

**INBOUND – 92 DAY INSPECTION – MECHANICAL**

- |   |    |
|---|----|
| a) Check heater motors in cab   | ED |
| b) Check all wiper motors   | ED |
| c) Check horn and bell  | ED |
| d) Check sanders (forward & reverse)  | ED |
| e) Check air compressor and governor (kick in @ 130psi and kick out @ 140psi) 120-130 | ED |

**INBOUND AIR BRAKE TEST**

- |  |     |
|--|-----|
| a) Independent leakage test                | ED  |
| b) Automatic leakage test                  | ED  |
| c) Automatic application ball-off test     | ED  |
| d) Emergency application and PCS trip test | *ED |
| e) Maintaining feature test                |     |

**MAIN RESERVOIR SAFETY VALVE TEST**

- |  |     |
|--|-----|
| a) Drop control & fuel valve switch (watch MR valve – should blow at 150psi) | ED  |
| b) Lift control and fuel pump breakers, record reading                       | 145 |

**ENGINE LOADING TEST**

- |   |    |
|---|----|
| a) Make sure it moves in each direction | ED |
|---|----|

**COOLING FAN TEST**

- |  |       |
|--|-------|
| a) Operate each temperature switch and make sure all shutter cylinders open & according fans engage with proper rotation | SN/KC |
|--|-------|

**IDLE ENGINE WALK AROUND TEST**

- |  |          |
|--|----------|
| a) Top deck running inspection               | ED/SN/KC |
| b) Check for fuel, oil, water, and air leaks | ED/SN/KC |
| c) Check throttle speeds                     |          |
| d) Check all water, oil, and sand levels     | SN/KC    |
| e) Test engine protector and low oil button  | ED       |
| f) Obtain lube oil sample                    | KC       |
| g) Idle oil pressure                         | 36 #'S   |
| h) Idle engine temperature                   | 146°F    |
| i) Obtain A/C Oil Sample                     | KC       |

**ENGINE ROOM WALK AROUND INSPECTION (IN 7<sup>TH</sup> OR 8<sup>TH</sup> NOTCH)**

Check exhaust, fuel, water, and oil for leaks

**\*RECORD ALL DEFECTS ON INBOUND DEFECT SHEETS\***

## **INBOUND DEFECT SHEET**

Engine running inspection

- Unit continues to load when PCS is tripped
- Engine low on Oil 20 gallons

## **WHEEL READINGS**

	Nose pack	Wheel thick	Flange height	Flange thick	Tread wear
Left #1	1/4	20	1 5/16	1 17/64	1/8
Right #1		20	1 5/16	1 17/64	1/8
Left #2	¼	22	1 ¼	1 17/64	1/8
Right #2		21	1 5/16	1 17/64	1/8
Left #3	¼	28	1 3/16	1 17/64	1/8
Right #3		29	1 5/16	1 17/64	1/8
Left #4	¼	29	1 3/16	1 17/64	1/8
Right #4		28	1 ¼	1 17/64	1/8
Left #5					
Right #5					
Left #6					
Right #6					

Flange height                  flange thick

0on0	1	0on0	1 17/64
0on1	1 1/16	1on0	1 15/64
0on2	1 1/8	2on0	1 7/32
0on3	1 3/16	3on0	1 5/32
0on4	1 ¼	4on0	1 7/64
0on5	1 5/16	5on0	1 3/64
0on6	1 3/8	6on0	1 1/32
4on6	1 7/16	7on0	63/64
5on6	1 31/64	8on0	15/16

#1 Side bearing clearances                  1/8  
#2 Side bearing clearances                  1/4  
Front draft gear total slack                  1/831  
Rear draft gear total slack                  1/8  
Front pilot plate height                  7 1/2  
Rear pilot plate height                  4 1/2  
Front coupler height                  31 1/2  
Rear coupler height                  31 1/2

**92 DAY LOCOMOTIVE F.R.A. INSPECTION**

**DEFECTS**

**SIGN OFF ON REPAIRS**

-Front Pilot Plate needs lowered

**92 DAY LOCOMOTIVE F.R.A. INSPECTION**

**DEFECTS**

**SIGN OFF ON REPAIRS**

**ENGINE TOP DECK INSPECTION (DEAD)**

- |   |          |
|---|----------|
| a) Check engine rack reading (dead)                                   | 1.96     |
| b) Engine under hydro of cooling system                               | ED       |
| c) Check for dropped valves   | SN/KC    |
| d) Rotate engine manually and check rocker – roller & cam shaft lobes | SN/KC    |
| e) Purge fuel system, check for leaks with black light & record       | ED/SN/KC |

**AIR BOX INSPECTION**

**With hydro of cooling**

- a) Obtain lead readings and record on air box sheet ED/KC
- B) Check top ring land readings & record on air box sheet ED/KC
- c) Check ring tension wear & record on air box sheet ED/KC
- d) Piston condition & record on air box sheet ED/KC
- e) Liner condition & record on air box sheet ED/KC

**CRANK CASE INSPECTION – 92 DAY**

**Obtained with hydro of cooling system**

- a) Record crankshaft lateral 1/32
- b) Check for rod lateral on all 8 rod throws ED
- c) Hammer test all main bearing nuts ED/KC
- d) Hammer test all rod nuts and bolts ED/KC
- e) Hammer test all piston cooling pipes ED/KC
- f) Check all rods for over- heating ED/KC
- g) Check for internal water leaks ED/KC

