

MM&A 1104 DAY INSPECTION SHEET

LOCATION:

DATE: 9-22-18

LOCOMOTIVE NO.

No.	INSPECT-CHECK	INSPECTOR'S SIGNATURE
	PERFORM ALL 100 SERIES INSPECTIONS AND TESTS WITH LOCOMOTIVE OUTSIDE OF SHOP BUILDING	
100	PERFORM SELF TEST ON ALERTER-EVENT RECORDER. DOWN LOAD EVENT RECORDER. INSURE THAT ALL DATA PARAMETERS ARE BEING RECORDED, VERIFY PROPER TIME AND DATE ON RECORDER	
101	SELF LOAD UNIT OUTSIDE. RECORD KW, AMPS AND VOLTS	5.3V 2247 HP
102	MANUALLY PULL EACH FUEL PUMP RACK SLIGHTLY AND LISTEN FOR A SHARP WRAP, WHICH INDICATES THAT THE NOZZLE AND CYLINDER ARE MOST LIKELY OPERATING PROPERLY.	J. Martin
103	CHECK "DID" ON THE BRIGHTSTAR SCREEN. IF FAULT IS DISPLAYED, RECORD ON DEFECT SHEET AND INVESTIGATE THE CAUSE. RUN LOCOMOTIVE SELF TEST IF NEEDED.	
104	LISTEN TO DIESEL ENGINE IN IDLE FOR ANY UNUSUAL SOUNDS. MAKE VISUAL INSPECTION WITH ALL DOORS OPEN. LOOK FOR WATER, LUBRICATION AND FUEL LEAKS AND MAKE CORRECTIONS AS NECESSARY.	J. Martin
105	CHECK ENGINE OIL LEVEL AT IDLE. ADD OIL TO FULL MARK AS NECESSARY. TAKE OIL SAMPLE AFTER RUNNING ENGINE FOR A MINIMUM OF FIVE (5) MINUTES.	Done [Signature]
106	CHECK AIR COMPRESSOR OIL LEVEL WITH ENGINE AT IDLE.	
107	CHECK OIL LEVEL IN ALTERNATOR GEAR TRAIN. ADD DIESEL ENGINE OIL AS NEEDED.	
108	CHECK OPERATION OF WINDOW WIPERS. REPLACE BLADES AS NECESSARY.	G. Martell
109	CHECK COOLING WATER LEVEL AND WATER TREATMENT CONCENTRATION. ADD TREATED OR CLEAN WATER AND COMPATIBLE WATER TREATMENT COMPOUND AS NEEDED.	J. Martin
110	CHECK OPERATION OF GROUND RELAY SYSTEM AND LOCK OUT PER GETS MI GEI-83418A.	J. Martin
111	CHECK EXHAUST MANIFOLD FOR LEAKS, CRACKS OR BROKEN WELDS. REPAIR AS NECESSARY.	G. Martell
112	CHECK OPERATION OF ENGINE AIR FILTER PRESSURE SWITCH PER GETS MI GEK-18104.	PSI 28 AT Full RPMs G. Martell
113	CHECK OPERATION OF EMERGENCY FUEL TRIPS AND THROTTLE STOPS	

