

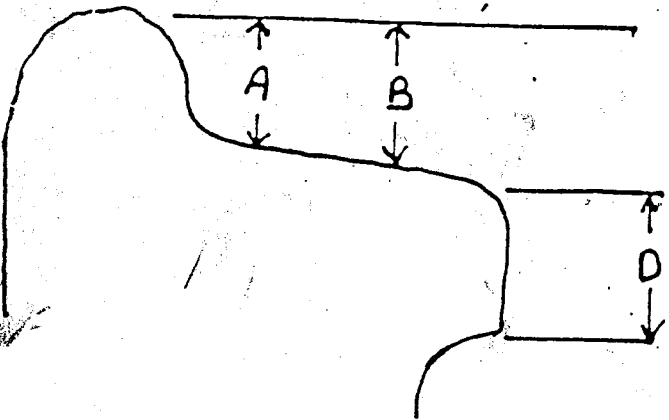
MONTREAL, MAINE AND ATLANTIC RAILWAY

Quarterly Mechanical Maintenance

Unit 2B

Date 01-1-05

REPORT SHEET
WHEEL, COUPLER and SIDE BEARING



$C = B \text{ MINUS } A$

COUPLER HEIGHT (31.5" to 34.5")		MACHINIST <i>H...</i>
FRONT <i>32 1/2</i>	REAR <i>33</i>	
SIDE BEARING CLR. (total 3/16" - 1/2")		MACHINIST <i>H...</i>
R.F. <i>1/8</i>	L.F. <i>1/8</i>	
R.R. <i>1/4</i>	L.R. <i>0</i>	
PILOT HEIGHT (min. 3" - max. 6")		MACHINIST <i>H...</i>
FRONT <i>5 1/2</i>	REAR <i>5</i>	

WHEEL	RIGHT SIDE				LEFT SIDE				NOSE SUSPENS. CLEARANCE
	A	B	C	D	A	B	C	D	
NO. 1	<i>1 6/16</i>	<i>1 9/16</i>		<i>1 10/16</i>	<i>1 6/16</i>	<i>1 7/16</i>		<i>1 5/16</i>	<i>1/2 cut</i>
NO. 2	<i>1 3/16</i>	<i>1 4/16</i>		<i>1 13/16</i>	<i>1 3/16</i>	<i>1 3/16</i>		<i>2 1/16</i>	<i>1/4</i>
NO. 3	<i>1 4/16</i>	<i>1 4/16</i>		<i>2 10/16</i>	<i>1 7/16</i>	<i>1 4/16</i>		<i>2 8/16</i>	<i>1/8</i>
NO. 4	<i>1 5/16</i>	<i>1 5/16</i>		<i>2 5/16</i>	<i>1 4/16</i>	<i>1 5/16</i>		<i>2 5/16</i>	<i>0</i>

MACHINIST: *H...*

- Condemning limit at "C", Tread worn hollow 5/16" Road units.
- Condemning limit at "A", High flange 1-1/2" All units.
- Inspect all wheels for thin flanges (15/16" min.). *1# R-w*
- Inspect all wheels for flat and shell spots. *OK*
- Inspect Front and rear draft gears and couplers. *OK*
- Inspect support brgs., caps, and gear cases for cracks. *OK*

