

m m A 5017
92 Day Inspection Packet

Reference: Code of Federal Regulation, Title 49, 229.23 and 229.25, Dated, 1 May 2009

General.

- a. The guidelines set forth in this packet are to be checked and repaired if necessary under these guidelines every 92 days as dictated under federal law. Reference: 229.23 (a)
- b. Each 92 day inspection shall be recorded on Form FRA F6180-49A. Reference: 229.23 (c)
- c. Each 92 day inspection shall be signed and dated legibly by the individual performing the inspection. In addition, the supervisor (lead man or manager) will sign and date that the work was checked and performed IAW with regulatory guidelines. Reference: 229.23 (d)
- d. A written record of this inspection shall be maintained and on file for one year. Reference: 229.23 (f)

Location Inspected: Derby

Date Inspected: 6-30-10

Inspector: _____

Inspector: J. Martin

Supervisor Check: _____

1. All mechanical gauges used by the engineer to aid in the control and braking of the train or locomotive except load meters used in conjunction with an auxiliary brake system, shall be tested by a comparison with a dead weight tester or a test gauge designed for this purpose. Reference 229.23 (a). **The MMA uses a comparison gauge that is kept in the tool room. It must be calibrated once a year. Always check the calibration date with leadman before proceeding with gauge testing. Gauge cannot be more than 3PSI or 5% in variance. MMA standard is exact calibration. Check all gauges at 10lb intervals from 0 to 140lbs.**

- a. Main Reservoir Gauge. Go No GO
- b. Equalizing reservoir Gauge. Go No GO
- c. Brake pipe gauge. Go No GO
- d. Brake cylinder gauge. Go No GO
- e. Load Meter. Go No GO

2. All electrical devices and visible insulation shall be inspected. Reference: 229.25 (b).

- a. Meg the engine. Check for grounds. Go No GO
- b. Test the operation of the ground relay. Go No GO
- c. Test the operation brake warning light. Go No GO
- d. Check Wheel slip light. Go No GO
- e. Check Alarm bell. Go No GO
- f. Check that all covers are secured. Go No GO

- g. Check placement of all safety stickers. Go No GO _____
- h. Check all light bulbs. Go No GO _____
- i. All cable connections between locomotives and jumpers that are designed to carry 600 volts or more shall be thoroughly cleaned and tested for continuity. Reference: 229.25
- (e). Check MU receptacles for damage. Go No GO _____

3. Event Recorder. **The MMA uses Quantum 10-29 Microprocessor based event recorders in all of our locomotives. If these microprocessor event recorders are installed, they are exempt from periodic inspection but shall be inspected annually as part of the 12 month inspection.** Other types of event recorders shall be inspected, maintained, and tested IAW instructions of the manufacturer, supplier, or owner IAW the following criteria: Reference: 229.23 (e)

- a. A written or electronic copy of test procedures in English must be used. **The MMA uses computer and electronic software to conduct these tests.**
- b. The event recorder must be tested before any maintenance work is performed. At a minimum the test shall include cycling, as practical all recording elements and determining the full range of each element by reading out the recorded data.
- c. If the premaintenance test does not reveal that the device is recording all the specified data and that all are within the designed recording elements, it shall be noted, and maintenance and testing shall be performed until a subsequent test is performed successfully.
- d. When a successful test is performed, a copy of the data verified results shall be maintained with the maintenance records for the locomotive until the next one is filed. **The MMA will print off the test sheet from the computer software and file the copy with the locomotive maintenance records.**
- e. An event recorder's periodic maintenance shall be considered effective if 90 percent of the recorders on locomotives inbound for periodic inspection in any given calendar month are fully functional.

4. In addition to the FRA mandated items the MMA will also include:

- a. Change oil filters. Complete PC
- b. Change Fuel Filters. Complete PC
- c. Change air compressor air filters if they are oily and dirty. Complete PC / CHANGED
- d. Change Electrical cabinet air filters. Complete PC
- e. Dump and service toilets. Complete J.W. BLACK
- f. Vacuum and wipe down cab. Complete J.W. BLACK
- g. Check windshield wipers. Complete J. Hartin
- h. Wash locomotive Complete _____
- i. Do wheel report. See below. Complete J. Appleton
- j. Do lab sample. Complete J. Appleton Cornhoke
- k. Outbound load test. See attached sheet. Complete J. Hartin
- l. Perform Air brake leakage test. See below Complete J. Hartin
 - i. Inspect and repair air piping for leaks
 - 1. Complete: J. Appleton
 - ii. Test all air gauges

73.9 V charging
7.1V - 3010 HP

1. Complete: J. Anderson
- iii. 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.
1. Complete: JW Black
- iv. Cover each trainline hose coupling with hand and test for leakage thru valve, then apply blank dummy couplings to trainline hoses on each end of unit and open trainline valves. Make a 20lb reduction with the automatic, move the cutoff valve to "OUT" position and check brake pipe leakage. Leakage shall not exceed 5lb per minute.
1. Complete: JW Black
- v. Reduce main reservoir pressure to 85lb by draining #2 main reservoir. Check cab gauge for leakage from main reservoir and piping for 3 minutes. Leakage must not exceed an average of 3lbs per minute during the test.
1. Complete: JW Black
- vi. Drain #1 main reservoir completely and test check valve between reservoirs. Pressure should remain on main reservoir gauge in cab as #1 main reservoir is drained.
1. Complete: JW Black
- vii. Check Air Flow Meter at 70 CFM.
1. Complete: J. Kestin

Montreal, Maine & Atlantic Railways

Itemized Defect Sheet.

General.

