

Manufacturer is QEI Version # S45E
Serial Number is 0204050055
Customer is EBE

Data was removed on - 11:05:37 on 11/12/10
Last Downloaded on - 20:12:00 on 04/29/10
Battery was installed on - 02/05/08
Locomotive Number is - 23

Downloaded by - P. Conlogue
Location - Derby
Train - 345
Wheel Size Entry - 40
Wheel Size used by program:
Circumference = 125.7 Diameter = 40.0
No memo present.

Wheel size used for printout is 125.66

QDP Version V

Locomotive Release from Shop Form.

To be completed on every engine released from the Shop

I have reviewed the work packet for locomotive 23 on this date 11-11-10 and take no exception to applicable laws, rules and or MMA standards, policies and standards.

LOCOMOTIVE												DATE		OLD GAUGE							
Start Readings												Has Shims		END READING				Has Shims		OLD GAUGE	
L#1	Flange Height	Flange Thickness	Rim Thickness	Witness Groove	YES		NO		L#1	Flange Height	Flange Thickness	Rim Thickness	Witness Groove	YES		NO		FLANGE THICKNESS MEASUREMENT			
L#1	4-22	0-0	2 1/4						L#1												
L#2	7-22	0-0	2 1/4						L#2												
L#3	3-21	0-0	2 1/4						L#3												
L#4	0-21	0-0	2 1/4						L#4												
L#5									L#5												
L#6									L#6												
R#1	0-22	0-0	2 1/4						R#1												
R#2	4-22	0-0	2 1/4						R#2												
R#3	0-21	0-5	2 1/4						R#3												
R#4	0-22	0-0	2 1/4						R#4												
R#5									R#5												
R#6									R#6												

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 1/4" Tread Wear

NEW GAUGE

0-on-17--1-1/16"
 0-on-18--1-1/8"
 0-on-19--1-3/16"
 0-on-20--1-3/8"
 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--1-5/16"
 8-on-22--1-1/2"

FLANGE HEIGHT MEASUREMENT

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 1/4"

CONVERSION CHART FOR WHEEL DIAMETER

8=	37"	15=	37 7/8"	22=	38 3/4"	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 1/2"	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 3/4"	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"

NEW GAUGE

0-on-0-1-17/64"
 1-on-0-1-15/64"
 2-on-0-1-7/32"
 3-on-0-1-5/32"
 4-on-0-1-7/64"
 5-on-0-1-3/64"
 6-on-0-1-1/32"
 7-on-0-5/64"
 8-on-0-15/16"

FLANGE THICKNESS MEASUREMENT

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"	FRA MAX 6" MIN 3"	5"	FRA MIN 2 1/2"
MMA	MAX 34 1/2" MIN 32 1/2"	32"	MMA 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)

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

ALWAYS SHOW THE DIFFERENCE IN WHEEL DIAMETER BETWEEN ANY TWO WHEELS ON A TRUCK OR BETWEEN ANY TWO TRUCKS ON A LOCOMOTIVE

REMEMBER THIS RULE

FOR SHIMS THE DIFFERENCE IN WHEEL DIAMETER BETWEEN ANY TWO WHEELS ON A TRUCK OR BETWEEN ANY TWO TRUCKS ON A LOCOMOTIVE SHOULD BE LESS THAN THE THICKNESS OF THE SHIM. IF THE THICKNESS OF THE SHIM IS 1/16" THE DIFFERENCE IN WHEEL DIAMETER SHOULD BE LESS THAN 1/16".

EMPLOYEES SIGNATURE

JW Black

SUPERVISORS SIGNATURE

[Empty Signature Box]

Bangor and Aroostook Railroad

Brush Record

Unit 23

Date 11-17-0

MAIN GENERATOR

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

Signature P. Sawyer

Aux. Generator

POS	1	2
2		
4	OK	
8		
10		

Signature P. Sawyer

Fuel Pump

3	
9	OK

Signature P. Sawyer

NO.1 TRACTION MOTOR

POS	1	2	3	B	W
3					
6		OK			
9					
12					

SIGNATURE P. Sawyer

No. 2 Traction Motor

3					
6					
9		OK			
12					

Signature P. Sawyer

No. 3 Traction Motor

3					
6					
9		OK			
12					

Signature P. Sawyer

No. 4 Traction Motor

3					
6					
9		OK			
12					

Signature P. Sawyer

Montreal, Maine, & Atlantic Railway
Mechanical Department

Unit Number. 23

Date 11-11-2010

1. Inspect traction motor wicks and report action

#1.	OK	OK	...
#2.	OK	OK	...
#3.	OK	OK	...
#4.	OK	OK	...
#5.			...
#6.			...

