

Locomotive Release from Shop Form

To be completed on every engine released from the Shop

I have reviewed the work packet for locomotive 3609 on this date 1-31-11 and take no exception to applicable laws, rules and or MMA standards, policies and standards.

Service Operations

Outbound

UNIT 3609

DATE 1-31-11

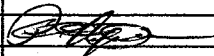
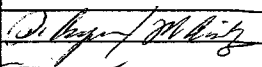
THROTTLE 8 INBOUND LOAD TESTS

Eng RPM (900)	EMD	<u> </u>	Lube Oil Pres	<u> </u>
Eng RPM (1050)	GE	<u>1050</u>	Water Temp	<u>160</u>
Horsepower		<u>3090</u>	Overspeed Setting	<u>1090</u>
Volts (5.3)	B-23	<u> </u>	RACK SETTING	<u>1905</u>
Volts (7)	C-30	<u>7.29</u>		
Volts (720)	B-39	<u> </u>		

THROTTLE #1 STALL TEST

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

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

<i>In-Bound Loadtest Electrical/Mechanical</i>		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		
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		NOTE: 120-
130 main reservoir is 64 + or - 3,		130-140 main
reservoir is 60 + o		
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		

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	J. Martin
VERIFY EVENT RECORDER IS WORKING	J. Martin
CHECK & RECORD THE DATE ON HEAD END DEVICE <u>1-14-11</u>	J. Martin
COMPLETE THE HEAD END DEVICE CONNECTOR SHEET	
CHECK THE FOLLOWING EQUIPMENT AND THEIR RELATED GUARDS AND LENSES FOR PROPER OPERATION:	J. Martin
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	J. Martin
TRACTION MOTORS AND UNDERFRAME	
CHECK THE TRACTION MOTOR LEADS, VERIFY NO LEADS ARE RUBBING ON THE FRAME	J. Martin
INSPECT TRACTION MOTOR COVERS AND ENSURE BOLTS ARE IN PLACE AND TIGHT	J. Martin
CHECK M.U. RECEPTACLE PINS AND LIDS. MAKE NECESSARY REPAIRS	J. Martin
MAKE SURE M.U. CABLES DO NOT FOUL COUPLERS	J. Martin

B-23, B-39, C 50, GP-7 MO3 INSPECTION

MECHANICAL IN HOUSE

CHANGED COMP. filters *QWC*
 Fuel Filter - *QWC* - Oil Filters - *QWC*

WORKED BY:

QWC

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)

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

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)

1 TRACTION MOTOR: OIL USED yes

2 TRACTION MOTOR: OIL USED yes

3 TRACTION MOTOR: OIL USED yes

4 TRACTION MOTOR: OIL USED yes

5 TRACTION MOTOR: OIL USED yes

6 TRACTION MOTOR: OIL USED yes

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

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

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 SIDEWAYS TO UNLOCK SEAT FOR/AFT ADJUSTMENT AND SEAT SLIDES FOR/AFT EASILY

P. Lopez
Cortley

QWC
P. Lopez
P. Lopez
P. Lopez

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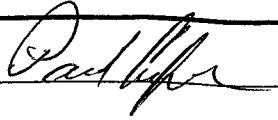

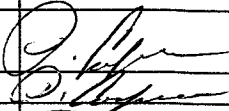
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M. Gibson
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B-23, B-39, C 0, GP-7 MO3 INSPECTION

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 KNOW. 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.	
<p>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</p>	
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	
	

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.

J. Hart

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.**

J. Hart

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

J. Hart

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.

J. Hart

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

J. Hart

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.

