

MONTREAL, MAINE, & ATLANTIC RAILWAY
BRUSH RECORD

UNIT # 8578

DATE _____

MAIN ALTERNATOR

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

SIGNATURE JS

NO. 1 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	OK				
9					
12					

SIGNATURE JS

NO. 2 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	OK				
9					
12					

SIGNATURE JS

NO. 3 TRACTION MOTOR

3 New Brushes

POS	1	2	3	B	W
3					
6	OK				
9					
12					

SIGNATURE JS

NO. 4 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	OK				
9					
12					

SIGNATURE JS

AUXILIARY GENERATOR

POS	1	2	3	B	W
2					
4	OK				
8					
10					

SIGNATURE JS

Cab Heaters
NO. 5 TRACTION MOTOR

POS	1	2	3	B	W
3					
6	OK		OK		
9					
12					

SIGNATURE JS

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 JS

DYNAMIC BRAKING BLOWER MOTORS

FRONT

POS	1	B	W
2			
4			
8			
10			

SIGNATURE _____

REAR

POS	1	B	W
2			
4			
8			
10			

SIGNATURE _____

FUEL PUMP MOTOR

POS	1	B	W
3			
9	OK		

SIGNATURE JS



Manufacturer is QEI Version # S45E
Serial Number is 0204050052
Customer is MNAR

Data was removed on - 11:21:54 on 11/13/12
Last Downloaded on - 10:00:00 on 08/10/12
Battery was installed on - 04/14/04
Locomotive Number is - 8578

Downloaded by - P. Conlogue
Location - Derby
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

Report Date: 11-13-2012
Locomotive 8578

Data Removed on 11-13-12

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.
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
EP OPERATING MODE	Never ON/ACTIVE
EP PENALTY BRAKE	Never ON/ACTIVE
EP ENGINEER EMERGENCY	Never ON/ACTIVE

758

11-13-12

3 Month Period Air Work

1. Inspect and repair air piping and valves for leaks.....
2. Test all air gauges with gauge tester and set if required..... *J. P. Bouché*
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.....
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.....
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.....
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.....
7. Check all MIV valve handles to ensure the locking devices work properly. Lubricate or replace as necessary..... *J. P. Bouché*
8. Check mainline thru valves and open the thru valves. Lubricate or repair as necessary..... *J. P. Bouché*

Note (*) main reservoir air is without the check valve # 2 & with the check valve.

9 test and calibrate Air Flow Meter

BP Leak at union behind front angle cock
BP leaking off 6-7 lbs per minute

MO-3

Locomotive Release from Shop Form

To be completed on every engine released from the Shop

I have reviewed the work packet for locomotive 957B on this date 11-13-12 and take no exception to applicable laws, rules and or MMA standards, policies and standards.

oil sample - P Goodie

Added water inhibitor - P Goodie

oil leak on back side of Michiana housing -

Replaced O-rings & seal - P. Conlogue

Serviced Hotstart

New Filters (oil & Fuel)

New Oil 23 gallons

TPB / J.S. / A.C.

Service Operations

UNIT _____

DATE _____

THROTTLE 8 INBOUND LOAD TESTS

Eng RPM (900)	EMD	_____	Lube Oil Pres	_____
Eng RPM (1050)	GE	_____	Water Temp	_____
Horsepower		<u>3700</u>	Overspeed Setting	_____
Volts (5.3)	B-23	_____	RACK SETTING	_____
Volts (7)	C-30	<u>1108</u>		
Volts (720)	B-39	<u>3</u>		

THROTTLE #1 STALL TEST

OP Mode	(PWR)	_____	NOT APPLICABLE TO B-23 AND C-30
AMPS	(300)	_____	
MGA	(1220)	_____	
Charging Rate	(70v)	_____	

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

In-Bound Loadtest Electrical/Mechanical

WORKED BY:

ELECTRICAL

VERIFY THE OPERATION OF THE GROUND RELAY	OK
CHECK FOR LOW VOLTAGE GROUNDS (7 watt bulb)	OK
WHILE IN THROTTLE 3 LOAD TEST, CHECK FOR AC GROUNDS	OK
CHECK OPERATION OF:	
A. HEATING	OK
COMPLETE THE IN-BOUND LOAD TEST SHEETS	OK
GROUND RELAY-(TEST THREE TIMES TO VERY LOCK-OUT)(DYNAMIC & POWER)	OK
CHECK THE FOLLOWING FOR PROPER OPERATION:	
A. CREW ALERT	OK
B. RADIO AND ANTENNA	OK
C. AXLE ALT. SPEEDO	OK
D. MU ENGINE SHUTDOWN	OK
E. FUEL CUT-OFF	OK
F. TEST WARNING DEVICES	OK

MECHANICAL

CLEAN AND SERVICE TOILET AND RESTROOM	
DRAIN RETENTION TANK	
PROPER LUBRICATION? FUEL LEAKS? CAM ROLLER ROTATION? ETC.	J. Black
INSPECT FUEL SYSTEM HOSES AND PIPES FOR LEAKS	P. Brodie
INSPECT COOLING SYSTEM:	
A. CHECK HOSES AND PIPES FOR LEAKS	P. Brodie
CHECK OPERATION OF ENGINE PROTECTION DEVICES:	
A. CRANKCASE PRESSURE	P. Brodie / P. Conroy
VISUALLY INSPECT AIR COMPRESSOR FOR WATER, AIR OR OIL LEAKS	
PERFORM MANUAL AIR BRAKE TEST	
Verify Flow Gauge	J. Black
130 main reservoir is 64 + or - 3, reservoir is 60 + 0	NOTE: 120- 130-140 main
PERFORM PENALTY BRAKE TEST	
CHECK FOR CORRECT AIR PRESSURE SETTINGS:	
A. MAIN RESERVOIR (130 - 140 PSI)	J. Black
B. BRAKE PIPE (90 PSI)	J. Black
C. EQUALIZING RESERVOIR (90 PSI)	J. Black
D. BRAKE CYLINDER (72 - 74 PSI)	J. Black
E. COMPRESSOR CONTROL (130 - 140 PSI +/- 5 PSI)	J. Black
CHECK FLUID LEVELS BEFORE LOADING:	
A: ENGINE OIL	J. Black
B: COOLING WATER	P. Brodie
C: AIR COMPRESSOR OIL	J. Black
TEST OPERATION OF THE FOLLOWING DEVICES:	
A. BELL	J. Black
B. SANDERS (FORWARD, REVERSE, EMERGENCY)	P. Brodie
C. RADIATOR SHUTTERS	P. Brodie

WINTERIZATION

	Signature
Winterization - All MMA Locomotives. (August - April)	<i>[Signature]</i>
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)	<i>[Signature]</i>
Inspect Cab Windows Slider Rail, Adjust Top Rail as needed, Lubricate with Silicone Grease.	<i>[Signature]</i>
Renew all Wiper Blades.	<i>[Signature]</i>
Criteria for Door seal Replacement:	<i>[Signature]</i>
1. Seal shows signs of Deterioration and or Medium to Heavy Cracking.	
3. Door seal is Torn or Loose from Door.	
2. With Door in the fully closed position has noticeable crack between door jam and cab body.	<i>[Signature]</i>
Criteria for Window seal Replacement:	<i>[Signature]</i>
1. Seals shows signs of Deterioration and or Medium to Heavy Cracking.	
3. Seal is Torn or Loose from window seal.	
2. With windows fully in the closed position there is a gap between window frame and cab body.	<i>[Signature]</i>