Replaced 12V Hot start battery and Tested System - OK

J. Martin

114	CHECK GOVERNOR OVER SPEED SYSTEM TO ENSURE PROPER OPERATION. CHECK GOVERNOR OIL LEVEL AT IDLE.	J. Hartin
115	TEST FLUID AMPLIFIER FOR LEAKAGE PER MI GE K-35899.	
116	INSPECT AND TEST ALL ALARMS, AUTOMATIC CONTROLS AND PROTECTIVE DEVICES	
117	RUN MANUAL SELF TEST USING DID PANEL.	
118	CHECK AND VERIFY OPERATION OF SPEEDOMETER	
119	ENSURE WATER GOES INTO RADIATOR AND TANK SIGHT GLASS IS LOWER AT APPROX 180 DEGREES ON WATER TANK TEMP GAGE. CHECK COOLING WATER AMPLIFIER FOR LEAKS DURING LOAD BOX TEST.	M Coihoy
120	PERFORM OUTBOUND AIR BRAKE LEAKAGE TESTS AND VERIFY AUTOMATIC AND INDEPENDENT WORK CORRECTLY. APPLY AUTOMATIC BRAKE TO FULL SERVICE POSITION, CUT OUT AIR VALVE, AND VERIFY THAT BRAKE CYLINDERS STAY APPLIED FOR FIVE (5) MINUTES.	M Coihoy
121	APPLY INDEPENDENT BRAKES, MOVE REVERSER TO FORWARD, OPEN THROTTLE AND OBSERVE AMPERAGE ON AMPERAGE METER. RETURN THROTTLE TO IDLE, MOVE REVERSER TO REVERSE, OPEN THROTTLE AND OBSERVE AMPERAGE ON AMPERAGE METER. IF NO AMPERAGE APPEARS, IDENTIFY AND CORRECT PROBLEM.	M Coihoy
122	CHECK OPERATION OF CAB HEATERS AND REFRIGERATOR. MAKE REPAIRS AS NECESSARY.	J. Hartin
200	CHECK THAT ALL ACCESS PANEL HATCHES AND DOORS OF ELECTRICAL EQUIPMENT AND CABINETS ARE IN PLACE AND SECURED AND PROPERLY STENCILED WITH WARNING LABELS	J. Hartin
201	CLEAN AND INSPECT CAB. MAKE SURE NO TOOLS OR DEBRIS IS ON THE FLOOR. CLEAN WINDOWS INSIDE AND OUT.	
202	CHECK ALL CIRCUITS FOR GROUNDS, SHORT CIRCUITS AND DAMAGED INSULATION. CLEAN CONTROL EQUIPMENT COMPARTMENTS USING LOW VELOCITY DRY AIR OR A VACUUM CLEANER WITH A SOFT BRUSH	J. Hartin
203	INSPECT ELECTRICAL EQUIPMENT POWER CONTACTOR TIPS, ARC CHUTES AND INTERLOCK PLUNGER BOLTS. CHECK FOR BURNED WIRING AND LOOSE OVERHEATED ELECTRICAL	J. Hartin

204	INSPECT MASTER CONTROLLER (17KC120), CLEANING CONTACT BRUSH WEAR DUST OR DEBRIS FROM DYNAMIC BRAKE POTENTIOMETER (IF PAINTED GREY VERSION) WITH DRY COMPRESSED AIR.	J. Harris
205	TEST ALL GAUGES FOR ACCURACY	M. Cooley
206	INSPECT LOW PRESSURE FUEL HOSE. REPLACE AS NECESSARY.	G. Martell
207	INSPECT MAIN ALTERNATOR COMMUTATOR, SLIP RINGS AND BRUSHES. DRESS COMMUTATOR AS NECESSARY. REPLACE (IN SETS ONLY!) CHIPPED, CRACKED OR DAMAGED BRUSHES AND THOSE TOO SHORT TO LAST UNTIL NEXT INSPECTION (IF ALL THREE MARKED LINES ARE NOT VISIBLE, BRUSHES ARE TOO SHORT AND MUST BE REPLACED).	J. Harris
208	INSPECT AUXILIARY ALTERNATOR AND EXCITER COMMUTATOR, SLIP RINGS AND BRUSHES. DRESS COMMUTATOR AS NECESSARY. REPLACE (IN SETS ONLY!) CHIPPED, CRACKED OR DAMAGED BRUSHES AND THOSE TOO SHORT TO LAST UNTIL NEXT INSPECTION. (IF ALL THREE MARKED LINES ARE NOT VISIBLE, BRUSHES ARE TOO SHORT AND MUST BE REPLACED).	J. Harris
209	INSPECT DYNAMIC BRAKE BLOWER MOTORS AND FUEL BOOSTER PUMP MOTOR COMMUTATOR, SLIP RINGS AND BRUSHES. DRESS COMMUTATOR AS NECESSARY. REPLACE (IN SETS ONLY!) CHIPPED, CRACKED OR DAMAGED BRUSHES AND THOSE TOO SHORT TO LAST UNTIL NEXT INSPECTION. (IF ALL THREE MARKED LINES ARE NOT VISIBLE, BRUSHES ARE TOO SHORT AND MUST BE REPLACED).	J. Harris
210	REMOVE CARBON BUILD UP FROM CRANKCASE BREATHER PIPE IN EXHAUST STACK (IF EQUIPPED).	G. Martell
211	REPLACE FUEL FILTER ELEMENT.	G. Martell
212	GREASE AND INSPECT GOVERNOR LINKAGE TO FUEL RACKS FOR PROPER OPERATION. APPLY TORQUE ADAPTER AND CHECK THAT TORQUE REQUIRED TO OPERATE LINKAGE DOES NOT EXCEED 25 FT.-LBS. DRAIN AND REFILL WITH NEW OIL (GE SPEC. D6B17F10, SAE 10W-30 GRADE SF OR BETTER); OPERATE ENGINE FOR FIVE (5) MINUTES TO CIRCULATE OIL, ADD OIL TO PROPER LEVEL WHILE ENGINE IS AT IDLE. CHECK	G. Martell
213	CHANGE ALL LUBE OIL FILTERS, CLEAN LUBE OIL STRAINER AND TAKE LUBE OIL SAMPLE	G. Martell
214	INSPECT ALL FLEXIBLE COUPLINGS. CHECK RUBBER BUSHINGS FOR DETERIORATION, REPLACE AS NECESSARY	G. Martell