J. Hart

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 no

J. Hart

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

J. Hart

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

J. Hart

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

J. Hart

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

J. Hart

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

J. Hart

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

J. Hart

Battery Cranking Voltage Test

14. Close battery knife switch, and circuit breakers.

J. Hart

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

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

LOCOMOTIVE **3609** DATE **1-31-11**

Start Readings						END READING						OLD GAUGE
Flange Height	Flange Thickness	Rim Thickness	Witness Groove	F&S	WE	Flange Height	Flange Thickness	Rim Thickness	Witness Groove	F&S	WE	FLANGE HEIGHT MEASUREMENT
L#1	0-19	0-0										
L#2	0-20											
L#3	0-19											
L#4	0-19											
L#5	0-19											
L#6	0-18											
R#1	0-19	0-0										
R#2	0-19											
R#3	0-18											
R#4	0-19											
R#5	0-19											
R#6	0-19											

WEAR LIMITS FOR ROAD & SWITCH LOCOMOTIVES - MINIMUM DAILY REQUIREMENTS

- FRA 1 3/8" 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

- 2-on-1 - 1/16"
- 2-on-2 - 1/16"
- 2-on-3 - 1/16"
- 2-on-4 - 1/16"
- 2-on-5 - 1/16"
- 2-on-6 - 1/16"
- 2-on-7 - 1/16"
- 2-on-8 - 1/16"
- 2-on-9 - 1/16"
- 2-on-10 - 1/16"
- 2-on-11 - 1/16"
- 2-on-12 - 1/16"
- 2-on-13 - 1/16"
- 2-on-14 - 1/16"
- 2-on-15 - 1/16"
- 2-on-16 - 1/16"
- 2-on-17 - 1/16"
- 2-on-18 - 1/16"
- 2-on-19 - 1/16"
- 2-on-20 - 1/16"
- 2-on-21 - 1/16"
- 2-on-22 - 1/16"
- 2-on-23 - 1/16"
- 2-on-24 - 1/16"
- 2-on-25 - 1/16"
- 2-on-26 - 1/16"
- 2-on-27 - 1/16"
- 2-on-28 - 1/16"
- 2-on-29 - 1/16"
- 2-on-30 - 1/16"
- 2-on-31 - 1/16"
- 2-on-32 - 1/16"

WEAR LIMITS - ROAD & SWITCH LOCOMOTIVES - MIN 92 DAY REQ WEAR LIMITS - PASSENGER LOCOMOTIVES - MIN 92 DAY REQ

FLANGE Height	Flange THICKNESS	Rim THICKNESS	Tread WEAR	Flange HEIGHT	Flange THICKNESS	Rim THICKNESS	Tread WEAR
FRA 1 3/8"	FRA 7/8"	FRA 1"	FRA 5/16"	FRA 1 3/8"	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 3/8"	MMA 1/4"

NEW GAUGE

- 2-on-1 - 1/16"
- 2-on-2 - 1/16"
- 2-on-3 - 1/16"
- 2-on-4 - 1/16"
- 2-on-5 - 1/16"
- 2-on-6 - 1/16"
- 2-on-7 - 1/16"
- 2-on-8 - 1/16"
- 2-on-9 - 1/16"
- 2-on-10 - 1/16"
- 2-on-11 - 1/16"
- 2-on-12 - 1/16"
- 2-on-13 - 1/16"
- 2-on-14 - 1/16"
- 2-on-15 - 1/16"
- 2-on-16 - 1/16"
- 2-on-17 - 1/16"
- 2-on-18 - 1/16"
- 2-on-19 - 1/16"
- 2-on-20 - 1/16"
- 2-on-21 - 1/16"
- 2-on-22 - 1/16"
- 2-on-23 - 1/16"
- 2-on-24 - 1/16"
- 2-on-25 - 1/16"
- 2-on-26 - 1/16"
- 2-on-27 - 1/16"
- 2-on-28 - 1/16"
- 2-on-29 - 1/16"
- 2-on-30 - 1/16"
- 2-on-31 - 1/16"
- 2-on-32 - 1/16"

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 3/4"	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 1/2"	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 5/8"	35= 40 3/8"	42= 41 1/4"

FLANGE THICKNESS MEASUREMENT

LOCOMOTIVE RAIL CLEARANCE

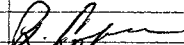
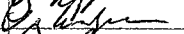