J.W. Black

DRAINED support Boxes & Refilled LUB.

Bangor and Aroostook Railroad
 Locomotive
 Quarterly Mechanical Maintenance
 Leads

Unit 23

Date 11-12-10

1. INSPECT ENGINE
 - a. Blowers, Lube oil Seperator and Stack studs for oil and water leaks. Tighten stack studs. J. Plante
 - b. Gear train housing, pumps, governor and governor linkage for defect and leaks. J. Plante
 - c. Crankcase, connecting rods, Bearings for cracks and leaks. J. Plante
 - d. Air Boxes, Liners, Pistons and Piston Rings for cracks, oil and water leaks. J. Plante
 - e. Wipe out air boxes. J. Plante
2. Take Cylinder Lead Readings. J. Plante
3. Change Michiana Filter Elements. J. Plante
4. Remove and Clean Lube Oil Suction Strainers. J. Plante
5. Change or Clean Fuel Oil Filters. J. Plante
 - a. Sintered Bronze. NA
 - b. Fullflo Filter Elements. J. Plante
 - c. Suction Filter Elements. J. Plante
6. LUBRICATE THE FOLLOWING:
 - a. Traction Motor Gears. (4 pkg per gear case) J. Black
 - b. Journal Boxes. J. Black
 - c. Speed Recorder Drive Chain. J. Black
 - d. Throttle Governor. J. Black
 - e. Shutter Linkage. J. Black
 - f. Bell Ringer. J. Black
 - g. Air Compressor Flexible Coupling. J. Black
7. Inspect, Repair and Lube Hand Brake. J. Black
8. Inspect and Repair TM Gear Case. J. Black
9. CHECK COOLING WATER SYSTEM.
 - a. Inspect for leaks. J. Black
 - b. Water Inhibitor Concentration. J. Black
 - c. Water Gauges. J. Black
10. Drain Condensate From Fuel Tank Sump. J. Black
11. Drain Condensate From Lube Oil Sump. J. Black
12. Check Fuel Emergency Cutoff Valve Operation. J. Black
13. Check Fuel System For Leaks and Repair. J. Black
14. Check Traction Motor Air Duct Bellows. J. Black
15. Change Engine Air Filters. J. Black
16. Change Carbody Air Filters. J. Black
17. Change High Voltage Cabinet Air Filters. J. Black
18. Change or Clean Air Compressor Intake Air Filters. J. Black
19. Clean Screen in Air Comp. Discharge Oil Seperator. J. Black
20. Clean Aftercooler Discharge Filter. J. Black
21. Clean Oil Cooler Breather. J. Black
22. CHECK OPERATION OF ALL GAUGES
 - a. Engine lube oil pressure. 82 psi
 - b. Engine lube oil suction. 20 psi
 - c. Water temperature. J. Black
 - d. Water pressure. J. Black
 - e. Air compressor lube oil pressure. J. Black
 - f. Main resevoir/air compressor governor. J. Black
 - g. Fuel gauges. J. Black
23. Perform Daily Inspection. J. Black
 COMMENTS:

Montreal, Maine, & Atlantic Railway
Locomotive

Unit 23

Date 11-12-10

3 Month Federal Air Work

Signature

1. Inspect and repair air piping and valves for leaks Woodie
2. Test all air gauges with gauge tester and set if required..... Woodie
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..... Woodie
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..... Woodie
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..... Woodie / M. Cooley
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..... Woodie / M. Cooley
7. Check all MU valve handles to ensure the locking devices work properly. Lubricate or replace as necessary..... Woodie
8. Check knuckle thrower to make sure it opens the knuckle. Lubricate or repair as necessary..... Woodie

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