

92 DAY TBST

5023

TRIPPING Ground Relay 12-01-10

Locomotive Release from Shop Form

To be completed on every engine released from the Shop

5023

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

# Service Operations

## THROTTLE # INBOUND LOAD TESTS

UNIT \_\_\_\_\_

DATE \_\_\_\_\_

Eng RPM (900)	EMD	<u>          </u>	Lube Oil Pres	<u>          </u>
Eng RPM (1050)	GE	<u>1050</u>	Water Temp	<u>120</u>
Horsepower		<u>3065</u>	Overspeed Setting	<u>          </u>
Volts (5.3)	B-23	<u>          </u>	RACK SETTING	<u>19.5</u>
Volts (7)	C-30	<u>7.22</u>		
Volts (720)	B-39	<u>          </u>		

## THROTTLE #1 STALL TEST

OP Mode	(PWR)	<u>F</u>	
AMPS	(300)	<u>300</u>	
MGA	(1220)	<u>          </u>	NOT APPLICABLE TO B-23 AND C-30
Charging Rate	(70v)	<u>75+</u>	

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

In-Bound Loadtest Electrical/Mechanical	WORKED BY:
<b>ELECTRICAL</b>	
VERIFY THE OPERATION OF THE GROUND RELAY	J. Hank
CHECK FOR LOW VOLTAGE GROUNDS (7 watt bulb)	
WHILE IN THROTTLE 3 LOAD TEST, CHECK FOR AC GROUNDS	<del>_____</del>
CHECK OPERATION OF:	
A. HEATING	J. Hank
COMPLETE THE IN-BOUND LOAD TEST SHEETS	J. Hank
GROUND RELAY-(TEST THREE TIMES TO VERY LOCK-OUT)(DYNAMIC & POWER)	J. Hank
CHECK THE FOLLOWING FOR PROPER OPERATION:	
A. CREW ALERT	J. Hank
B. RADIO AND ANTENNA	J. Hank
C. AXLE ALT. SPEEDO	J. Hank
D. MU ENGINE SHUTDOWN	J. Hank
E. FUEL CUT-OFF	J. Hank
F. TEST WARNING DEVICES	J. Hank
<b>MECHANICAL</b>	
CLEAN AND SERVICE TOILET AND RESTROOM	D. Black add temp
DRAIN RETENTION TANK	D. Black
PROPER LUBRICATION? FUEL LEAKS? CAM ROLLER ROTATION? ETC.	W. Goodie
INSPECT FUEL SYSTEM HOSES AND PIPES FOR LEAKS	W. Goodie
INSPECT COOLING SYSTEM:	W. Goodie
A. CHECK HOSES AND PIPES FOR LEAKS	W. Goodie
CHECK OPERATION OF ENGINE PROTECTION DEVICES:	
A. CRANKCASE PRESSURE	
VISUALLY INSPECT AIR COMPRESSOR FOR WATER, AIR OR OIL LEAKS	W. Goodie
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)	132-142
B. BRAKE PIPE (90 PSI)	W. Goodie
C. EQUALIZING RESERVOIR (90 PSI)	W. Goodie
D. BRAKE CYLINDER (72 - 74 PSI)	W. Goodie
E. COMPRESSOR CONTROL (130 - 140 PSI +/-5 PSI)	W. Goodie
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>None Installed</u>		J. Martin
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		J. Martin
<b>TRACTION MOTORS AND UNDERFRAME</b>		
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-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.	D. Black
H. INSPECT SEAT RAILS AND REPLACE IF DAMAGED OR WORN BEYOND PROVIDING SECURE, STABLE MOUNTING OF SEAT.	D. Black
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.	D. Black
J. LUBRICATE THE SEAT RAILS WITH SILICONE LUBRICANT.	D. Black 10040
K. INSPECT THE BACKREST RAKE ADJUSTMENT KNOB. VERIFY THAT THE KNOB ROTATES EASILY TO ADJUST BACKREST ANGLE.	D. Black
L. INSPECT KNOB FOR CRACKS OR SPLITS AND THAT IT IS SECURELY FASTENED.	D. Black
M. INSPECT GEAR MECHANISM FOR ANY WEAR OR DAMAGE.	Eng. side Hand rest gone
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.	D. Black
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.	Eng. side Hand rest gone
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.	D. Black
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.	Eng. side hand rest Taped
<b>SEAT PART NUMBERS:</b> 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	D. Black
A. CLEAN THE CAB, WINDOWS, AND EQUIPMENT	
COMPLETE WINTERIZATION SHEET (AUGUST - APRIL)	
WASH LOCOMOTIVE ENGINE/ENGINE ROOM/AND AIR COMPRESSOR ROOM	
WASH THE LOCOMOTIVE	

