BRAKE TEST	
Verify Flow Gauge 130 main reservoir is 64 + or - 3, reservoir is 60 + o	NOTE: 120- 130-140 main
PERFORM PENALTY BRAKE TEST	
CHECK FOR CORRECT AIR PRESSURE SETTINGS:	
A. MAIN RESERVOIR (130 - 140 PSI)	
B. BRAKE PIPE (90 PSI)	
C. EQUALIZING RESERVOIR (90 PSI)	
D. BRAKE CYLINDER (72 - 74 PSI)	
E. COMPRESSOR CONTROL (130 - 140 PSI +/-5 PSI)	N/A
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	

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

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

ELECTRICAL IN HOUSE	WORKED BY:
SERVICE THE BATTERIES	
VERIFY EVENT RECORDER IS WORKING	
CHECK & RECORD THE DATE ON HEAD END DEVICE _____	
CLOSELY INSPECT THE HEAD END DEVICE CONNECTOR. ENSURE IT IS TIGHTLY CONNECTED AND NOT CROSS THREADED	
CHECK THE FOLLOWING EQUIPMENT AND THEIR RELATED GUARDS AND LENSES FOR PROPER OPERATION:	
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	
TRACTION MOTORS AND UNDERFRAME	
CHECK THE TRACTION MOTOR LEADS, VERIFY NO LEADS ARE RUBBING ON THE FRAME	
INSPECT TRACTION MOTOR COVERS AND ENSURE BOLTS ARE IN PLACE AND TIGHT	
CHECK M.U. RECEPTACLE PINS AND LIDS. MAKE NECESSARY REPAIRS	
MAKE SURE M.U. CABLES DO NOT FOUL COUPLERS	

N/A

B-23, B-39, B-30, GP-7 MO3 INSPECTION**MECHANICAL IN HOUSE**

WORKED BY:

REVIEW LAB CODE AND PERFORM A COMPLETE AIRBOX/CRANKCASE INSPECTION IF A LAB CODE EXISTS

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

CHANGE THE FOLLOWING FILTERS AND ASSOCIATED GASKETS:

FUEL SPIN ON FILTERS. EMD ONLY

SOAK BACK FILTER. EMD ONLY

TURBO SPIN ON FILTER. EMD 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.

INSPECT COUPLERS & DRAFT GEARS. MAKE REPAIRS AS NECESSARY

CHECK KNUCKLE CLEARANCE AND KNUCKLE THROWER, MAKE REPAIRS AS NEEDED AND APPLY SPARE KNUCKLES (E AND F TYPE) (2.5")

INSPECT PIN LIFTERS CHECKING FOR PROPER HAND CLEARANCE AND ANTI-CREEP

CHECK SNOWPLOW (IF EQUIPPED) FOR HANDHOLDS AND PROPER DISTANCE

CHECK AUTO BLOWDOWNS FOR PROPER OPERATIONS IN AUTOMATIC MODE

ENSURE SUMP DRAINS ARE OPEN AND FREE OF DEBRIS

TRUCKS

INSPECT WICK BOLT SECUREMENT AND REPAIR IF NECESSARY

CHECK SUSPENSION BEARING OIL LEVEL

CHECK JOURNAL BOX OIL LEVEL (FILL TO POINT OF OVERFLOW)

CHECK GEAR CASES AND INSPECT BULL GEAR (ADD 6lbs. OF GEARCASE GREASE)

CHECK OIL FILLED GEAR CASES AND FILL (RECORD USAGE BELOW)

1 TRACTION MOTOR: OIL USED _____

2 TRACTION MOTOR: OIL USED _____

3 TRACTION MOTOR: OIL USED _____

4 TRACTION MOTOR: OIL USED _____

5 TRACTION MOTOR: OIL USED _____

6 TRACTION MOTOR: OIL USED _____

INSPECT ALL BRAKE HANGERS, HEADS, GUIDES AND STRAPS ENSURING BRAKE SHOES ARE IN LINE WITH WHEELS

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.

CHECK HANDBRAKE AND INSPECT DATE. MAKE REPAIRS AS NECESSARY

MISC

IN ACCORDANCE WITH FRA 229.23. VERIFY AIR GAUGES (+/- 3PSI) (CALIBRATE AT +/- 1PSI, REQUIRES 130 PSI MR)

CHECK ALL FLUID LEVELS, ENGINE OIL, COOLING WATER, AIR COMPRESSOR OIL

DRAIN RETENTION TANK

TOILET MAINTENANCE:

A. INSPECT/REPAIR AS NEEDED TOILET DRAIN VALVE & FLOOR SEALS

INSPECT CAB SEATS. REPAIR AND LUBRICATE AS REQUIRED

INSPECT AND REPAIR AS REQUIRED:

