Montreal, Maine & Atlantic Railway
Locomotive

Unit: 8583 Date: 10-30-12

3 Month Federal Air Work

Signature

1. Inspect and repair air piping and valves for leaks.................... OWC

2. Test all air gauges with gauge tester and set if required.................... OWC

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.................... [signature]

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.................... [signature]

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.................... [signature]

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.................... [signature]

7. Check all MU valve handles to ensure the locking devices work properly. Lubricate or replace as necessary.................... [signature]

8. Check [illegible] Lubricate or [illegible] necessary.................... [signature]

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

9 test and calabrat air flow meter [signature]

LOCOMOTIVE 8583

DATE 10/30/12

	Start Readings				Has Shims			END READING				Has Shims	
	Flange Height	Flange Thickness	Rim Thickness	Witness Grove	YES	NO		Flange Height	Flange Thickness	Rim Thickness	Witness Grove	YES	NO
L#1	0 18	00	42				L#1						
L#2	0-18	00	44				L#2						
L#3	0-18	00	39				L#3						
L#4	0-18	00	44				L#4						
L#5							L#5						
L#6							L#6						
R#1	0-17	00	44				R#1						
R#2	0-18	00	42				R#2						
R#3	0-17	00	41				R#3						
R#4	0-18	00	43				R#4						
R#5							R#5						
R#6							R#6						

OLD GAUGE

FLANGE THICKNESS MEASUREMENT

0 – on 0 – 1 – 15/64"
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 – /32"
7 – on 0 – 63/64"
8 – on 0 – 15/16"

OLD GAUGE

FLANGE HEIGHT MEASUREMENT

0-on-0---1"
0-on-1---1-1/16"
0-on-2---1-1/8"
0-on-3---1-3/16"
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"

NEW GAUGE

0-on-17---1- 1/16"
0-on-18---1-1/8"
0-on-19---1-3/16"
FLANGE HEIGHT MEASUREMENT
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"

NEW GAUGE

FLANGE THICKNESS MEASUREMENT

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 – 63/64"
8 – on 0 – 15/16"

WEAR LIMITS FOR ROAD & SWITCH LOCOMOTIVES – MINIMUM DAILY REQUIREMENTS

RA 1 ½"	MMA 1 7/16"	Flange Height
RA 7/8"	MMA 15/16"	Flange Thickness
RA 1"	MMA 1 1/16"	Rim Thickness
RA 5/16"	MMA ¼"	Tread Wear

WEAR LIMITS – ROAD & SWITCH LOCOS – MIN. 92 DAY REQ

LANGE eight	Flange THICKNESS	Rim THICKNESS		Tread WEAR
RA 1 ½"	FRA 7/8"	FRA 1"		FRA 5/16"
MA 1 7/16"	MMA 1 1/32"	MMA 1 1/8"		MMA ¼"

WEAR LIMITS – PASSENGER LOCOS – MIN 92 DAY REQ

Flange HEIGHT	Flange THICKNESS	Rim THICKNESS	Tread WEAR
FRA 1 ½"	FRA 7/8"	FRA 1"	FRA 5/16"
MMA 1 7/16"	MMA 1"	MMA 1 ¼"	MMA ¼"

CONVERSION CHART FOR WHEEL DIAMETER

=	37"	15=	37 7/8"	22=	38 ¾"	29=	39 5/8"	36=	40 ½"
=	37 1/8"	16=	38"	23=	38 7/8"	30=	39 ¾"	37=	40 5/8"
0=	37 ¼"	17=	38 1/8"	24=	39	31=	39 7/8"	38=	40 ¾"
1=	37 3/8"	18=	38 ¼"	25=	39 1/8"	32=	40"	39=	40 7/8"
2=	37 ½"	19=	38 3/8"	26=	39 ¼"	33=	40 1/8"	40=	41"
3=	37 5/8"	20=	38 ½"	27=	39 3/8"	34=	40 ¼"	41=	41 1/8"
4=	37 ¾"	21=	38 5/8"	28=	39 ½"	35=	40 3/8"	42=	41 ¼"

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
RA	MAX 34 ½" MIN 31 ½"	33½	FRA	MAX 6" MIN 3"	5"	FRA MIN 30" MMA MIN 30" FRA MAX 50" MMA MAX 50"	FRA MIN 2 ½" MMA MIN 3"
MA	MAX 34 ½ MIN 32 ½"	REAR 33½	MMA	MAX 6" MIN 3 ½"	REAR 5"		

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

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

" IS THE MAXIMUM VARIATION ALLOWED, IN WHEEL DIAMETER, BETWEEN ANY 2 WHEELS IN THE SAME TRUCK WITHOUT SHIMS.
¼" IS THE MAXIMUM VARIATION ALLOWED, IN WHEEL DIAMETER, BETWEEN ANY 2 WHEELS IN THE SAME TRUCK WITH SHIMS APPLIED.
¼" IS THE MAXIMUM VARIATION ALLOWED, IN WHEEL DIAMETER, BETWEEN ANY 2 WHEELS ON DIFFERENT TRUCKS.

NOTE
WHEN FIGURING THE DIFFERENCE IN WHEEL DIAMETER, TO DETERMINE IF SHIMS ARE REQUIRED, YOU MUST USE THE AVERAGE WHEEL DIAMETER FIGURES
REMEMBER THIS RULE
TO 5 DIAMETER DIFFERENCE NO SHIMS REQUIRED 6 TO 10 DIAMETER DIFFERENCE ADD APPROPRIATE SHIMS TO BOTH BOXES ON BOTH SIDES OVER 10 IN DIAMETER DIFFERENCE REQUIRES WHEEL CHANGE OR TRUED. NOTE: ON EMD LOCOMOTIVES USE ONLY ONE ½" SHIM EMD PART NUMBER 8455981 SHELLED TREAD AND FLAT SPOTS MUST BE TRUED OR CHANGED WHEN FOUND ON PERIODIC OR UNSCHEDULED MAINTENANCE. KCS CONDEMNING LIMITS FOR SHELLED TREAD ON A SERVICE TRAIN • ONE SHELLED SPOT 1" OR GREATER IN LENGTH • ONE SHELLED SPOT WITH A DEPTH OF ½" OR MORE

EMPLOYEES SIGNATURE C Ferguson

SUPERVISORS SIGNATURE

Bangor and Aroostook Railroad

Brush Record

Unit 8583

Date 10/30/12

MAIN GENERATOR

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

Signature JS

Aux. Generator

POS	1	2
2	OK	
4		
8	OK	
10		

Signature JS

Cab Heater

~~Fuel Pump~~

3	OK
9	OK

Signature JS

NO.1 TRACTION MOTOR

POS	1	2	3	B	W
3					
6		OK			
9					
12					

SIGNATURE JS

No. 2 Traction Motor

3					
6		OK			
9					
12					

Signature JS

No. 3 Traction Motor

3					
6			OK		
9					
12					

Signature JS

No. 4 Traction Motor

3					
6			OK		
9					
12					

Signature JS

Quantum Engineering, Inc.

Quantum Desktop Playback
Data Scan Report

Report Date: 10-30-2012
Locomotive 8583

Data Removed on 10-30-12

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

Quantum Engineering, Inc.

Quantum Desktop Playback

Manufacturer is QEI Version # S450
Serial Number is 0097100717
Customer is NS

Data was removed on - 08:40:20 on 10/30/12
Last Downloaded on - 08:31:00 on 07/26/12
Battery was installed on - 01/18/00
Locomotive Number is - 8583

Downloaded by - SUDS
Location - guilford
Train - 1234
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