215	INSPECT EXHAUST MANIFOLD, HEAT SHIELDS, SILENCER AND EXHAUST STACK.	<i>G. Martell</i>
216	CHECK OIL LEVEL OF RADIATOR FAN GEAR BOX. CLEAN FAN BLADES AND MAKE CLOSE VISUAL INSPECTION FOR CRACKS. IF ANY CRACKS ARE FOUND, REPLACE RADIATOR FAN.	<i>G. Martell</i>
217	REPLACE BAGGIE AIR FILTERS WITH NEW ELEMENTS	<i>DM</i>
218	CLEAN EXTERIOR OF AIR COMPRESSOR INTERCOOLER AND INSPECT FOR LEAKAGE. CHECK OPERATION OF UNLOADERS. DRAIN OIL, CLEAN SUMP SCREEN, ADD NEW OIL, (GE SPEC D6B11D3) AND CLEAN FILTER (if applicable). REPLACE INLET AIR FILTERS. REPLACE CMV SYSTEM IN-LINE FILTER	<i>DM</i>
219	FREEDOM OF OPERATION	
220	INSPECT AND CLEAN ENGINE COALESCER AIR FILTER CARTRIDGE WITH MINERAL SPIRITS	<i>DM</i>
221	CLEAN ENGINE ROOM WITH APPROVED CLEANING AGENT. MAKE SURE PLATFORM DRAINS ARE NOT PLUGGED	
222	INSPECT COOLING SYSTEM FOR OIL AND CORROSION. CLEAN AS NECESSARY (MI 09601) CHECK COOLING WATER LEVEL AND WATER TREATMENT CONCENTRATION. ADD TREATED OR CLEAN WATER AND COMPATIBLE WATER TREATMENT COMPOUND AS NEEDED. REPLACE OR RECONDITION AMOT THERMOSTAT	<i>DM</i>
223	CHANGE OUT FUEL INJECTION NOZZLES. TORQUE NUTS IN HIGH PRESSURE LINE TO SPECIFICATION.	<i>DM</i>
224	LUBRICATE EQUIPMENT BLOWER BEARINGS (GE SPEC. D6A2C5)	<i>DM</i>
300	VISUALLY INSPECT ALL COMPONENTS OF THE CRANK CASE OF DIESEL ENGINE . PRESSURIZE THE COOLING SYSTEM AND BAR THE ENGINE OVER SLOWLY AND INSPECT THE INSIDE OF THE LINERS, BOTTOM OF PISTONS, ROD THRUST FACES ETC.	<i>DM</i>
301	TAKE AND RECORD CRANKSHAFT LATERAL MEASUREMENT	
302	VISUALLY INSPECT ALL CYLINDER INLET PORTS FOR CARBON BUILD UP. IF CARBON THICKNESS APPROACHES 6 MM IN ANY PORT, CLEAN ENTIRE ENGINE.	
303	CHECK CYLINDER TAPPET CLEARANCE AND ADJUST AS NECESSARY.	
304	CLEAN AND QUALIFY FUEL HEATER.	
400	INSPECT ENTIRE LOCOMOTIVE FOR LOOSE BOLTS, NUTS AND PIPE JOINTS. TIGHTEN OR REPAIR AS APPROPRIATE.	