REPORT ALL DEFECTS AND NEAR DEFECTS TO FOREMAN

FRACTIONAL MEASUREMENTS TO BE IN 32nds"
ONLY CORRECT MEASUREMENTS ARE USEFUL

comments: # 1 R-w TAKES *15/16* almost
- Hollow wheel TREAD *7/8*

Locomotive
Quarterly Mechanical Maintenance

Unit 73

Date 10-31-05

M M A R R

1. INSPECT ENGINE

SIGNATURE

- a. Blowers, Lube oil Separator and stack studs for oil and water leaks. Tighten stack studs. Woodie
- b. Gear train housing, pumps, governor and governor linkage for defect and leaks. Woodie
- c. Crankcase, connecting rods, Bearings for cracks and leaks. Woodie
- d. Air Boxes, Liners, Pistons and Piston Rings for cracks, oil and water leaks. Hansen / T. Goodine
- e. Wipe out air boxes. 9-16-Hansen 11-9-Hansen
- 2. Change Michiana Filter Elements. Woodie
- 3. Remove and Clean Lube Oil Suction Strainers. Woodie
- 4. Change or Clean Fuel Oil Filters. Woodie
 - a. Sintered Bronze. Woodie
 - b. Fullflo Filter Elements. Woodie
 - c. Suction Filter Elements. Woodie
- 5. LUBRICATE THE FOLLOWING:
 - a. Traction Motor Gears. (4 pkg. Per gear case).... Hansen
 - b. Journal Boxes. Hansen
 - c. Speed Recorder Drive Chain. N/A
 - d. Throttle Governor. DZM
 - e. Shutter Linkage. DZM
 - f. Bell Ringer. DZM
 - g. Air Compressor Flexible Coupling. DZM
- 6. Inspect, Repair and Lube Hand Brake. DZM
- 7. Inspect and Repair TM Gear Case. Hansen
- 8. CHECK COOLING WATER SYSTEM.
 - a. Inspect for leaks. TPG - K. Hassey
 - b. Water Inhibitor Concentration. NEED WATER & COOLANT (DRAINED) See defect
 - c. Water Gauges. Woodie
- 9. Drain Condensate from Fuel Tank Sump. N/A
- 10. Drain Condensate from Lube Oil Sump. Hansen
- 11. Check Fuel Emergency Cutoff Valve Operation.
- 12. Check Fuel System for Leaks and Repair.
- 13. Check Traction Motor Air Duct Bellows. Hansen
- 14. Change Engine Air Filters. Woodie
- 15. Change Carbody Air Filters. Woodie
- 16. Change High Voltage Cabinet Air Filters. Woodie
- 17. Change or Clean Air Compressor Intake Air Filters. Woodie
- 18. Clean Screen in Air Comp. Discharge Oil Separator.
- 19. Clean Aftercooler Discharge Filter.
- 20. Clean Oil Cooler Breather.
- 21. CHECK OPERATION OF ALL GAUGES
 - a. Engine lube oil pressure.
 - b. Engine lube oil suction.
 - c. Water temperature.
 - d. Water pressure.
 - e. Air compressor lube oil pressure.
 - f. Main reservoir/air compressor governor.
 - g. Fuel gauges. OK
- 22. Perform Daily Inspection. Hansen
- 23. On 350s and 360s take compressor oil sample. Hansen

WATERIZED

Lead Readings - - - - Hansen / T. Goodine
 Ring Inspection - - - - Hansen / T. Goodine

Montreal, Maine, & Atlantic Railway
Mechanical Department

Unit Number. 23

Date 11/1/05

1. Inspect traction motor wicks and report action

	L	R	
#1.	Good	Good	... /
#2.	"	"	... /
#3.	"	"	... /
#4.	"	"	... /
#5.	[Scribbled out]		
#6.	[Scribbled out]		

DRAINED ALL OIL IN BOXES Hessley
(WILK)

BANBOR AND WOODSTOCK RAILROAD

12 MONTH REG. & AIR WORK

unit no. 23

Date 11/1/05

UNIT EQUIPMENT (UNIT NO. 24, 21, 23, 200-203, 10-4305)

1. Test resistance of Electrical Equipment;
 - a. High Voltage system.
 - b. Low Voltage System.
 - c. A/C System.
2. Check calibration of transition meter.
3. Check Fire Extinguisher. *Dave*
4. Lubricate Brake Pistons. *Dave*
5. Measure slack in draft gears & record; Front *Rear*
6. Change Main Reservoir Relief Valve. *Hussey*
7. Remove and Clean Salem 274 Filter (Type "H"). *Dave*
8. Remove and Clean Salem 213 Filter (Auto Drain Valve) *✓*
9. Remove and Clean Dirt Filter. *NA*
10. Check Setting of Compressor Governor.
11. Check Brake pipe Pressure (75 lb.). *Dave*
12. Check Brake Cyl. Pressure with Auto. Appl. (45 lb.) *Dave*
13. Check Independent Brake Pressure. *Dave*
14. Cut Out Compressor Unloaders and Test Main Reservoir Relief Valve. (Should pop at 155 lb.) *Hussey*
15. Inspect and Test Hand Brake. *OZ McI*
16. Change Air Comp. Oil and Filler (wipe out base) *OZ McI*
17. Inspect Air Comp. Rod Polts, Wrgs., and Oil Pump *OZ McI*
18. Check Oil Pressure at Idle and Record.

Comments:

Bangor and Arcostock System
Locomotive
Quarterly Mechanical Maintenance

Unit 23

Date 11/1/05

3 Month Federal Air Work

=> 26-L Air Brake System <=

Signature

1. Inspect and repair air piping and valves for leaks.
2. Test all air gauges with Gauge tester and set if required.
3. With full brake pipe pressure, make a 20 lb. reduction, move the cutoff valve to "OUT" position and move the lead-dead valve to "dead" position. Brakes must remain applied for 5 minutes.
4. Cover each trainline hose coupling with hand and test for leakage thru valve, then apply blank dummy couplings to trainline hoses on each end of unit and open Trainline Valves. Make a 20 lb. reduction with the automatic, move the cutoff valve to "OUT" position and check Brake Pipe leakage. Leakage shall not exceed 5 lb. per minute.
5. Reduce main reservoir pressure to 85 lb. by draining #2 Main Reservoir (*) Check cab gauge for leakage from Main Reservoirs and piping for three minutes. Leakage must not exceed an average of 3 lbs. per minute during the test.
6. Drain #1 Main Reservoir (*), completely and test check valve between reservoirs. Pressure should remain on M. R. gauge in cab as #1 Main Reservoir is drained.