**AIR BOX INSPECTION REPORT**

**UNIT# : 1037**

**DATE: 10-02-18**

STATUS	PREVIOUS READING	POS	READING	LINER COND.	RING COND.	PISTON COND.	RING LAND WEAR	NEW LEAD READING
		1	.068/.061	OK	TRS	OK	.012	
		2	.061/.067	OK	TRS WEAK	OK	.008	

		3	049/.054	OK	TRS	OK	.012	
C/O AS HEAD		4	.060/.062	OK	OK	CARBON	.013	
		5	.047/.046	OK	TRS	OK	.010	
		6	.054/.054	OK	TRS	OK	.013	
		7	.056/.061	OK	OK	OK	.008	
		8	.055/.052	OK	OK	OK	.008	
C/O AS HLP		9	.059/.059	WORN	WORN	WORN	.020	
		10	.057/.055	OK	OK	OK	.008	
		11	.056/.055	OK	OK	OK	.008	
		12	.057/.061	OK	OK	OK	.008	
		13						
		14						
		15						
		16						
		17						
		18						
		19						
		20						

INSPECTED BY:

FOREMAN:

**TOP DECK/AIR BOX/CRANK CASE INSPECTION DEFECTS**

**DEFECTS**

**SIGN OFF**

## **STANDARD INSPECTION ITEMS**

### **FUEL SYSTEM**

- a) C/O primary filters
- b) C/O secondary filters
- c) Clean fuel sight glasses
- d) Prime for leaks

### **COOLING SYSTEM**



- a) Check water for treatment

### **LUBRICATION SYSTEM**

- a) C/O main lube oil filters
- b) C/O air compressor oil filter (if applicable)

### **AIR INTAKE SYSTEMS**

- a) C/O engine air intake filters
- b) Clean out exhaust and traps
- c) Renew car body filters
- d) C/O a/c intake filters

### **AIR BRAKE SYSTEM**

- a) Test Air Brake Gauges & Recalibrate
- b) Lubricate Hand Brake and Test Operation

### **TRUCK AND WHEEL ITEMS**

- a) Check and fill all journal boxes
- b) Check and fill all support bearing oil levels
- c) Make sure all wicks are tight
- d) Check and fill all gear cases
- e) Check and replace or adjust all brake shoes
- f) Lube #1 and #2 truck center castings

### **CAB AND CAR BODY ITEMS**

- a) Inspect all fire extinguishers (dates and securement)
- b) Check all wiper blades
- c) Check cab for fuses, torpedoes and flags
- d) Lubricate all shutter linkages and car body hinges

### **OUTBOUND – 92 DAY RUN CHECKS – MECHANICAL**

- a) Check heater motors in cab
- b) Check all wiper motors
- c) Check horn and bell
- d) Check sanders (forward and reverse)
- e) Check A/C & A/C Governor for proper function

### **OUTBOUND AIR BRAKE TEST**

- a) Independent leakage test
- b) Automatic brake leakage test
- c) Automatic application ball-off test
- d) Emergency application and PCS trip test

d) Maintaining feature test

**MAIN RESERVOIR SAFETY TEST**

- a) Drop control and fuel pump switch (watch M/R valve should blow @ 150 psi)
- b) Lift control and fuel pump beakers, record reading

**ENGINE LOADING TEST**

- a) Make sure it moves in each direction

**COOLING FAN TEST**

- a) Operate each temperature switch and make sure all shutter cylinders open and according fans engage with proper rotation

**IDLE ENGINE – WALK AROUND TEST**

- a) Top deck running inspection
- b) Check for fuel, water and oil leaks
- c) Check throttle speeds
- d) Check water, oil and sand levels
- e) Test engine protector and low oil button
- f) Check all inbound defects for repairs
- g) Idle oil pressure
- h) Idle engine temperature

**ENGINE ROOM – WALK AROUND INSPECTION (IN 7<sup>TH</sup> OR 8<sup>TH</sup> NOTCH)**

- a) Check exhaust, fuel, water, and oil for leaks and repair

**92 – DAY ELECTRICAL INSPECTION**

<b>UNIT #</b>	<b>DATE</b>	
<b>1.) Meg. Sys. /Ground relay trip</b>	<b>Ohms</b>	<b>Amps</b>
<b>2.) Check for low voltage grounds</b>		
<b>3.) Main Generator</b>		
a) Check brushes and holders		
b) Check for flashover & paint bare spots		
c) Clean inside of generator if necessary		
d) Check Slip Ring Brushes		
<b>4.) Load Regulator</b>		
<b>5.) Check auxiliary generator</b>		
a) Check brushes & holders		
b) Clean if necessary		

**6.) Voltage Regulator** **VDC**

**7.) Traction Motors**

- a) Check brushes, holders and cables
- b) Check for flashover & paint bare spots
- c) Check motor leads & securement

**8.) Fuel pump**

- a) Check brushes and armatures

**9.) Electrical Cabinets**

- a) Check for loose wires & connections

**10.) Control stand**

**11.) A C cabinet**

- a) Check for loose wires & connections

**12.) Lighting Equipment**

- a) Check front & rear headlights and ditch lights
- b) Check cab, car body & control stand lights

**13.) MU receptacles**

- a) Check & Clean

**14.) Batteries**

- a) Check & fill cells with water
- b) Check battery connection
- c) Check battery box connection

**15.) Cab Heaters**

- a) Check motor brushes
- b) Clean interior if necessary
- c) Aux Heaters

**ELECTRICAL INSPECTION DEFECTS**

**DEFECTS**

**SIGN OFF**