*Don't
Duke
Per
DM*

401	CLEAN RADIATORS.	
402	INSURE THAT SAND BOXES ARE FULL.	<i>D.M., J.H.</i>
403	INSPECT ALL HAND RAILS AND RAILINGS TO INSURE THEY ARE STRAIGHT AND SECURE.	<i>D. Blair</i>
404	INSPECT ALL LIGHT BULBS TO INSURE THEY ARE OPERATIONAL.	
405	CHECK COUPLER HEIGHT (950 MM MIN, 1080 MM MAX, 1050 MM NOMINAL) AND DRAFT GEAR ON BOTH ENDS FOR FREE SLACK (FREE SLACK SHALL NOT EXCEED 13 MM) AND RECORD-FRONT: <i>32</i> REAR: <i>32</i>	<i>J.H.</i>
406	WASH EXTERIOR OF BATTERY TRAYS. INSPECT BATTERIES FOR PROPER ELECTROLYTE LEVEL, FILLING AS NECESSARY, CHECK ALL ELECTRICAL CONNECTIONS, FLUSH AND GREASE TERMINALS AS NEEDED, CHECK AND RECORD SPECIFIC GRAVITY ON BACK OF THIS SHEET.	<i>JH</i>
407	TEST / QUALIFY MU JUMPER CABLE WITH TESTER	
500	PERFORM INTERNAL TRACTION MOTOR INSPECTION. INSPECT ALL VISIBLE INSULATION AND CONNECTIONS ON TRACTION MOTOR LEADS AND CARBODY BOOTS. INSPECT ALL CABLES FOR INDICATIONS OF RUBBING AGAINST OTHER CABLES OR THE BOGIES-ELIMINATE ANY RUBBING. CHECK MOTOR FLEXIBLE AIR DUCTS FOR LEAKS. CHECK FOR LOOSE OR MISSING TRACTION MOTOR COMMUTATOR COVERS. CHECK COMMUTATOR FOR DISCOLORATION AND DAMAGE. CHECK FOR CHIPPED, BROKEN OR DAMAGED BRUSHES. REPLACE BRUSHES IN SETS IF TOO SHORT TO LAST TO NEXT INSPECTION.	<i>J. Martin</i>
501	PERFORM TRACTION MOTOR LUBRICATION INSPECTION. CHECK FOR HEAVY FILM OF LUBRICANT ON GEAR TEETH. IF LOW, FILL TO BOTTOM OF LOWER INSPECTION OPENING (GE SPECIFICATION D50E8C) REPLACE LEAKING OR DEFECTIVE FILLER CAPS. DRAIN OIL FROM TRACTION MOTOR SUPPORT BEARINGS. REMOVE WICK ASSEMBLY. REFILL WITH NEW OIL (GE SPEC D50E14) NOTE: CLEAN DIRT AND DEBRIS FROM WICK, WICK PLATE AND FILL OPENING AREAS PRIOR TO INSPECTION OR FILLING. CHECK FOR SIGNS OF EXCESS HEAT AROUND THE SUPPORT BEARING CAPS AND DIRT SHIELD.	<i>MC, 1-2</i> <i>D.B. - 3-4</i>

502	INSPECT WHEELS FOR CRACKS, SHELLED TREADS OR FLAT SPOTS. CHECK FOR PROPER RIM THICKNESS AND MAKE CORRECTIONS AS NECESSARY. COMPLETE WHEEL INSPECTION REPORT.	J. Hartin
503	DRAIN WASTE OIL RETENTION TANK. INSPECT DRAIN TROUGHS ALONG THE WALKWAYS TO ENSURE DRAIN HOLES ARE NOT PLUGGED.	J. Hartin
504	CHECK OIL LEVEL IN JOURNAL BOXES (IF APPLICABLE)	Tinker
505	CHECK TRACTION MOTOR NOSE SUSPENSION FOR DAMAGE, DETERIORATED RUBBER PADS, SEPARATION OF RUBBER FROM STEEL SEPARATORS AND FOR CRACKS IN PARTS OR AT WELDS. RENEW WEAR PLATES WHEN EXCESSIVELY WORN.	M.C. 1-2 D.B. 3-4
506	INSPECT TRUCK WEAR PLATES FOR PRESENCE, CRACKED WELDS AND EXCESSIVE WEAR. MEASURE PEDESTAL WEAR LINER WEAR AND REPLACE IF WORN TO 11 MM OR LESS. REPLACE AS NECESSARY. INSPECT SHOCK ABSORBERS FOR LEAKING CYLINDERS OR LOOSE MOUNTING HARDWARE. INSPECT TIE BAR BOLTS FOR TIGHTNESS	M.C. 1-2 D.B. 3-4
507	CHECK GEARCASE BOLTS FOR PROPER SECUREMENT BY GENTLY TAPPING WITH A HAMMER TO DETECT LOOSE BOLTS. IF LOOSE, TORQUE: CASE TO MOTOR-440-495 ft.-lbs., GEARCASE HALVES-185-210 ft.-lbs. REPLACE LEAKING OR DEFECTIVE FILLER CAPS.	M.C. 1-2 D.B. 3-4
508	DRAIN FUEL TANK CONDENSATION.	TH
509	INSPECT TRUCKS FOR LOOSE OR DRAGGING EQUIPMENT. REPAIR AS NEEDED. ENSURE THAT SAND PIPES ARE PROPERLY ALIGNED SO THAT THE SANDERS DEPOSIT SAND ON RAIL IN FRONT OF WHEELS.	M.C. 1-2 D.B. 3-4
510	INSPECT BRAKE RIGGING, BRAKE BLOCKS AND SLACK ADJUSTERS FOR EXCESSIVE WEAR. REPLACE BRAKE BLOCKS AS NEEDED. ADJUST SLACK ADJUSTER AS NEEDED FOR PROPER PISTON TRAVEL WHICH MUST NOT EXCEED 150 MM.	M.C. 1-2 D.B. 3-4
600	PERFORM OUTBOUND SELF LOAD TEST AND RECORD HP, AMPS, VOLTS, BATTERY VOLTS, WATER AND OIL TEMP	5.3V 2247 HP
601	ENSURE WATER GOES INTO RADIATOR AND TANK SITE GLASS IS LOWER AT APPROX 180 DEGREES ON WATER TANK TEMP GAGE	