*Note passage side seat don't side*

**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	<b>X</b>
SOAK BACK FILTER. EMD ONLY	
TURBO SPIN ON FILTER. EMD ONLY	
COMPLETE FRA INSPECTION (DAILY INSPECTION CHECKLIST)	
<b>CARBODY</b>	
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.	D. Black
INSPECT COUPLERS & DRAFT GEARS. MAKE REPAIRS AS NECESSARY	D. Black
CHECK KNUCKLE CLEARANCE AND KNUCKLE THROWER, MAKE REPAIRS AS NEEDED AND APPLY SPARE KNUCKLES (E AND F TYPE) (2.5")	D. Black
INSPECT PIN LIFTERS CHECKING FOR PROPER HAND CLEARANCE AND ANTI-CREEP	D. Black
CHECK SNOWPLOW (IF EQUIPPED) FOR HANDHOLDS AND PROPER DISTANCE	D. Black
CHECK AUTO BLOWDOWNS FOR PROPER OPERATIONS IN AUTOMATIC MODE	-
ENSURE SUMP DRAINS ARE OPEN AND FREE OF DEBRIS	-
<b>TRUCKS</b>	
INSPECT WICK BOLT SECUREMENT AND REPAIR IF NECESSARY	D. Black
CHECK SUSPENSION BEARING OIL LEVEL	D. Black
CHECK JOURNAL BOX OIL LEVEL (FILL TO POINT OF OVERFLOW)	D. Black
CHECK GEAR CASES AND INSPECT BULL GEAR (ADD 6lbs. OF GEARCASE GREASE)	D. Black
CHECK OIL FILLED GEAR CASES AND FILL (RECORD USAGE BELOW)	
# 1 TRACTION MOTOR: OIL USED _____	
# 2 TRACTION MOTOR: OIL USED _____	
# 3 TRACTION MOTOR: OIL USED _____	<b>D. Black</b>
# 4 TRACTION MOTOR: OIL USED _____	
# 5 TRACTION MOTOR: OIL USED _____	
# 6 TRACTION MOTOR: OIL USED _____	
INSPECT ALL BRAKE HANGERS, HEADS, GUIDES AND STRAPS ENSURING BRAKE SHOES ARE IN LINE WITH WHEELS	
<b>CAB</b>	
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	
<b>MISC</b>	
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	M. Wood
DRAIN RETENTION TANK	M. Wood
TOILET MAINTENANCE: _____	D. Black
A. INSPECT/REPAIR AS NEEDED TOILET DRAIN VALVE & FLOOR SEALS	M. Wood
<b>Cab Seat Inspection:</b>	
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.	D. Black
B. LUBRICATE PIVOT POINTS	D. Black
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. Black
D. LUBRICATE THE PIN MECHANISM.	E. Black
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	D. Black

**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

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*J. Black*

**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

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Verify Flow Gauge  
 130 main reservoir is 64 + or - 3,  
 reservoir is 60 + o

NOTE: 120-  
 130-140 main

- 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)