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

G. IF THE SEAT MOVEMENT IS IMPEDED, REMOVE SEAT CUSHION AND INSPECT SEAT PAN ROLLER TRACK FOR DEBRIS, MALFUNCTION, OR LACK OF LUBRICATION.	
H. INSPECT SEAT RAILS AND REPLACE IF DAMAGED OR WORN BEYOND PROVIDING SECURE, STABLE MOUNTING OF SEAT.	
I. INSPECT THE FORE/AFT SEAT POSITIONING TRACK. INSPECT THE SEAT RAILS AND REPLACE IF DAMAGED OR WORN BEYOND PROVIDING SECURE, STABLE MOUNTING OF SEAT.	
J. LUBRICATE THE SEAT RAILS WITH SILICONE LUBRICANT.	
K. INSPECT THE BACKREST RAKE ADJUSTMENT KNOB. VERIFY THAT THE KNOB ROTATES EASILY TO ADJUST BACKREST ANGLE.	
L. INSPECT KNOB FOR CRACKS OR SPLITS AND THAT IT IS SECURELY FASTENED.	
M. INSPECT GEAR MECHANISM FOR ANY WEAR OR DAMAGE.	
N. ENSURE THAT THE BACKREST MECHANICAL STOP IS INTACT AND FUNCTIONS AS INTENDED-- PREVENTS THE SEAT BACKREST FROM RECLINING BEYOND APPROXIMATELY 45 DEGREES BACKWARDS FROM A VERTICAL POSITION.	
O. INSPECT THE LUMBAR SUPPORT ADJUSTMENT LEVER. VERIFY THAT THE ADJUSTMENT LEVER OPERATES EASILY TO ADJUST THE LUMBAR SUPPORT.	
P. VERIFY ALL ARMREST FASTENERS ARE SECURE. REPLACE ANY MISSING OR STRIPPED OUT FASTENERS.	
Q. INSPECT ARMREST SWIVEL FASTENERS. ENSURE SWIVEL FASTENER IS SECURE ON EACH ARMREST SUCH THAT THE ARMREST IS WITHOUT SIDE TO SIDE MOVEMENT. ARMREST SHOULD SWIVEL TO VERTICAL. ARMREST SHOULD NOT DROP DOWN PAST IT'S ORIGINAL STOP.	
R. INSPECT SEAT FABRIC ON SEAT PAN AND BACKREST. INSPECT FOR RIPS, TEARS, OR HOLES. SEAT PAN OR BACKREST COMPONENT MAY BE REPLACED IF THERE IS AN EXCESSIVE RIP, TEAR, OR HOLE.	
SEAT PART NUMBERS: Cab Seat, Freight with arms: 2043511 Cab Seat Mid Back: 20425731 Wall Mounted Pedestal: 20435541 Trunion Pedestal Assembly: 20425721 Seat Pedestal Rail Left Side 65": 20422211 Seat Pedestal Rail Right Side 46": 20422221	
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 (AUGUST - APRIL) WASH LOCOMOTIVE ENGINE/ENGINE ROOM/AND AIR COMPRESSOR ROOM WASH THE LOCOMOTIVE	

Plc

Plc

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

Revision Date: 8/18/2010
 Issued By: Tim Scalia

Electrical in House	WORKED BY:
SERVICE THE BATTERIES AND COMPLETE JSP-010	<i>DWC</i>
VERIFY EVENT RECORDER IS WORKING	<i>DWC</i>
CHECK & RECORD THE DATE ON HEAD END DEVICE <u>3-1-12</u>	<i>DWC</i>
COMPLETE THE HEAD END DEVICE CONNECTOR SHEET	_____
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	<i>DWC</i>
TRACTION MOTORS AND UNDERFRAME	_____
CHECK THE TRACTION MOTOR LEADS, VERIFY NO LEADS ARE RUBBING ON THE FRAME	<i>JS</i>
INSPECT TRACTION MOTOR COVERS AND ENSURE BOLTS ARE IN PLACE AND TIGHT	<i>JS</i>
CHECK M.U. RECEPTACLE PINS AND LIDS. MAKE NECESSARY REPAIRS	<i>JS</i>
MAKE SURE M.U. CABLES DO NOT FOUL COUPLERS	<i>JS</i>

B-23, B-39, C-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)

NA
NA
NA
NA

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

R. Goodie
R. Goodie
R. Goodie
R. Goodie
R. Goodie

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)

J. Black
J. Black
J. Black
J. Black

1 TRACTION MOTOR: OIL USED 3 pky 6800

2 TRACTION MOTOR: OIL USED 3 pky "

3 TRACTION MOTOR: OIL USED 3 pky "

4 TRACTION MOTOR: OIL USED 3 pky "

5 TRACTION MOTOR: OIL USED X

6 TRACTION MOTOR: OIL USED X

A.C. / J. Black
AC. / J. Black
AC. / J. Black
AC. / J. Black
X
X

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

R. Goodie
R. Goodie

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

D. [Signature]
D. [Signature]
D. [Signature]
D. [Signature]

Cab Seat Inspection:

A. INSPECT THE VERTICAL ADJUSTMENT LEVER. VERIFY THAT THE LEVER OPERATES AND THAT THE SEAT PAN ADJUSTS UP AND DOWN AND DOES NOT DROP SUDDENLY.