602	PERFORM OUTBOUND AIR BRAKE LEAKAGE TESTS AND VERIFY AUTOMATIC AND INDEPENDENT WORK CORRECTLY. APPLY AUTOMATIC BRAKE TO FULL SERVICE POSITION, CUT OUT AIR VALVE, AND VERIFY THAT BRAKE CYLINDERS STAY APPLIED FOR FIVE (5) MINUTES.	<i>M Coihay</i>
603	APPLY INDEPENDENT BRAKES, MOVE REVERSER TO FORWARD, OPEN THROTTLE AND OBSERVE AMPERAGE ON AMPERAGE METER. RETURN THROTTLE TO IDLE, MOVE REVERSER TO REVERSE, OPEN THROTTLE AND OBSERVE AMPERAGE ON AMPERAGE METER. IF NO AMPERAGE APPEARS, IDENTIFY AND CORRECT PROBLEM.	<i>M Coihay</i>
604	CHECK SANDERS FOR PROPER OPERATION, COMPRESSOR PICK-UP AND DROP-OUT PRESSURES, AND INSPECT ANY OIL, FUEL OR WATER LEAKS CORRECTED.	<i>[Signature]</i>
605	RUN AUTO SELF TEST USING DID PANEL.	<i>[Signature]</i>
606	REVIEW COMMENT AND DEFECT SHEETS AND CORRECT ANY DEFECTS NOT CORRECTED.	<i>[Signature]</i>
0	SUPERVISOR'S SIGNATURE	<i>[Signature]</i>

Montreal, Maine, & Atlantic Railway
Locomotive

Unit 2006

Date 9-27-10

3 Month Federal Air Work

Signature D Black

1. Inspect and repair air piping and valves for leaks D Black
2. Test all air gauges with gauge tester and set if required..... M. Carley
3. With full brake pipe pressure, make a 20lb. reduction, move the cutoff valve to "OUT" position and move the lead - dead valve to "DEAD" position. Brakes must remain applied for 5 minutes..... M. Carley
4. Cover each trainline hose coupling with hand and test for leakage through valve, then apply blank dummy couplings to the trainline hoses on each end of the unit and open trainline valves. Make a 20lb. reduction with the Automatic, move the cutoff valve to "OUT" position and check for brake pipe leakage. Leakage shall not exceed 5 lb. per minute..... M. Carley
5. Reduce main reservoir pressure to 85 lbs. by draining #2 main reservoir.(*)
Check cab gauge for leakage from main reservoirs and piping for 3 minutes.
Leakage must not exceed an average of 3 lb. per minute during the test..... D Black
6. Drain #1 main reservoir (*) completely and test check valve between reservoirs.
Pressure should remain on the main reservoir gauge in the cab as #1 main reservoir is drained..... D Black
7. Check all MU valve handles to ensure the locking devices work properly. Lubricate or replace as necessary..... _____
8. Check knuckle thrower to make sure it opens the knuckle. Lubricate or repair as necessary..... D Black

Note (*) #1 reservoir is without the check valve.# 2 is with the check valve.

