

PENNSYLVANIA RAILROAD

LINES EAST OF PITTSBURGH

Locomotive Maintenance Instructions No. L-21-A

ISSUED ALTOONA, PA.
DECEMBER 21, 1915

Instructions for Filling Out Monthly and Annual Locomotive Inspection and Repair Reports M. P. 162-A and M. P. 164-A.

(SUPERSEDING SUPPLEMENT NO. 1 TO CIRCULAR NO. 119-A, DATED MARCH 4, 1912)
(SUPERSEDING LOCOMOTIVE MAINTENANCE INSTRUCTIONS NO. L-21, DATED MAY 5, 1915)

GENERAL

The following instructions cover the method to be followed in preparing the monthly and annual inspection reports M. P. 162-A and M. P. 164-A, to the Interstate Commerce Commission.

MONTHLY LOCOMOTIVE INSPECTION AND REPAIR REPORT.

P. R. R. Form M. P. 162-A, Interstate Commerce Commission Form No. 1

The month for which the report is filed should be inserted in the upper left hand corner of report and the number of the locomotive and the initials should be given in the upper right hand corner. The initial will be the initial of the owning railroad, and not the initial of the operating railroad. The name of the company operating the locomotive should appear on the line at the top of report; the initials of the company are not satisfactory, the full name is required on this line. The locomotive number should be filled in on line 2 and should correspond with that given in the upper right hand corner. The date that the inspection and repairs are completed and the place where inspection was made should be filled in on line 3.

Question No. 1 should show the date on which steam gauges were tested and left in good condition. The steam gauges should be tested immediately before the safety valves are set or any changes made in the setting.

Question No. 2 should show the pressure at which each safety valve is set to pop. If the locomotive is equipped with only two safety valves, the space on report for the third safety valve should be filled in with the word "none." The date of setting should be given.

Question No. 3 should be answered "yes" or "no."

Question No. 4 should be answered "yes" or "no."

Question No. 5 requires two answers; first, giving condition of brake equipment; and second, giving condition of signal equipment.

Question No. 6 requires two answers; first, giving condition of draft gear; and second, giving condition of draw gear between locomotive and tender.

Question No. 7 requires the condition of the driving gear.

Question No. 8 requires the condition of the running gear.

Question No. 9 requires the condition of the tender.

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Question No. 10 should be answered "yes" or "no."

Question No. 11 should be answered "yes" or "no."

Question No. 12 requires two answers; one showing condition of stay bolts, the other showing condition of crown stays. These answers should show the number found broken at the time of inspection.

Question No. 13 requires two answers; first, giving number of stay bolts renewed, if any, and second, giving the number of crown stays renewed, if any, at time of inspection. These answers must also show how many of the bolts renewed were good; how many cracked and how many broken. For instance, if no crown bolts or stay bolts are renewed, the answer should be "None," "None." If two broken stay bolts and no crown bolts are renewed, the answer should be "S. B. two," "C. None." If one broken and two good stay bolts are renewed and no crown bolts the answer should be "S. B., one broken, two good," "C., None."

Question No. 14 requires two answers; first, showing the condition of the flues and second, the condition of the firebox sheets.

Question No. 15 requires two answers, giving the condition of arch and water bar tubes, if used; if either is not used, the answer should be "not used."

Question No. 16 should be answered "not used," as none of our boilers are equipped with them.

Question No. 17. Give date of previous hydrostatic test.

Question No. 18 should be answered by giving the date of the last removal of caps from flexible staybolts.

ANNUAL LOCOMOTIVE INSPECTION AND REPAIR REPORT

P. R. R. Form M. P. 164-A Interstate Commerce Commission Form No. 3

The name of the company operating the locomotive should appear in the upper left hand corner of the report. The initials of the company are not satisfactory, the full name is required on the line. The number of the locomotive must be inserted in the upper right hand corner, and also where it is called for on the second line of the report. The initial of the locomotive must be given in the upper right hand corner and the initial will be the initial of the owning railroad, and not the initial of the operating railroad. The date that the inspection and repairs are completed should be filled in on line 3. The place where inspection was made should be filled in on line 3.

Question No. 1. Give date of previous hydrostatic test.

Question No. 2. Give date of previous removal of caps from flexible stay bolts. If flexible stay bolts are not used, the answer should be "not used." If bolts of the "breakless type" are used the following note in addition to the above answer should be made, "Special 18 mo. examination of breakless bolts made—19—."

Question No. 3. Give date of previous removal of flues.

Question No. 4. Give date of previous removal of lagging from barrel of boiler.

Question No. 5 should show the pressure applied when hydrostatic test was given.

Question No. 6 should be answered "yes" or "no." If flexible stay bolts are not used, the question should be answered "not used."

Question No. 7 should be answered "yes" or "no."

Question No. 8 should give the condition of the interior of the barrel of boiler if a sufficient number of flues are removed to allow a thorough examination. If such a number of flues are not removed, but the interior of barrel above flues is examined, this item should give the condition of the interior of the barrel above flues; for example, "Good above flues." The entire set of flues must be removed at least once every three years and a thorough examination made of the entire interior of boiler.

Question No. 9 should be answered "yes" or "no" or "portion removed."

Question No. 10 should give the condition of the exterior of the barrel of boiler if one-third or more of the lagging is removed from the barrel. If less than one-third of the lagging is removed

the answer should be "not inspected." All of the lagging must be removed at least once every five years, and a thorough inspection made of the entire exterior of the boiler at that time.