B. LUBRICATE PIVOT POINTS

C. INSPECT ROTATION ADJUSTMENT LOCKING PIN. VERIFY THAT THE LOCKING PIN OPERATES (PULL OUT TO RELEASE LOCK) AND THAT THE SEAT ROTATES WHEN UNLOCKED.

D. LUBRICATE THE PIN MECHANISM.

E. SEAT PAN COMPONENTS: INSPECT THE FORE-AFT FINE ADJUSTMENT LEVER.

F. VERIFY THAT THE LEVER SLIDES SIDWAYS TO UNLOCK SEAT FOR/AFT ADJUSTMENT AND SEAT SLIDES FOR/AFT EASILY

D. [Signature]
↓
↓

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

Out Bound Loadtest Electrical/Mechanical

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 IN-BOUND LOAD TEST SHEETS
- GROUND RELAY-(TEST THREE TIMES TO VERY LOCK-OUT)(DYNAMIC & POWER)
- CHECK THE FOLLOWING FOR PROPER OPERATION:
 - A. CREW ALERT
 - B. RADIO AND ANTENNA
 - C. AXLE ALT. SPEEDO
 - D. MU ENGINE SHUTDOWN
 - E. FUEL CUT-OFF
 - F. TEST WARNING DEVICES

D. Lopez

MECHANICAL

- CLEAN AND SERVICE TOILET AND RESTROOM
- DRAIN RETENTION TANK
- 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 + 0
- 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)
- 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

D. Lopez
D. Lopez

NOTE: 120-130-140 main

JSP-010 (BATTERY MAINTENANCE AND QUALIFICATION)

JOB SPECIFIC PROCESS

Locomotive Type: ALL MODELS

Valid for Road Numbers: (All Models)

Overview: This job process sheet will assist with the maintenance and qualification of batteries.

SPECIAL TOOLS OR EQUIPMENT:

SEQUENCE OF JOB STEPS

Please print your name.
NO signatures

1. Ensure the locomotive is shutdown, discharged, all of the circuit breakers are open and the battery knife switch is open.

[Handwritten Signature]

Battery Qualification/Maintenance

2. **NOTE: If batteries are dead, connect the charger until the charge rate falls below 10 amps to determine state of charge. Readings under 20 V are suspect for units with just 2 batteries.**

3. Insert hose stem into battery cell and squeeze bulb.

4. Release pressure until enough acid solution is drawn into the tube allowing the float to float freely. Be sure float does not touch rubber stopper at the top of the tube.

5. The float reading at the water line is the uncorrected charge level of the battery.

6. Read and record the specific gravity of all 16 pilot cells. "record readings below": acceptable range is 1.225 – 1.300 (if out of this range notify tech support)

Note 1: the sheet below is set up for 2 or 8 batteries as some units have 8 batteries.

Note 2: accurate readings cannot be obtained if water has recently been added to cells. Differences of 50 points or more between readings in battery cells may indicate pending battery failure.

7. Based on the above specific gravity readings, do any batteries need replaced? Remember, if the unit came in with already dead batteries, an attempt to charge the batteries must be made before taking the specific gravity readings. YES

8. Return acid to cell from which it was drawn.

9. Be sure all vent plugs are replaced and tight.

10. With Unit shut down measure the voltage reading across each battery at the terminals, record readings on the chart below.