Montreal, Maine and Atlantic Railway
12 Month Airwork

Unit Number _____

Date _____

1. Test resistance of Electrical Equipment to Ground:
 - a. Hi Voltage System..... J. Hart
 - b. Low Voltage System..... J. Hart
 - c. A/C System..... _____
2. Check Fire Extinguisher..... JH G.M.
3. Lubricate Brake Pistons..... D Black
4. Measure slack in draft gears & record: Front MC Rear MC
5. Change Main Reservoir Relief Valve..... Gordon
6. Remove and clean Salem Filters..... J. Hart
7. Remove and clean Dirt Filter..... Garbon
8. Check Compressor on/off pressures..... J. Hart
9. Check Brake Pipe pressures (90lbs.)..... M. Griley
10. Check Brake Cylinder Pressure with Auto Application..... M. Griley
11. Check Independent Brake Pressure..... M. Griley
12. Cut out Compressor Unloader and test Main Reservoir Relief Valve.
(Should pop @ 155psi)..... J. Hart
13. Inspect and test Hand Brake..... M. Griley
14. Change Air Compressor oil and Filter (wipe out base)..... JH
15. Inspect Air Compressor Rod Bolts, Brgs., and Oil Pump... JH
16. Check Oil pressure @ idle and record..... 80 PSI JH
17. Change Oil in Dash 7:
 - a. Alternator..... check J.H.
 - b. Fan Drive..... Gordon
18. Check Engine Adjustments..... NA
19. Clean Air Boxes..... NA
20. Clean Diode Bank in Dash 8's... → 7.5..... J. Hart

Comments:

unit no. _____

Date _____

26 L EQUIPMENT, (UNITS 26-29, 300-303, 40-4305 and 81-90)

- 1. Change Automatic Brake Valve Portion. J. HART
- 2. Change Independent Brake Valve. J. HART
- 3. Change A-1 Charging Cutoff Pilot Valve. G. MARTELL
- 4. Change Control Valve Portion:
 - a. Service Portion. J. HART
 - b. Quick Release Portion. J. HART
- 5. Change P-2-A Application Valve. J. HART
- 6. Change Overspeed Magnet Valve (Salem 816-1). J. HART
- 7. Change Compressor Unloader Magnet Valve. N. I. S.
- 8. Change Out Compressor Intake Air Filters. G. MARTELL
- 9. Remove and Wash Inertial Air Separators. J. HART
- 10. Change J-relay air valve. G. MARTELL
- 11. Clean Six 2-Way Checks. G. MARTELL
- 12. Change Air Compressor Intake Air Filters. G. MARTELL
- 13. Change Oil in Air Compressor. G. MARTELL
- 14. Change #8 vent valve. J. HART

Comments:

