

*J. S. M.*  
H. S. M.

Clearing shop order is issued as follows:

S.O. 65134 - Annual inspection and overhaul  
to track sweeper #498177 and  
associated equipment.

*C. J. Bowers*  
Manager - Heavy Repair Shops.

1-13-59.f (6-7)

Work Equipment  
Transfer to S.E.E.  
Key 65  
F.D.Key 07-01

cc:

W.A.N.  
G.C.B.  
E.W.H.  
H.M.L.  
M.A.H.  
C.H. Bowers

*J.S.M.*

50 65132

Locomotive Shop, January 8, 1959  
7-6 and

Mr. John Shearer:

Subject: Inspection of track sweeper 498177, power car 498178, tool car 489500, material car 499563 and six (6) dirt car conveyors for seasonal overhaul:

This inspection was made at South Philadelphia yards on December 30, 1958 by T. D. Brackbill, Electrician and W. H. Thomas, Machinist, accompanied by R. E. Gorsuch, Assistant Engineer from the Chief Engineer's office, Philadelphia and R. Oshell, Foreman, Track Sweeper 498177. A thorough inspection of all parts was made while working in south Philadelphia yard.

General Repairs:

1. Renew cable on broom lift.
2. Renew cable on crane lift
3. Repair operator's platform.
4. Repair rail scrapers.
5. Repair rail scrapers, cylinders and operating valves.
6. Repair auxiliary plow cylinders and operating valves.
7. Clean and test air brake equipment.
8. Repair all gauges and valves.
9. Repair pipe and all operating valves.
10. Repair truck brake rigging.
11. Apply new brake shoes where needed.
12. Repair couplers and examine draft gear.
13. Repair scarifier and teeth holders.
14. Renew scarifier teeth.
15. Renew rivets in auxiliary plow hangers.
16. Renew sponging in all journal boxes.
17. Straighten bent hand rails and foot step.
18. Paint all hand rails and foot steps yellow enamel.
19. Remove rust spots and paint black enamel, reference 47-2218.
20. Examine all gear boxes, drain and refill with #140 SAE gear oil.
21. Tighten hold down bolts on all gear boxes.

Broom Assembly:

1. Dismantle broom and check bearing and seals.
2. Repair broom segment cylinders.
3. Repair broom clutches.
4. Renew broom.
5. Repair radius bars, renew left side - bent bad.
6. Repair drive gang casing.
7. Check broom shaft for alignment.

"A" Conveyor:

1. Check all bearings when dismantled.
2. Renew all conveyor chains.
3. Renew all conveyor flights.
4. Check all shafts for straightness and wear.
5. Renew all pins, bushings and rollers that are bad.
6. Renew lateral conveyor screw.
7. Remove and anneal all bearing grease pipes.
8. Renew broom side guards.
9. Repair slewing device.
10. Renew all dirt guards on bottom conveyor shaft.
11. Straighten left side, sheet of conveyor.
12. Check gear boxes and fill with SAE gear oil.
13. Remove and repair all chain casings.
14. Renew rubber strip at bottom of conveyor.

"B" Conveyors:

1. Remove all shafts and bearings and examine same.
2. Remove conveyor chain - examine for broken bushing, pins and rollers.
3. Renew all conveyor flights.
4. Renew some flight carriers that are bad.
5. Examine conveyor side sheets and bottom sheets when dismantled.
6. Tighten gear box and motor support.
7. Repair drive chain casings.
8. Check gear box and refill with SAE #140 gear oil.
9. Repair grating on top of conveyor.

"C" Conveyor:

1. Remove and clean all shaft bearings.
2. Check shaft for straightness.
3. Renew all conveyor flights.
4. Remove conveyor chain, renew all pins, bushings and rollers that are bad.
5. Line conveyor chain on head shafts.
6. Repair grating on top of conveyor.
7. Repair clean-out doors on bottom of conveyors.
8. Repair conveyor chain, tighten belts.
9. Weld slope sheets, weld is broken.
10. Straighten hand rails.
11. Repair drive chain casings.
12. Check gear boxes and refill with SAE #140 gear oil.

Six (6) 100-ton Dirt Car Conveyors:

1. Remove and clean all bearings, renew all bearings that are worn bad.
2. Check all shafts when dismantled.
3. Patch side sheets where necessary.

Six (6) 100-ton Dirt Car Conveyor (cont'd.)