Dave

Hasey

Dave

Dave

Dave

Dave

NOTE (*) Main Reservoir locations:
GP-38=> Res. L Side: #2 Res R. Side

COMMENTS:

**BANGOR & AROOSTOOK SYSTEM
LOCOMOTIVE
QUARTERLY ELECTRICAL MAINTENANCE**

UNIT 23 DATE 10/31/05

TYPE OF MILEAGE

TYPE OF UNIT

(M-1) (M-2) (LM) (M-12) (M-24) (M-36) (GP-7) (GP-9) (GP-35R) (GP-38) (GP-40)

		SIGNATURE
1.	INSPECT, CLEAN, AND CHECK BRUSHES	
	A. TRACTION MOTORS	
	1. NO. 1.....	<u>DF</u>
	2. NO. 2.....	<u>DF</u>
	3. NO. 3.....	<u>DF</u>
	4. NO. 4.....	<u>DF</u>
	B. MAIN GENERATOR.....	<u>DF</u>
	C. AUXILIARY GENERATOR.....	<u>DF</u>
	D. ALTERNATOR SLIP RINGS.....	<u>DF</u>
	E. FUEL PUMP MOTOR.....	<u>DF</u>
	F. DYNAMIC BRAKING MOTOR.....	<u>NA</u>
	G. TURBO LUBE PUMP MOTOR.....	<u>NA</u>
2.	CHECK MAIN ALTERNATOR	
	A. DIODES.....	<u>NA</u>
	B. FUSES.....	<u>NA</u>
3.	DRAIN WATER AND LUBE MOTOR SUPPORT BEARINGS	<u>NA</u>
4.	LUBE SPEED RECORDER. (UNITS 60-79).....	<u>NA</u>
5.	INSPECT AND CLEAN CONTROLLER STAND.....	<u>DF</u>
6.	INSPECT AND CLEAN ALL EQUIPMENT IN ELECTRICAL CABINETS.....	<u>DF</u>
7.	CHECK WATER LEVEL AND GRAVITY OF BATTERIES....	<u>DF</u>
8.	WASH OUT BATTERY BOXES AND GREASE TERMINALS	<u>DF</u>
9.	INSPECT AND CLEAN COMMUTATOR AND SLIP RING ASSEMBLY OF THE LOAD REGULATOR.....	<u>DF</u>
10.	INSPECT, CLEAN, AND REPAIR ALL POWER CONTRACTORS	<u>DF</u>
11.	INSPECT, CLEAN, AND REPAIR ALL REVERSER CONTRACTORS.....	<u>DF</u>
12.	INSPECT, CLEAN, AND REPAIR ALL DYNAMIC BRAKING CONTRACTORS.....	<u>NA</u>
13.	CHECK FOR LOOSE TERMINALS AND INSULATION DEFECTS IN CABINETS.....	<u>DF</u>
14.	CHECK ELECTRICAL SYSTEM FOR GROUNDS	
	A. HIGH VOLTAGE.....	<u>DF</u>
	B. LOW VOLTAGE.....	<u>DF</u>
	C. A/C VOLTAGE SYSTEM.....	<u>NA</u>

*Eng. Batt at 25-50%
Comm. Batt at 50-75%*

SIGNATURE

15.	CHECK ENGINE COOLING SYSTEM	
	A. COOLING FANS.....	<u>DF</u>
	B. SHUTTER OPERATION.....	<u>DF</u>
16.	CHECK RUNNING VOLTAGES	
	A. AUXILIARY GENERATOR VOLTAGE (72 VOLTS).....	<u>DF</u>
	B. 3 PHASE A/C VOLTAGE.....	<u>DF</u>
17.	CHECK OPERATION OF ALARM CIRCUITS AND SAFETY SWITCHES	
	A. LOW OIL PRESSURE.....	<u>DF</u>
	B. SUCTION ALARM.....	<u>DF</u>
	C. HIGH TEMPERATURE.....	<u>DF</u>
	D. CREW ALERT SYSTEM.....	<u>NA</u>
	E. TURBO LUBE PUMP TIMER.....	<u>NA</u>
18.	CHECK OPERATION OF WHEEL SLIP RELAYS.....	<u>NA</u>
19.	PERFORM A DAILY INSPECTION.....	<u>DF</u>
20.	DOWN LOAD EVENT RECORDER.....	
21.	CALIBRATE LOAD METER (+/-5%).....	<u>NA</u>
22.	GOVERNOR	
	A. CHANGE OIL.....	<u>NA</u>
	B. REMOVE PACK AND CLEAN ALL SOLENOIDS.....	<u>NA</u>

COMMENTS:

Oil dripping into T.M.#4 through air duct. - Cleaned - D.F.