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*J. Black*

- 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

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*J. Black*

# 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. Hartin
<b>Battery Qualification/Maintenance</b>	
2. <b>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.</b>	_____
3. Insert hose stem into battery cell and squeeze bulb.	J. Hartin
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. Hartin
5. The float reading at the water line is the uncorrected charge level of the battery.	J. Hartin
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) <b>Note 1:</b> the sheet below is set up for 2 or 8 batteries as some units have 8 batteries. <b>Note 2:</b> 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. Hartin
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	Rear battery 1200 - 1225
8. Return acid to cell from which it was drawn.	J. Hartin
9. Be sure all vent plugs are replaced and tight.	J. Hartin
10. With Unit shut down measure the voltage reading across each battery at the terminals, record readings on the chart below.	J. Hartin
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 exit, like corrosion, clean with scotch-brite buffer or wire br	J. Hartin
12. Apply approved protective coating to connections after terminals are cleaned and dried	J. Hartin
13. Add water as required (Add water to bottom of filler neck).	_____
<b>Battery Cranking Voltage Test</b>	
14. Close battery knife switch, and circuit breakers.	
15. Open the injector toggle switch, on EUI units to prevent unit from starting.	
<b>NOTE: Battery cranking voltage readings do not need to be taken on Air Start Locomotives.</b>	



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	1200	1200	1200	1200		✓		
Section B	1225	1200	1200	1200		✓		
Section C	1200	1200	1225	1200		✓		
Section D	1200	1200	1200	1200		✓		

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	1250	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								
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	32.6	32.3						
	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								

LOCOMOTIVE  
5023

DATE  
12-3-10

SOUTH SIDE				NORTH SIDE			
L#1	0-18	0-0	2.16	L#1			
L#2	0-20	0-0	3.04	L#2	0-19	0-0	1 7/8 12-08-10
L#3	0-21	0-0	2.00	L#3			
L#4	0-20	0-0	2.08	L#4	0-17	0-0	1 7/8 12-07-10
L#5	0-18	0-0	2.00	L#5			
L#6	0-19	0-0	2.12	L#6			
R#1	0-21	0-0	2.12	R#1			
R#2	0-20	0-0	3.04	R#2	0-19	0-0	1 7/8 changed out 12-08-10
R#3	0-21	0-0	1.14	R#3			
R#4	4-22	0-8	2.08	R#4	0-17	0-0	1 7/8 changed out 12-07-10
R#5	0-18	0-0	1.14	R#5			
R#6	0-21	0-0	2.14	R#6			

OLD GAUGE

FLANGE HEIGHT MEASUREMENT

NEW GAUGE

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 3/4" Tread Wear

FLANGE HEIGHT MEASUREMENT  
 200-22-4-13132

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 3/4"	MMA 1 7/16"	MMA 1"	MMA 1 1/4"	MMA 3/4"

CONVERSION CHART FOR WHEEL DIAMETER

8= 37"	15= 47 7/8"	22= 58 1/2"	29= 69 1/2"	36= 80 1/2"
9= 37 1/2"	16= 48"	23= 58 7/8"	30= 69 3/4"	37= 80 3/4"
10= 37 3/4"	17= 48 1/2"	24= 59"	31= 69 3/4"	38= 80 3/4"
11= 37 3/4"	18= 48 1/2"	25= 59 1/4"	32= 69 3/4"	39= 80 3/4"
12= 37 3/4"	19= 48 3/4"	26= 59 1/2"	33= 69 3/4"	40= 80 3/4"
13= 37 3/4"	20= 49"	27= 59 3/4"	34= 69 3/4"	41= 80 3/4"
14= 37 3/4"	21= 49 1/4"	28= 59 3/4"	35= 69 3/4"	42= 80 3/4"

NEW GAUGE

FLANGE THICKNESS MEASUREMENT

LOCOMOTIVE PAIR CLEARANCE

COUPLER HEIGHT	FRONT	REAR	FRONT	HEIGHT OF HORIZONTAL END HANDRAIL	HEIGHT OF HORIZONTAL END HANDRAIL FOR USE OF CHAIRS LEVER IF USED AT HORIZONTAL HANDRAIL	UNDER RAIL CLEARANCE
3	33		4 3/4			
	32 1/2		5			

NOTE

R#4 High Flange - coming out over 3/8" lateral lots of Brass in Wick Box. O. Black