- A. This sheet is to list defects found during the 92 day inspection. The 92 day is designed to quickly ensure we are in federal compliance and if so to return the locomotive quickly back to service if at all possible.
- B. Do list your defects that you notice, but seek guidance from the leadman before doing anything other than the prescribed list on the previous sheets. Leadman guidance is to let minor (non FRA defects) go until a major shopping for 12 month inspections or above. Medium defects require a manager approval but if it can go – then do so.
- C. Defects should be classified as either FRA, Major, Medium, or Minor. Major defects can only be run with the CMO's approval. Majors are classified as something that will imminently fail in the near future. Medium defects are defects that can wait but are serious in nature and will need to be addressed in the near future. Minors are defects that make the locomotive not to OEM specs but otherwise does not seriously hamper operations. FRA defects will be fixed.

1. Exiter Gen. B/O J. Black / D. Black J. Hartin
R+Replace Gen J. Hartin
2. HV System grounded 0.00 meg J. Hartin
GR sticking - cleaned - 750K
3. #6 TM Gear Case Bolts loose Top + Bottom Done
Clean
4. Horn not showing on Event Recorder
Tested and replaced horn pressure switch in recorder J. Hartin
5. Brake Cylinder Rightside leaking
Rebuilt B. Cleary
6. Aux Gen B/O
Replaced Gen J. Hartin, B. Cleary, D. Sullivan
7. ~~SAND HOSES ON ALL 4 CORNERS ARE MISALIGNED~~ M. Foiley
Front mu holder chain D. Black D. Black
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

Done →

Wheel Report

General.

- a. Condemning limits at "C", Tread worn hollow at 5/16". Applies to Road Units.
- b. Condemning limits at "A", High Flange is at 1 1/2". Applies to all units.
- c. Inspect all wheels for thin flange. 15/16" minimum.
- d. Inspect all wheels for flat and shell spots.
- e. Inspect front and rear draft gears and couplers.
- f. Inspect support brgs, caps, and gear cases for cracks.
- g. Report all defects and near defects to leadman or manager.
- h. Fractional measurements to be in 32nds of an inch.
- i. Consistency is key and only correct measurements are useful.

Inspector Name: Josh Anderson

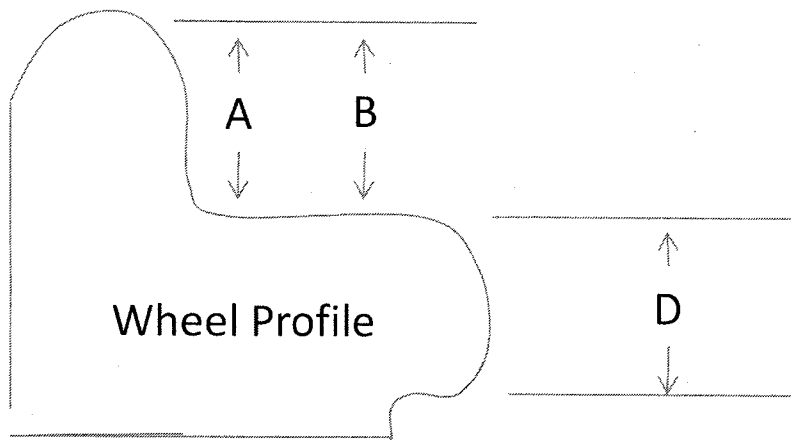
Date: 6-30-10

Wheel	Right Side				Left Side			
	A	B	C	D	A	B	C	D
#1	1.05	1.06		1.30	1.06	1.06		2.00
#2	1.11	1.12		1.27	1.11	1.07		1.22
#3	1.07	1.07		2.08	1.08	1.08		2.06
#4	1.11	1.10		1.16	1.07	1.06		1.18
#5	1.05	1.07		1.26	1.06	1.08		1.28
#6	1.09	1.07		2.28	1.09	1.08		2.29

Coupler Height	
31.5" to 34.5"	
Front	Rear
32	33 1/2

Side Bearing Clearance			
Total 3/16" - 1/2"			
RF	1/4	LF	3/16
RR	3/16	LR	1/4

Pilot Height	
Min 3" - Max 6"	
Front	Rear
5	5



Wheel Profile

$$C = B \text{ minus } A$$

Report Date: 07-01-2010
Locomotive 5017

Data Removed on 07-01-10

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	Never ON/ACTIVE
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

Defect →



Manufacturer is QEI Version # S45E
Serial Number is 0204100033
Customer is MMAR

Data was removed on - 06:34:25 on 07/01/10
Last Downloaded on - 16:04:00 on 03/30/10
Battery was installed on - 09/21/04
Locomotive Number is - 5017

Downloaded by - jh
Location - derby
Train - 235
Wheel Size Entry - 38
Wheel Size used by program:
Circumference = 119.4 Diameter = 38.0
No memo present.

Wheel size used for printout is 119.38

QDP Version V

Report Date: 07-06-2010
Locomotive 5017

Data Removed on 07-06-10

SPEED (MPH)	Never above 20.
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	Stop never reported. Low Idle never reported.
REVERSE	OK
EIE	Never ON/ACTIVE
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

Repaired →



Manufacturer is QEI Version # S45E
Serial Number is 0204100033
Customer is MMAR

Data was removed on - 10:35:34 on 07/06/10
Last Downloaded on - 10:44:00 on 07/02/10
Battery was installed on - 09/21/04
Locomotive Number is - 5017

Downloaded by - jh
Location - derby
Train - 234
Wheel Size Entry - 38
Wheel Size used by program:
Circumference = 119.4 Diameter = 38.0
No memo present.

Wheel size used for printout is 119.38

QDP Version V