BRUSH RECORD

UNIT # _____

DATE _____

MAINS ALTERNATOR

POS	1	2	3	4	B	W
9						
10	✓					
11						
12	✓					
1						
2	✓					

SIGNATURE J. Martin

NO. 1 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	OK				
9					
12					

SIGNATURE J. Martin

NO. 2 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	OK				
9					
12					

SIGNATURE J. Martin

AUXILIARY GENERATOR

POS	1	2	3	B	W
2					
4					
8	✓	✓	✓		
10					

SIGNATURE J. Martin

NO. 3 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	OK				
9					
12					

SIGNATURE J. Martin

NO. 4 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	OK				
9					
12					

SIGNATURE J. Martin

NO. 5 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	/				
9					
12					

SIGNATURE _____

NO. 6 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	/				
9					
12					

SIGNATURE _____

EXCITER GENERATOR

POS	1	2	3	B	W
2					
4	OK				
8					
10					

SIGNATURE J. Martin

~~Cab Heaters
DYNAMIC BRAKING BLOWER MOTORS~~

FUEL PUMP MOTOR

POS	1	B	W
3	OK		
9			

SIGNATURE J. Martin

FRONT

POS	1	B	W
2			
4	OK		
8			
10			

SIGNATURE J. Martin

REAR

POS	1	B	W
2			
4	OK		
8			
10			

SIGNATURE J. Martin

Down load Event Recorder X

Montreal, Maine, & Atlantic Railway
Mechanical Department

Unit Number. 2006

Date 9-23-10

1. Inspect traction motor wicks and report action

- #1. MC ... OK
- #2. MC ... OK
- #3. MC ... OK
- #4. W. B ... OK
- #5. W. B ... OK

#6. New gaskets
New oil
re-wired plugs

LOCOMOTIVE										DATE				
MMA 2006										9-22-10				
Start Readings					Has Shims		END READING					Has Shims		OLD GAUGE
	Flange Height	Flange Thickness	Rim Thickness	Witness Groove	YES	NO		Flange Height	Flange Thickness	Rim Thickness	Witness Groove	YES	NO	FLANGE THICKNESS MEASUREMENT
L#1	1 13/32	1 7/8	1 12/16				L#1							
L#2	1 5/16	1 7/8	1 11/16				L#2							
L#3	1 5/16	1 7/8	1 14/16				L#3							
L#4	1 1/4	1 7/8	1 7/16				L#4							
L#5							L#5							
L#6							L#6							
														OLD GAUGE
R#1	1 5/16	1 7/8	1 12/16				R#1							FLANGE HEIGHT MEASUREMENT
R#2	1 5/16	1 7/8	1 11/16				R#2							0-on-0-1"
R#3	1 5/16	1 7/8	1 5/16				R#3							0-on-1-1 1/16"
R#4	1 3/16	1 7/8	1 7/16				R#4							0-on-2-1 1/8"
R#5							R#5							0-on-3-1 3/16"
R#6							R#6							0-on-4-1 1/4"
														0-on-5-1 5/16"
														0-on-6-1 3/8"
														2-on-6-1-13/32"
														4-on-6-1 7/16"
														6-on-6-1 31/64"

WEAR LIMITS FOR ROAD & SWITCH LOCOMOTIVES - MINIMUM DAILY REQUIREMENTS

FRA 1 1/2" MMA 1 7/16" Flange Height
 FRA 7/8" MMA 15/16" Flange Thickness
 FRA 1" MMA 1 1/16" Rim Thickness
 FRA 5/16" MMA 1/2" Tread Wear

NEW GAUGE

FLANGE HEIGHT MEASUREMENT

0-on-17-1 1/16"
 0-on-18-1 1/8"
 0-on-19-1 3/16"
 0-on-20-1 1/4"
 0-on-21-1 5/16"
 0-on-22-1 3/8"
 2-on-22-1-13/32"
 4-on-22-1 7/16"
 6-on-22-1 15/32"
 8-on-22-1 1/2"

WEAR LIMITS - ROAD & SWITCH LOCOS - MIN 92 DAY REQ

WEAR LIMITS - PASSENGER LOCOS - MIN 92 DAY REQ

FLANGE Height	Flange THICKNESS	Rim THICKNESS	Tread WEAR	Flange HEIGHT	Flange THICKNESS	Rim THICKNESS	Tread WEAR
FRA 1 1/2"	FRA 7/8"	FRA 1"	FRA 5/16"	FRA 1 1/2"	FRA 7/8"	FRA 1"	FRA 5/16"
MMA 1 7/16"	MMA 1 1/32"	MMA 1 1/8"	MMA 1/4"	MMA 1 7/16"	MMA 1"	MMA 1 1/4"	MMA 1/2"

CONVERSION CHART FOR WHEEL DIAMETER

8= 37"	15= 37 7/8"	22= 38 1/2"	29= 39 5/8"	36= 40 1/2"
9= 37 1/8"	16= 38"	23= 38 7/8"	30= 39 3/4"	37= 40 5/8"
10= 37 1/4"	17= 38 1/8"	24= 39"	31= 39 7/8"	38= 40 3/4"
11= 37 3/8"	18= 38 1/4"	25= 39 1/8"	32= 40"	39= 40 7/8"
12= 37 1/2"	19= 38 3/8"	26= 39 1/4"	33= 40 1/8"	40= 41"
13= 37 5/8"	20= 38 1/2"	27= 39 3/8"	34= 40 1/4"	41= 41 1/8"
14= 37 3/4"	21= 38 5/8"	28= 39 1/2"	35= 40 3/8"	42= 41 1/4"

LOCOMOTIVE RAIL CLEARANCE

COUPLER HEIGHT	FRONT	PILOT HEIGHT	FRONT	HEIGHT OF HORIZONTAL END HANDHOLD OR UNCOUPLING LEVER IF USED AS HORIZONTAL HANDHOLD	LOCO RAIL CLEARANCE
FRA	MAX 34 1/2" MIN 31 1/2"	32	MAX 6" MIN 3"	4 1/2	FRA MIN 2 1/2"
MMA	MAX 34 1/2" MIN 32 1/2"	32	MAX 6" MIN 3 1/2"	4 1/2	MMA MIN 3"

WHEEL DIAMETER MEASUREMENTS ARE TAKEN FROM THE TOP OF THE WITNESS GROOVE 40" DIAMETER WHEELS WITNESS GROOVE = 36"
 42" DIAMETER WHEEL WITNESS GROOVE = 38"

WHEEL MATCHING STANDARDS FOR 6 AXLE LOCOMOTIVES (FRA & MMA) STANDARDS ARE THE SAME

- 1) IS THE MAXIMUM VARIATION ALLOWED IN WHEEL DIAMETER BETWEEN ANY 2 WHEELS IN THE SAME TRUCK WITHOUT SHIMS
- 2) IS THE MAXIMUM VARIATION ALLOWED IN WHEEL DIAMETER BETWEEN ANY 2 WHEELS IN THE SAME TRUCK WITH SHIMS APPLIED
- 3) IS THE MAXIMUM VARIATION ALLOWED IN WHEEL DIAMETER BETWEEN ANY 2 WHEELS ON DIFFERENT TRUCKS