11. Make a general check of the battery as to proper blocking, clean and tight connections at all points, and any unusual appearance or condition. If any unusual appearance or conditions exist, like corrosion, clean with scotch-brite buffer or wire br

12. Apply approved protective coating to connections after terminals are cleaned and dried

13. Add water as required (Add water to bottom of filler neck).

Battery Cranking Voltage Test

14. Close battery knife switch, and circuit breakers.

15. Open the injector toggle switch, on EUI units to prevent unit from starting.

[Handwritten Signature]

NOTE: Battery cranking voltage readings do not need to be taken on Air Start Locomotives.

16. On MUI engines, pull the Governor button and hold back the Lay-shaft while cranking the engine over to prevent unit from starting.

18. Based on the cranking voltages, is any battery suspect of needing replaced? YES NO

2 Battery Units	Specific Gravity				Water Added			Battery Replaced-Reason
	Cell 1	Cell 2	Cell 3	Cell 4	Yes	No	Yes	
Battery 1								o
Section A	Added Water				✓			O
Section B					✓			
Section C					✓			
Section D					✓			

2 Battery Units	Specific Gravity				Water Added			Battery Replaced-Reason
	Cell 1	Cell 2	Cell 3	Cell 4	Yes	No	Yes	
Battery 2								o
Section A	Added Water				✓			O
Section B					✓			
Section C					✓			
Section D					✓			

8 Battery Units	Specific Gravity				Water Added			Battery Replaced-Reason
	Cell 1	Cell 2	Cell 3	Cell 4	Yes	No	Yes	
Battery 1								
Battery 2								
Battery 3								
Battery 4								
Battery 5								
Battery 6								
Battery 7								
Battery 8								

BATTERY CRANKING VOLTAGE CHART

	Battery 1	Battery 2	Battery 3	Battery 4	Battery 5	Battery 6	Battery 7	Battery 8
Battery Voltage	35.9v	34.9v						

	Battery 1	Battery 2	Battery 3	Battery 4	Battery 5	Battery 6	Battery 7	Battery 8
Battery Voltage								

	Battery 1	Battery 2	Battery 3	Battery 4	Battery 5	Battery 6	Battery 7	Battery 8
Cranking Battery Voltage								
Battery Voltage								

	Battery 1	Battery 2	Battery 3	Battery 4	Battery 5	Battery 6	Battery 7	Battery 8
Cranking Battery Voltage	68.1v							

Unit: 8578

Date: 11-13-12

DEFECTS FOUND DURING INSPECTION

DEFECT <u>Fire Ext. in cab outdated</u>	INSPECTED BY: <u>J. P. Goodrich</u>
REPAIR <u>Replaced</u>	CORRECTED BY: <u>J. P. Goodrich</u>

DEFECT <u>lite above toilet not working</u>	INSPECTED BY: <u>J. P. Goodrich</u>
REPAIR <u>Replaced bulb</u>	CORRECTED BY: <u>J. P. Goodrich</u>

DEFECT <u>Both rear sanders plugged</u> <u>LR sand pipe worn through</u>	INSPECTED BY: <u>J. P. Goodrich</u>
REPAIR <u>unplugged both rear sanders</u> <u>Filled rear sand box</u> <u>Replaced LR sand pipe</u>	CORRECTED BY: <u>J. P. Goodrich</u>

DEFECT <u>Fc. sand hopper empty</u>	INSPECTED BY: <u>J. P. Goodrich</u>
REPAIR <u>Filled rear & Fc. sand boxes</u>	CORRECTED BY: <u>J. Black</u>

DEFECT <u>RF & RR M4 valve handle not working</u> <u>spring/ not closing handle when depressed</u>	INSPECTED BY: <u>J. P. Goodrich</u>
REPAIR <u>Replaced both M4 valve handles</u>	CORRECTED BY: <u>J. P. Goodrich</u>

RF sander hose bad - replaced -

JPC

#3 Traction missing cover - JS
Primary Fuel Filter 'drain back valve leaking' - Replaced valve J. P. Goodrich

Service Operations

UNIT _____

DATE _____

THROTTLE 8 OUTBOUND LOAD TESTS

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

THROTTLE #1 STALL TEST

OP Mode	(PWR)	_____	
AMPS	(300)	_____	
MGA	(1220)	_____	NOT APPLICABLE TO B-23 AND C-30
Charging Rate	(70v)	_____	