#6 grounded - also coming out

O. Black







Unit: 5023

Date: 12-2-10

### DEFECTS FOUND DURING INSPECTION

DEFECT <u>GASKET BAD BEHIND comp. MAGNET VALVE (leak)</u>	INSPECTED BY: <u>T.P. [Signature]</u>
REPAIR <u>Exhaust leak back between #4 &amp; 5 center section</u> <u>Replaced gasket</u>	CORRECTED BY: <u>J. Black</u>

DEFECT <u>EXHAUST leak #4 &amp; 5 cyl.</u>	INSPECTED BY: <u>T.P. [Signature]</u>
REPAIR <u>Repaired leak (new gaskets)</u>	CORRECTED BY: <u>J. Black</u>

DEFECT <u>EXHAUST leak behind R2 cyl.</u>	INSPECTED BY: <u>T.P. [Signature]</u>
REPAIR <u>Repaired leak (new gaskets)</u>	CORRECTED BY: <u>J. Black</u>

DEFECT <u>Bad voltage regulator (75-backed off)</u>	INSPECTED BY:
REPAIR	CORRECTED BY:

DEFECT <u>Toilet Drained - needs winter chemicals</u>	INSPECTED BY: <u>TPC</u>
REPAIR <u>replace and fill low temp chemical</u>	CORRECTED BY: <u>D. Black</u>

Unit: \_\_\_\_\_

Date: \_\_\_\_\_

### DEFECTS FOUND DURING INSPECTION

DEFECT	# 6 TM 300K needs to be C/O	INSPECTED BY:	JH
REPAIR	Replaced wheel & motor	CORRECTED BY:	J Black H Conlogue

DEFECT	Grids Low meg reading .02 M.	INSPECTED BY:	JH
REPAIR	Replaced bad insulation L/Rear Grid bank	CORRECTED BY:	JH

DEFECT	# 4 wheel excessive lateral	INSPECTED BY:	J Black
REPAIR	Changed out motor, wheel	CORRECTED BY:	J Black H Conlogue

DEFECT	# 2 wheel 780 Big 3 1/8	INSPECTED BY:	J Black
REPAIR	Changed out wheel and motor	CORRECTED BY:	J Black H Conlogue

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

WINTERIZATION	
	Signature
Winterization - All MMA Locomotives. (August - April)	
Inspect front and rear cab door seals replace, as needed (NO TAPE)	D. Black
Inspect left and right side window seals replace as needed.	D. Black
Inspect Electric cabinet door seals replace as needed.	D. Black
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.	D. Black
Test Manual Water Dump Valves, Proper Handle, Location, Orifice is Open.	
Close Winter/ Summer doors if equipped.	Done
Check Traction Motor cover gaskets, install as needed.	Done
Check condition of Cab Door Hinges (Lubricate all Hinges)	D. Black
Check condition of Cab Door Locks (Lubricate all Locks)	D. Black
Inspect Cab Windows Slider Rail, Adjust Top Rail as needed, Lubricate with Silicone Grease.	D. Black
Renew all Wiper Blades.	
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.	D. Black
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.	D. Black



# Service Operations

## THROTTLE 8 OUTBOUND LOAD TESTS

UNIT 5023

DATE 12-13-10

Eng RPM (900)	EMD	<u>                    </u>	Lube Oil Pres	<u>                    </u>
Eng RPM (1050)	GE	<u>1050</u>	Water Temp	<u>170</u>
Horsepower		<u>3074.4</u>	Overspeed Setting	<u>                    </u>
Volts (5.3)	B-23	<u>                    </u>	RACK SETTING	<u>19.5</u>
Volts (7)	C-30	<u>7.2</u>		
Volts (720)	B-39	<u>                    </u>		

## THROTTLE #1 STALL TEST

OP Mode	(PWR)	<u>F</u>	
AMPS	(300)	<u>300</u>	
MGA	(1220)	<u>                    </u>	NOT APPLICABLE TO B-23 AND C-30
Charging Rate	(70v)	<u>73.27</u>	