

C.R. Elmer

Form 2250 Standard



Ready Reference
to the
A.A.R. Code of Rules
Governing Conditions and Re-
pairs to Cars, Effective
January 1, 1945

The Atchison, Topeka and Santa Fe Ry. System

(1945 Edition)

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PREFACE

1. The instructions contained herein are issued by the Mechanical Department for the information and guidance of employees having to do with inspection, repairs to foreign cars, billing for such repairs, and interchange of cars under the provisions of the A.A.R. Code of Interchange Rules.

2. It is important that all car foremen, car inspectors, repairmen, car clerks, and others concerned, thoroughly familiarize themselves with the A.A.R. Code of Rules by studying and following its instructions, to the end that all chargeable repairs to foreign cars will be reported and to guard against misinterpretation of the rules, prevent improper or questionable charges for repairs to foreign cars, improper use of defect cards and improper repairs.

3. The A.A.R. Rules are predicated upon the honesty of and fair dealing between railroads and other car owners, and it must be understood that it is the intent of this Company that the letter and spirit of the rules, as interpreted by the Arbitration Committee, shall be lived up to and shall govern in all charges for repairs to cars. If this Company is responsible, under the rules for damage to a foreign car, it stands ready to make good for such damage, and employees must govern themselves accordingly.

4. At no time should any charges whatever be included in bills which are not strictly in accordance with the A.A.R. Rules and, while it is insisted upon that bills be made to cover all proper charges, it must be understood that charges which cannot be sustained by record and amply verified in case of dispute ARE NOT WANTED. This Company wants just what belongs to it NOTHING MORE.

5. All material applied and labor expended in repairing a car costs the Company something and, even though in some cases it may amount to but little, this Company should be reimbursed for every item properly chargeable against foreign companies for car repairs; however, this is possible only where all concerned study the A.A.R. Rules and carefully report all work done.

6. The A.A.R. Code of Rules is revised annually and supplements are issued from time to time. Each

revision of the rules has a definite purpose behind it and a careful study of the changes as they occur, will mean the avoidance of irregularities in car repair billing and matters pertaining thereto. Each supplement should be pasted in the A.A.R. Rule Book.

7. The Code of Rules governing the condition of and repairs to freight cars is divided into major subjects as shown below:

	<i>Rule</i>
Care of Foreign Freight Cars.....	1
Interchanging Freight Cars.....	2 to 3
Use of Defect, Original Record of Repairs, Billing Repair and Joint Evidence Cards.....	4 to 15
General Instructions.....	16 to 86
Improper Repairs.....	87 to 90
Instructions for Billing.....	91 to 111
Settlement for Destroyed or Damaged Cars.....	112 to 114
Disposition of Cars Requiring Extensive Repairs for Which Owners are Responsible.....	120
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Refunding for Improper Charges...	124
Revision of The Code of Rules.....	125 to 127
Condition of Acceptance of The Code of Rules.....	128 to 131

8. Billing information for the Audit Office is furnished in whole by the Mechanical Department, and care must be taken to see that all information necessary is supplied.

9. Any questions with reference to this work will be handled by the Mechanical Department through its Traveling Car Clerks.

INTERCHANGE AND INTERMEDIATE INSPECTION

1. The position of an inspector is one of much importance. It is his province to protect his company against improper deliveries under the A.A.R. Rules and to secure such protection for defective equipment as the rules prescribe. He is in a position to save his company much money by judicious handling of his work, which can only be done by keeping himself

thoroughly posted on the rules. On the other hand his failure to thoroughly post himself is bound to result in loss to his company through his ignorance of the rule requirements.

2. Each inspector will be required to pass an examination on the following subjects before appointment:

- Safety Appliance Laws
- A.A.R. Interchange Rules
- A.A.R. Loading Rules
- Air Brakes
- Bureau of Explosive Regulations
- Steam Heat and Air Conditioning

3. Inspectors at points of interchange must demand defect cards in all cases when due, and care must be taken not to furnish defect cards for defects that are not cardable under the A.A.R. Rules. It is required, however, that in all interchange with either connecting railroads or private car owners, inspectors shall deal with them in all fairness and in strict accordance with the A.A.R. Rules, furnishing protection when known to be due.

4. It is important that our inspection records be as complete and comprehensive as they can be made, as upon these records frequently depends the settlement of very important questions.