A. CAB / CARBODY/DOORS/HINGES/WINDOWS/LATCH SEALS/WEATHER STRIPPING AND SEALS/MIRRORS. ALSO LUBRICATE/CHANGE AS NEEDED

A. CLEAN THE CAB, WINDOWS, AND EQUIPMENT

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

<p><i>Out-Bound Loadtest Electrical/Mechanical</i></p>	<p>WORKED BY:</p>
ELECTRICAL	
<p>VERIFY THE OPERATION OF THE GROUND RELAY</p>	
<p>CHECK FOR LOW VOLTAGE GROUNDS (7 watt bulb)</p>	
<p>WHILE IN THROTTLE 3 LOAD TEST, CHECK FOR AC GROUNDS</p>	
<p>CHECK OPERATION OF:</p>	
<p>A. HEATING</p>	
<p>COMPLETE THE OUTBOUND LOAD TEST SHEETS</p>	
<p>GROUND RELAY-(TEST THREE TIMES TO VERY LOCK-OUT)(DYNAMIC & POWER)</p>	
<p>IF EQUIPPED, VERIFY THE OPERATION OF THE LDVR CAMERA</p>	
MECHANICAL	
<p>PROPER LUBRICATION? FUEL LEAKS? CAM ROLLER ROTATION? ETC.</p>	
<p>INSPECT FUEL SYSTEM HOSES AND PIPES FOR LEAKS</p>	<p><i>J. Black</i> <i>J. Black</i> <i>J. Black</i> <i>J. B</i> <i>J. B</i></p>
<p>INSPECT COOLING SYSTEM:</p>	
<p>A: CHECK HOSES AND PIPES FOR LEAKS</p>	
<p>CHECK OPERATION OF ENGINE PROTECTION DEVICES:</p>	
<p>A. CRANKCASE PRESSURE</p>	
<p>VISUALLY INSPECT AIR COMPRESSOR FOR WATER, AIR OR OIL LEAKS</p>	
<p>PERFORM MANUAL AIR BRAKE TEST</p>	
<p>Verify Flow Gauge 130 main reservoir is 64 + or - 3, reservoir is 60 + o</p>	<p>NOTE: 120- 130-140 main</p>
<p>PERFORM PENALTY BRAKE TEST</p>	
<p>CHECK FOR CORRECT AIR PRESSURE SETTINGS:</p>	<p><i>J. B</i> <i>J. B</i> <i>J. B</i> <i>J. B</i> <i>J. B</i> <i>J. B</i> <i>J. B</i> <i>J. B</i> <i>J. B</i> <i>J. B</i></p>
<p>A. MAIN RESERVOIR (130 - 140 PSI)</p>	
<p>B. BRAKE PIPE (90 PSI)</p>	
<p>C. EQUALIZING RESERVOIR (90 PSI)</p>	
<p>D. BRAKE CYLINDER (72 - 74 PSI)</p>	
<p>E. COMPRESSOR CONTROL (130 - 140 PSI +/-5 PSI)</p>	
<p>CHECK FLUID LEVELS BEFORE LOADING:</p>	
<p>A: ENGINE OIL</p>	
<p>B: COOLING WATER</p>	
<p>C: AIR COMPRESSOR OIL</p>	
<p>TEST OPERATION OF THE FOLLOWING DEVICES:</p>	
<p>A. BELL</p>	
<p>B. SANDERS (FORWARD, REVERSE, EMERGENCY)</p>	
<p>C. RADIATOR SHUTTERS</p>	



5016 OUT BOUND

UNIT 5016

DATE 5/20/12

Service Operations

THRITTLE 8 OUTBOUND LOAD TESTS

Eng RPM (900)	EMD	_____	Lube Oil Pres	<u>135 @ 8th</u>
Eng RPM (1050)	GE	_____	Water Temp	<u>160°F</u>
Horsepower		<u>2749.5</u>	Overspeed Setting	_____
Volts (5.3)	B-23	_____	RACK SETTING	_____
Volts (7)	C-30	<u>6.5</u>		
Volts (720)	B-39	_____		

[Handwritten signature]

THRITTLE #1 STALL TEST

OP Mode	(PWR)	_____	
AMPS	(300)	_____	
MGA	(1220)	_____	NOT APPLICABLE TO B-23 AND C-30
Charging Rate	(70v)	<u>73-9</u>	

[Handwritten signature]

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)
- Inspect left and right side window seals replace as needed.
- Inspect Electric cabinet door seals replace as needed.
- Operate Cab Heaters-Check condition of Heater Assembly @ 45o F above Ambient Temperature.
- 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.
- Check Traction Motor cover gaskets, install as needed.
- Check condition of Cab Door Hinges (Lubricate all Hinges)
- Check condition of Cab Door Locks (Lubricate all Locks)
- Inspect Cab Windows Slider Rail, Adjust Top Rail as needed, Lubricate with Silicone Grease.
- Renew all Wiper Blades.

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.

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.

Unit: 5016

Date: 1-20-12

DEFECTS FOUND DURING INSPECTION

DEFECT <u>BAD power As. #4 cyl.</u>	INSPECTED BY: <u>[Signature]</u>
REPAIR <u>Charged out</u>	CORRECTED BY:

DEFECT <u>Fuel jumper leaking on L-4</u>	INSPECTED BY: <u>J Black</u>
REPAIR <u>Changed out fuel jumper</u>	CORRECTED BY: <u>J Black</u>

DEFECT _____	INSPECTED BY:
REPAIR _____	CORRECTED BY:

DEFECT _____	INSPECTED BY:
REPAIR _____	CORRECTED BY:

DEFECT _____	INSPECTED BY:
REPAIR _____	CORRECTED BY:

Did A Comp test - J Black
#4 cyl LEFT
BAD VALVE
Charge out [Signature]