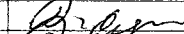





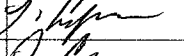
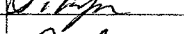

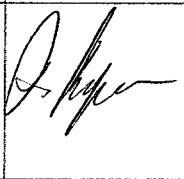
COUPLER HEIGHT	FRONT	PILOT HEIGHT	FRONT	HEIGHT OF HORIZONTAL END HANDHOLD OR UNCOUPLING LEVER IF USED AS HORIZONTAL HANDHOLD	LOCO RAIL CLEARANCE
FRA MAY 34 1/2 MIN 31 1/2	33 1/2	FPA MAY 36 MIN 33	5 1/2	FPA MIN 39 MMA MIN 36 FPA MAY 39 MMA MAY 36	FRA MIN 27 MMA MIN 27
MMA MAY 34 1/2 MIN 32 1/2	33	MMA MAY 36 MIN 33	5 3/4		

WHEEL DIAMETER MEASUREMENTS ARE TAKEN FROM THE MAXIMUM WIDENESS GROOVE. 40" DIAMETER WHEELS WITNESS GROOVE = 36"
42" DIAMETER WHEEL WITNESS GROOVE = 38"

WHEEL MATING REQUIREMENTS FOR ALL TYPES OF MATING: (1) RAIL WITNESS GROOVE TO WITNESS GROOVE = 36"
(2) THE MAXIMUM WITNESS GROOVE TO WITNESS GROOVE DEPTH OF THE WITNESS GROOVE = 36"
(3) THE MAXIMUM WITNESS GROOVE TO WITNESS GROOVE DEPTH OF THE WITNESS GROOVE = 36"
(4) THE MAXIMUM WITNESS GROOVE TO WITNESS GROOVE DEPTH OF THE WITNESS GROOVE = 36"

REMEMBER THIS RULE
IF THE WITNESS GROOVE DEPTH IS LESS THAN THE WITNESS GROOVE DEPTH OF THE WITNESS GROOVE, THE WITNESS GROOVE DEPTH IS THE WITNESS GROOVE DEPTH OF THE WITNESS GROOVE.

EMPLOYEES SIGNATURE: Cooley SUPERVISORS SIGNATURE: _____

WINTERIZATION	Signature
Winterization - All MMA Locomotives (August - April)	
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. <i>OK</i>	
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.	

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**

J. N. [Signature]

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	1250	1275	1250	1250		✓		
Section B	1275	1275	1275	1275		✓		
Section C	1275	1275	1250	1275		✓		
Section D	1275	1275	1250	1275		✓		

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	1250	1250	1200	1250		✓		
Section B	1250	1250	1250	1250		✓		
Section C	1250	1250	1250	1250		✓		
Section D	1250	1250	1250	1250		✓		

8 Battery Units	Specific Gravity				Water Added			Battery Replaced-Reason
	Cell 1	Cell 2	Cell 3	Cell 4	Yes	No	Yes	
Battery 1								o
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	34.27	34.14						
Battery Voltage								

	Battery 1	Battery 2	Battery 3	Battery 4	Battery 5	Battery 6	Battery 7	Battery 8
Cranking Battery Voltage	26.6	26.6						
Battery Voltage								

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

Description of Work Performed

Locomotive ID

Time Started

Time Finished

Employee Signature _____ Form to fill out completely and Signature must be legible.