4. Renew flight return track on No. 1 conveyor.
5. Repair bottom doors and latches.
6. Request has been made to have slide doors put in top of casings to oil chain.
7. Renew all bad flights.
8. Renew bad running boards.
9. Straighten running board brackets.
10. Straighten hand rails.
11. Examine drive chain for broken rollers, when dismantled.
12. Renew all drop doors cross bars.
13. Repair all drive chain guards.
14. Renew oil seals on all gear boxes.
15. Examine all gears boxes and refill with SAE No. 140 gear oil.
16. Paint all conveyors black enamel, reference No. 47-2218.
17. Paint all hand rails and grab irons yellow enamel, ref. 47-2590.
18. Paint all electrical equipment red enamel.

Power Car 498178

1. Engine should be checked for leaks in fuel lines at injectors. We believe some of the fuel oil is getting into the crankcase, thinning the oil. Engine is using two to three quarts of oil in eight hours running time.
2. Renew fuel filters.
3. Renew lube oil filters.
4. Radiators leaking bad, remove and repair.
5. Oil is blowing out of generator breather hole.
6. Oil also leaks around the rear of the head.
7. Oil pump packing is leaking front end.
8. Renew exhaust pipe.
9. Responge journal boxes.
10. Check couplers and draft gear, carrier is low.
11. Clean car inside and outside. Paint is O.K.
12. Test air brake equipment.

Tool Car No. 489500

1. Test air brake equipment.
2. Request has been made to remove four drawers from one side of work bench and apply two shelves and two doors for personal tool boxes.
3. Repair side doors, binding on top of rollers.
4. Responge all journal boxes.
5. Repair emergency lighting equipment plant.
6. No fire extinguishers on the train, should have four extinguishers.

Tool Car No. 489500 (cont'd.)

7. Paint inside of car aluminum paint - outside ok.
8. Repair couplers front end 3" low.
9. Paint roof with plastic paint, leaks bad.
10. Paint trucks black.

Material Car No. 499563

1. Test air brake equipment.
2. Responging all journal boxes.
3. Check couplers and draft gear.
4. Side doors are off car doors, need repairs, track on top of car needs repairs.
5. Paint roof with plastic paint, leaks bad.
6. Paint on outside of car is O.K.
7. Renew four brake shoes.
8. Paint trucks black.

Miscellaneous Parts

1. Repair two (2) 6 ft. side auxiliary plows.
2. Repair rail scraper doors.
3. Renew springs on doors.

ELECTRICAL REPAIRS

Sweeper

1. Main control panel to be cleaned, checked and overhauled, wires to be painted.
2. "M" relay on "B" panel - check circuit closely.
3. Replace button contactors on broom lift and hoist panels.
4. Check both panels, replace dash-pot oil - time 3 seconds operation.
5. Check and clean all switches, conduit, etc.
6. Remove "A" conveyor motor, overhaul, may need new brush ring, this conduit was grounded badly.
7. Rewire broom hoist circuit from motor to terminal box.
8. Check 40 HP motor.
9. Check "C" conveyor motor for bad bearings.
10. Check and renew lights.
11. Check emergency stop circuit.
12. Meg entire sweeper circuit.
13. Rewire hoist circuit from motor to terminal box.
14. "B" conveyor motor, check grease retainer.

Six (6) Conveyors

1. Check, clean and overhaul all six motors.

Six (6) Conveyors (cont'd.)

2. No. 1 conveyor starting panel, new resistor needed.
3. Have all motor armatures undercut if needed.
4. Replace damaged power and control jumpers.
5. No. 5 conveyor motor running too slow.
6. No. 1 conveyor motor not running correct.
7. Overhaul lighting circuit, new equipment needed globes, shades, guards, etc.
8. Meg all circuits for grounds.
9. Replace all damaged conduit.
10. Check starting panels and switches.
11. Clean emergency stop circuit and repair all switches.
12. Replace damaged power receptacles.

Power Car

1. Check main generator, clean and note air gap for bearings.
2. Check starting panels and clean.
3. Check field resistors.
4. Check light circuit.
5. It has been suggested by the Assistant Engineer, R. E. Gorsuch, that all electrical equipment in the power car that is not being used be removed, this equipment is from the No. 2 MG set that was removed in 1956.
6. Check power receptacles both ends of car.
7. Remove batteries and send to battery shop.
8. Check charging circuit.

Tool Car

1. Check all electrical equipment in car, lights, emergency power plant, grinder, welder, etc.
2. Install emergency lights in car so lights are available when main MG set is shut down.  
The lights in the tool car was supplied by both power plants, but when the change-over was made from 230 volts to 110 volts, the lights were too dim.

W. H. Thomas  
Machinist

T. D. Breckbill  
Electrician