REMEMBER THIS RULE

NOTE: WHEEL DIAMETER MEASUREMENTS ARE TAKEN FROM THE TOP OF THE WITNESS GROOVE 40" DIAMETER WHEELS WITNESS GROOVE = 36"
 42" DIAMETER WHEEL WITNESS GROOVE = 38"

EMPLOYEES SIGNATURE

J. Hoja

SUPERVISORS SIGNATURE

WINTERIZATION	
Winterization - All MMA Locomotives (August - April)	Signature
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.	

OK



UNIT _____
 DATE _____

Service Operations

THROTTLE 8 INBOUND LOAD TESTS

Eng RPM (900)	EMD	<u> </u>	Lube Oil Pres	<u>60</u>
Eng RPM (1050)	GE	<u>1050</u>	Water Temp	<u>145</u>
Horsepower		<u>2247</u>	Overspeed Setting	<u>1090</u>
Volts (5.3)	B-23	<u>5.3</u>	RACK SETTING	<u>19.5</u>
Volts (7)	C-30	<u> </u>		
Volts (720)	B-39	<u> </u>		

THROTTLE #1 STALL TEST

OP Mode	(PWR)	<u>NOT IN Reverse</u>	
AMPS	(300)	<u>350</u>	
MGA	(1220)	<u> </u>	NOT APPLICABLE TO B-23 AND C-30
Charging Rate	(70v)	<u>74 V</u>	



B-23, B-39, C-30, GP-7 M12 MAINTENANCE

LOCOMOTIVE INSPECTION REPORT AIR99

	RECORDED DATE	(STENCIL DATE)	SIGNATURE
26 INDEPENDENT BRAKE VALVE	9-21-10		J. Harte
26 C AUTOMATIC BRAKE VALVE	9-21-10		J. Harte
HB5D RELAY AIR VALVE (NOTE IF			
26 F CONTROL VALVE	9-21-10		J. Harte
A-1 CHARGING VALVE			
P-2-A PENALTY BRAKE APPLICATION	9-21-10		J. Harte
F-1 SELECTOR VALVE (NOTE IF NOT			
MU2A VALVE	9-21-10		J. Harte
J-1 RELAY AIR VALVE			
J-1.6-16 RELAY AIR VALVE			
QUICK RELEASE PORTION	9-21-10		J. Harte
#8 VENT ENGINEER'S SIDE (NOTE IF	9-21-10		J. Harte
#8 VENT FIREMAN'S SIDE (NOTE IF	9-21-10		J. Harte
MAIN RESERVOIR POP VALVE Check			
CHANGE ALL MAIN RESERVOIR AND DIRT COLLECTOR ELEMENTS	9-22-10		J. Harte

The equipment above is to be changed out every 24 months. If the date dictates it needs changed, please change it.

Manufacturer is QEI Version # S45E
Serial Number is 0204070095
Customer is MMAR

Data was removed on - 13:36:34 on 09/22/10
Last Downloaded on - 20:15:00 on 06/25/10
Battery was installed on - 06/28/04
Locomotive Number is - 2006

Downloaded by - jh

Location - derby

Train - 234

Wheel Size Entry - 39

Wheel Size used by program:

Circumference = 122.5 Diameter = 39.0

No memo present.

Wheel size used for printout is 122.52

QDP Version V



Quantum Desktop Playback
Data Scan Report

Report Date: 09-22-2010
Locomotive 2006

Data Removed on 09-22-10

SPEED (MPH)	OK
TRACTION MOTOR CURRENT	OK
BRAKE PIPE PRESSURE	OK
INDEPENDENT BRAKE	OK
END-OF-TRAIN PSI	Never above 20.
EP BRAKE REQUESTED	Never ON/ACTIVE
THROTTLE	Low Idle never reported. Notch 1 never reported.
REVERSE	OK
EIE	OK
PCS	Never ON/ACTIVE
HORN	OK
EOT MOVING	Never ON/ACTIVE
EOT MSG. JUST RX	Never ON/ACTIVE
EOT LIGHT	Never ON/ACTIVE
EP OPERATING MODE	Never ON/ACTIVE
EP PENALTY BRAKE	Never ON/ACTIVE
EP ENGINEER EMERGENCY	Never ON/ACTIVE