Unit

Date

DEFECTS FOUND DURING INSPECTION

DEFECT	#1 TM. Ground cable broken	INSPECTED BY:	J.H
REPAIR	Repaired cable end	CORRECTED BY:	JH

DEFECT	Missing GC Bolt #2 TM	INSPECTED BY:	Coiley
REPAIR	Replaced & Rewired Bolt	CORRECTED BY:	Coiley

DEFECT	2 loose GC Bolts on #2 TM	INSPECTED BY:	Coiley
REPAIR	Tightened & Rewired Bolts	CORRECTED BY:	Coiley

DEFECT	Front hite side Sandpse was loose and No Nozrte	INSPECTED BY:	PK
REPAIR	New Nozrte and welded nose in place	CORRECTED BY:	PK

DEFECT	R Front Sand box all wet sand	INSPECTED BY:	MC
REPAIR	Emptied Box unplugged Sander	CORRECTED BY:	MC/PC/JH

Unit: _____

Date: _____

DEFECTS FOUND DURING INSPECTION

DEFECT	air pipe from comp. leaking	INSPECTED BY:	MC
REPAIR	Replaced O ring & gasket	CORRECTED BY:	mc/PC

DEFECT	_____	INSPECTED BY:	_____
REPAIR	_____	CORRECTED BY:	_____

DEFECT	_____	INSPECTED BY:	_____
REPAIR	_____	CORRECTED BY:	_____

DEFECT	_____	INSPECTED BY:	_____
REPAIR	_____	CORRECTED BY:	_____

DEFECT	_____	INSPECTED BY:	_____
REPAIR	_____	CORRECTED BY:	_____

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		J. Hart
CHECK FOR LOW VOLTAGE GROUNDS (7 watt bulb)		J. Hart
WHILE IN THROTTLE 3 LOAD TEST, CHECK FOR AC GROUNDS		J. Hart
CHECK OPERATION OF:		
A. HEATING		J. Hart
COMPLETE THE IN-BOUND LOAD TEST SHEETS		J. Hart
GROUND RELAY-(TEST THREE TIMES TO VERY LOCK-OUT)(DYNAMIC & POWER)		J. Hart
CHECK THE FOLLOWING FOR PROPER OPERATION:		
A. CREW ALERT		J. Hart
B. RADIO AND ANTENNA		Corley
C. AXLE ALT. SPEEDO		Corley
D. MU ENGINE SHUTDOWN		J. Hart
E. FUEL CUT-OFF		J. Hart
F. TEST WARNING DEVICES		J. Hart
MECHANICAL		
CLEAN AND SERVICE TOILET AND RESTROOM		P. [Signature]
DRAIN RETENTION TANK		M. [Signature]
PROPER LUBRICATION? FUEL LEAKS? CAM ROLLER ROTATION? ETC.		
INSPECT FUEL SYSTEM HOSES AND PIPES FOR LEAKS		Corley
INSPECT COOLING SYSTEM:		
A. CHECK HOSES AND PIPES FOR LEAKS		Corley
CHECK OPERATION OF ENGINE PROTECTION DEVICES:		
A. CRANKCASE PRESSURE		Corley
VISUALLY INSPECT AIR COMPRESSOR FOR WATER, AIR OR OIL LEAKS		Corley
PERFORM MANUAL AIR BRAKE TEST		Corley
Verify Flow Gauge	NOTE: 120-	
130 main reservoir is 64 + or - 3,	130-140 main	
reservoir is 60 + 0		
PERFORM PENALTY BRAKE TEST		Corley
CHECK FOR CORRECT AIR PRESSURE SETTINGS:		
A. MAIN RESERVOIR (130 - 140 PSI)		Corley
B. BRAKE PIPE (90 PSI)		Corley
C. EQUALIZING RESERVOIR (90 PSI)		Corley
D. BRAKE CYLINDER (72 - 74 PSI)		Corley
E. COMPRESSOR CONTROL (130 - 140 PSI +/-5 PSI)	132-142	Corley
CHECK FLUID LEVELS BEFORE LOADING:		
A. ENGINE OIL		Corley
B. COOLING WATER		Corley
C. AIR COMPRESSOR OIL		Corley
TEST OPERATION OF THE FOLLOWING DEVICES:		
A. BELL		Corley
B. SANDERS (FORWARD, REVERSE, EMERGENCY)		Corley
C. RADIATOR SHUTTERS		