Question No. 11 should be answered "yes" or "no."

Question No. 12 should be answered "yes" or "no."

Question No. 13 requires two answers; first, the condition of the crown stays; and, second, the condition of the staybolts.

Question No. 14 requires two answers; first, the condition of the sling stays, if used; and, second, the condition of the crown bars, if used. Where they are not used, the answer should be "not used."

Question No. 15 requires two answers. First, showing condition of firebox sheets, and; second, showing condition of flues.

Question No. 16 requires two answers; first, the condition of the arch tubes, if used; and, second, the condition of the water bar tubes, if used. Where they are not used, the answer should be "not used."

The answer to Question No. 17 should give the condition of throat braces, if inspected. If not inspected, the answer should be "not inspected."

The answer to Question No. 18 should give the condition of back head braces whenever it is possible for these braces to be inspected. If not inspected, or the Inspector feels that he cannot properly subscribe to the condition of the braces, the answer should be "not inspected."

The answer to Question No. 19 should give the condition of front flue sheet braces whenever it is possible for these braces to be inspected. If not inspected, the answer should be "not inspected."

Question No. 20 should be answered "not used," as none of our locomotives have fusible plugs.

Question No. 21 should be answered "yes" or "no."

Question No. 22 should be answered "yes" or "no."

Question No. 23 should show the pressure at which each safety valve is set to pop.

Question No. 24 should be answered "yes" or "no."

Question No. 25 should be answered "yes" or "no."

Question No. 26 should be answered by giving the pounds hydrostatic pressure applied to the main reservoir.

Question No. 27 requires two answers; first, the condition of the brake equipment; and, second, the condition of the signal equipment.

Question No. 28 should be answered "yes" or "no."

Question No. 29 requires two answers; first, the condition of the draft gear; and, second, the condition of the draw gear.

Question No. 30 should be answered by giving the condition of the driving gear.

Question No. 31 should be answered by giving the condition of the running gear.

Question No. 32 should be answered by giving the condition of the tender.

GENERAL INSTRUCTIONS APPLICABLE TO BOTH MONTHLY AND ANNUAL REPORTS

Each report has the questions split into two parts, one covering the machinists' work and one covering the boiler makers' work. This was done so that each Inspector can sign and certify to the work done by him without having to use identification marks to show what work he did. In the case of the M. P. 162-A, the machinists' work is on the left hand side and the Inspector doing this work should sign at the bottom of this column; the boiler makers' work is on the right hand side and the Inspector doing this work should sign at the bottom of this column. In the case of the M. P. 164-A, the boiler work is included in the first 21 questions and is above the machinists' work. The Inspector doing this boiler work should sign on the line immediately following question 21 and the Inspector doing the machinists' work should sign on the line immediately following question 32. In case all of the work is done by one Inspector, he should sign in both places.

Both monthly and annual reports must be sworn to before a notary public by the inspectors, and then signed by the Officer in Charge.

The officer in charge signing the report must have personal knowledge that work has been properly done. If the Master Mechanic has such knowledge, reports signed by him will be accepted; otherwise, they must be signed by his foreman, who is in direct charge of the work and has personal knowledge that it has been properly done.

It is desired that the report be filled in with typewriter, ink, or rubber stamp. While the use of an indelible lead pencil is allowed, we prefer the reports being filled in with ink.

The reports should be sworn to immediately after proper repairs of defects disclosed by the inspection have been completed.

Reports which are sent in to take the place of ones previously filed, but which were incorrect, should bear the notation, "Corrected report," at top of report, and should be forwarded to the District Inspector, to whom the original was sent.

Such words as "safe" and "OK" should not appear in answer to any of the items on either report and in no case should the answer be placed in the Inspector's mouth, so to speak, as is the case where the answers are printed after the questions.

The words "good," "fair" and "bad" shall be used in certifying the condition of parts.

The following definitions to be used for the above terms:

The word "good" should be used to indicate that there are no material defects.

The word "fair" should be used to indicate that the part in question is approaching the time when it will require repair.

The word "bad" should be used to indicate that the part in question is not in serviceable condition. When the word "bad" is used on forms M. P. 162-A and 164-A, the Inspector should show on the face of the report that the locomotive has been taken out of service for repairs.

No monthly report will be required for the month in which an annual report has been made.

All reports must be filed with the Federal Inspector within ten days after date of inspection.

A report for each locomotive is required for each month.

If a locomotive is out of service for an entire month, or during the last 15 days of any month, an "out of service" report may be filed for that month. Otherwise, a regular inspection report on Form M. P. 162-A or M. P. 164-A must be filed. The "out of service" report need not be filed until the end of the month which it is to cover.

If a locomotive is in service at any time during the last 15 days of any month, and an inspection report has not already been filed for that month, a report of inspection on Form M. P. 162-A should be filed showing the condition in which the locomotive was found immediately prior to being removed from service, and also bearing a notation to the effect that no repairs had been made, but before the locomotive went into service again all the repairs would be made, and an inspection and repair report on either Form M. P. 162-A or Form M. P. 164-A would be filed therefor. This report must be filed with the District Inspector within the ten day limit. This report may be made on M. P. 162-A report by giving the condition of the parts required by questions 5, 6, 7, 8, 9, 12, 14 and 15, and the dates required by questions 1, 2, 17 and 18. All the other questions may be answered in the negative and the last line of the upper part of the form, stating that defects have been repaired may be erased.

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