Ground lead rubbing through insulation on "F" lead on T.M.#1. - Secured ground lead - D.F.

Missing spare 150A fuse. - Replaced with 200A fuse. - D.F.

Cab heater brushes OK. - D.F.

Load regulator commutator rough and dirty. - cleaned - D.F.

Load regulator brushes rough on contact surface. - ~~etc~~ Smoothed with sandpaper. - D.F.

Bangor and Aroostook Railroad


Brush Record

Unit 23

Date 11/1/05

MAIN GENERATOR

POS	1	2	3	4	5	B	W
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Signature 

Aux. Generator

POS	1	2
2		
4		
8		
10		

Signature 

Fuel Pump

3	
9	OK

Signature DF

NO. 1 TRACTION MOTOR

POS	1	2	3	B	W
3					
6					
9			OK		
12					

SIGNATURE DF

No. 2 Traction Motor

3					
6					
9			OK		
12					

Signature DF

No. 3 Traction Motor

3					
6					
9			OK		
12					

Signature DF

No. 4 Traction Motor

3					
6					
9			OK		
12					

Signature DF

Cab heater
brushes OK.
-DF

ANNUAL INSPECTION TESTS

TEST OPERATION OF DYNAMIC BRAKES.....		NA
CHECK OPERATION OF FUEL PREHEATER.....		
INSTALL GURU PLUGS.....	N/A	
INVENTORY TRACTION MOTORS IN LOCOMOTIVES.....		NA
TEST CAB HEATERS.....		NA
CHECK MAIN RES BLOWDOWNS FOR OPERATION.....		
PERFORM COMPRESSION TEST.....		
INSPECT CAB SEATS.....		
CLEAN AIRBOXES.....	Hussey	OK
REMOVE AND CLEAN TRACTION MOTOR FILTERS.....	N/A	
GREASE EQUIPMENT BLOWERS ON -7s.....		NA
PIN RACKS.....		NA
GREASE FAN / COMPRESSOR COUPLING ON -7s.....		NA
CHECK CRANK CASE BREATHER.....	ok	
CHECK SANDER OPERATION.....		OK
FUEL SPILL KITS.....		OK
CHECK TOILET.....		
PERFORM ENGINE ADJUSTMENTS.....		
TEST AND DATE HANDBRAKE.....	DZ M2	
CHECK CRANK CASE PRESSURE SWITCH.....		
INSPECT BRAKE RIGGING.....	Done	
INSPECT BATTERIES.....		NA
PERFORM CMR TEST.....		NA
INSPECT CDC CONTACTORS ON -8s.....		NA
INSPECT FIRST AID KITS.....		
APPLY SPARE KNUCKLES TO LOCOMOTIVES IF NEEDED.....	OK	
WRENCH, HAMMER, HOSES.....	OK	



11/1/05

DEFECT	CORRECTIVE ACTION TAKEN	SIGNATURE
Eng. Water Drain Valve cracked (sprays out the side)		
Copper line From Ho-Lp. leaking	REPLACED LINE	W. Good
#6 AIR BOX COVER LEAKING	REPLACED GASKET	W. Good
Drained cont. Tank	DRAINED	K. Hussey
Oil Cooler leaking Internally	REPLACED	W. K. Hussey
Welded T-Handles on all test cocks		W. Good
Oil getting into T.M. #4 through air duct. Ground lead rubbing through insulation of "E" lead on T.M. #1.	Moved and secured ground lead.	D.F.
Missing spare 150A fuse.	Replaced with 200A fuse.	D.F.
Passenger Side mirror bracket pulled away (bottom)	OK	Dave
#1 R-W night All must 15/16's	FLANGE - hollow	Dave
#2 R-W persal like bolt missing	REPLACED	Dave
CLEANED CAB/WINDOWS	CLEANED	W. Good
Eng side MIRROR Broken	Replaced	Dave
Eng. Side battery at 25% to 50%		
Automatic drain spitter valve wires disconnected.	Reconnected.	D.F.

Inspector: _____ Time: _____

Time and Date Ok'd For Service: _____

The above work has been performed, except as noted, and the report is approved.

Signature: _____ Occupation: _____

Foreman in Charge _____

Unit No: 23

Inspection: _____