5. Inspection records must be kept to reflect the physical condition of each car received and delivered, giving a clear and concise statement of all defects whether or not they require immediate repairs. When delivering line is responsible, state cause of damage (if known), or conditions which would indicate delivering line's responsibility; thus, "derailed," "cornered," "sideswiped," etc. In cases where question may arise as to whether delivering line or owner's responsibility show if "worn out," "decayed," "broken in," "broken out," etc., as the case may be.

6. Cars handled for other lines in switch movement under local agreement providing for movement on record to switching line and return "as received" to delivering line should be shown on inspection records as "switch cars" when record is made of defects so that it will be readily understood that no protection is in order and why.

7. When defect cards are issued or received, inspection record must show what defects are carded and also the road to which the defect card was issued or received from. The defect cards should show in lower left hand corner the line or company to which issued.

8. Record should be taken of cars carrying defect cards by recording the date, station and the road issuing the defect card with reference to principal items of defects. Example; D/C — NYC — Lindale — 7-12-44 for siding, side sill, roof sheet cornered, A end.

9. In case car is carrying an Interchange Bureau defect card, record should so indicate. Example; D/C CCIB No. 162381 from CNW to GTW—Chicago, 9-15-44 for metal side door sideswiped, R. side.

10. We are having difficulty with cars received in interchange by not securing defect cards in full to cover existing unfair usage defects. More care is necessary and it is insisted upon that receiving inspectors protect against such losses. For example; a tank car may be wrecked on a foreign line and safety appliances repaired or just enough work done to "get by" and when later delivered to car owner or connecting line we are called upon to furnish our defect card for additional damage. When a tank car is received with new running boards or any other car with new shop work, receiving inspectors should carefully inspect such cars for cardable defects not repaired and demand protection in full to cover.

11. Slight unfair usage defects, new or old, are not cardable unless such defects of themselves require repairs. When damage is not to the extent specified in Rule 4, the record should show "too light to card" when recorded for information purposes.

12. Particular attention is directed to the interpretation following Rule 32 which places responsibility with delivering line for fire damage on tank cars caused by use of fire to soften contents for unloading purposes when the fire damage is to the extent specified in this interpretation. Receiving inspectors at interchange points must observe this feature and secure full protection when such cars are received in interchange for movement on our line.

13. Defect cards for unfair usage defects shall be issued at time of damage or at first available inspection point and must be attached to car. If car is in shop, and a portion only of the unfair usage damage is repaired, defect card must be applied to the car for the unrepaired portion before car leaves the shop. Defect cards shall also be issued at time of interchange at which time it should be seen whether cars are already carded for any damage. Compliance with this rule is insisted upon except in cases where responsibility must be determined by investigation. This refers to inspection and inspection records of all cars interchanged to and from the Santa Fe System Lines with all railroads and private car companies.

14. When making joint inspection of damaged equipment, the defects should be reported on the inspection statement in a clear and comprehensive manner. For example; a bent part may be repaired on car or it may require renewal. In writing items of defects, it should be shown whether to renew or straighten them on one side of the report with defective condition on the other side in order that there will be no question as to correctly understanding what is intended. Example;

Repairs Required	Nature of Defects
1—tank head—repair on car	Bent—light
1—metal end sill—renew	Broken beyond repairs
1—metal center sill—splice	Broken

15. Attention is directed to A.A.R. Car Service Rule 7 which reads as follows:

"Cars shall be considered as having been delivered to a connecting railroad when placed upon the track agreed upon and designated as the interchange track for such deliveries, accompanied or preceded by proper data for forwarding and to insure delivery, and accepted by the car inspector of the receiving road."

"Unless otherwise arranged between the roads concerned the receiving road shall be responsible for the cars; contents and per diem after receipt of the proper data for forwarding and to insure delivery, and until they have been accepted by its inspector or returned to the delivering road."

16. The interchange of cars, loaded or empty, will be governed by the provisions of A.A.R. Rules.

TRANSFER AND ADJUSTMENT OF LOADS

1. Bills shall be rendered against foreign companies for the cost of transfer and rearrangement of loads including application of proper door protection as provided for in the A.A.R. Interchange Rules and A.A.R. Car Service Rule 14 referred to in Rule 2.

2. Particular attention is directed to that portion of A.A.R. Car Service Rule 14 which specifies conditions under which the delivering line is responsible for the cost of transferring and rearrangement of load at interchange points. This rule also specifies conditions under which the originating road haul carrier is responsible for the cost of transferring and rearrangement of loads at interchange points or intermediate points.

3. When necessary to transfer or adjust load and the originating road haul carrier is to pay the cost, authority to render charges for the cost of transfer or adjustment of load should be secured from the originating road haul carrier.

4. When necessary to transfer or adjust load and delivering line is to pay the cost, transfer check or authority to render charges for the cost of transfer or adjustment of lading should be secured from the delivering line.

5. Bills against foreign companies for transfer and adjustment of loads will be handled as follows: At Kansas City and Chicago, transfer checks with information or adjustment authority, together with information covering expense (labor and material) incurred by the Mechanical Department must be sent to local superintendents for rendition of bills. At all other stations the necessary information must be sent direct to Mechanical Superintendents, who will render bill if the service is performed by the Mechanical Department exclusively. If the service is joint with other departments, Mechanical Superintendents will furnish Audit Department information to cover the expense incurred by Mechanical Department only, and the completed bill will be rendered by the Audit Department. At points where this service is per-

formed under special agreement, billing will be handled in accordance with such agreement.

6. When billing for the cost of transfer or adjustment of load, the percentage rates specified in Rule 2 shall be added as overhead to actual labor and material billed. It will be noted that when derrick or wreck equipment is used, additional charge is to be made for same. The provisions of the interpretation following Rule 2 should be referred to when necessary to use equipment of the type mentioned in transferring and adjusting lading in order to assure full reimbursement for this type of work when performed.

7. When necessary to issue transfer or adjustment of load authority to foreign lines, Form 1171 should be used. At points where interchange is handled by joint inspectors, this authority or car transfer check will be issued by the joint inspector if so locally provided, with copy to car foreman or Mechanical Department official in charge.

8. At points where there is no local provision, and at points which are not handled by joint inspectors, the car foreman or car inspector will make request on the representative of the delivering line for authority to transfer or adjust load as the case may be. Should the representative of the delivering company refuse such authority, a written request should be made and if delivering line continues its refusal, Form 1171 shall be sent to Mechanical Superintendent with copy of written request and the delivering line's refusal (if any) attached, as information that transfer or rearrangement of load is necessary and the name of the company against which bill is to be rendered under the provisions of A.A.R. Rules.

9. Attention is called to that portion of A.A.R. Car Service Rule 14 which specifies conditions under which the receiving road shall assume cost of transfer or rearrangement. If the receiving road refuses to accept cars requiring such attention, then the delivering road can make transfer or adjustment and render bill against receiving road unless otherwise agreed, such bills including per diem.

INSPECTION RECORDS

1. Form 2517 is our standard inspection form used for both train and interchange records. Inspec-

tion records should be complete and in detail, with signature of inspectors, and turned in daily so that permanent accumulation record will be made for reference or other purposes.

Inbound Trains

2. All information called for by the heading at the upper left hand corner of Form 2517 must be shown in all cases.

3. Full consist of trains need not be taken. Record should be confined to defective cars only with disposition to cover, using the term "BO" for cars requiring shop or repair track attention, and "LR" for those let run without repairs.

4. It is important that our inspection records reflect the condition of defective cars let run with defects of a nature that we may be called upon to account for later. Many cars are operating with defects that are progressive or accumulative which may reach the stage of repair requirements soon, or may have slight defective conditions not needing repair attention in which cases our records should describe the defects so that subsequent reference to the record will give definite information.

5. When more than one sheet is required to record the defective cars in one train, the information called for in the upper left hand corner should be shown on first sheet with train number and date only shown on subsequent sheets for identification.

6. The use of such terms as "B/O brakes," "B/O draft rigging," "B/O siding," etc., are so indefinite as to be of little value. The records should show items and conditions thus:

Brake beam—head worn out—R3
10 side siding—broken in—BL
10 side siding—broken out—AL
Running board—decayed and broken—B
Coupler—shank cracked—A
Wheel—thin flange—L2
Old air date—TS 2-8-44 ATSF Ry.

7. The inspection record should be so clear as to show whether damage (or any part of it) is chargeable to car owner or delivering line.

8. When damage to car is due to known derailment, cornering, sideswiping, or other agency specified in Rule 32, the record must so state.

9. Inspectors should make sure that conductor's reports, Forms 1523, are not overlooked. Notation should be made on inspection records to show if such reports were or were not received.

Outbound Trains

10. All information called for by the heading at the upper right hand corner of Form 2517 must be shown in all cases.

11. When necessary to bad order cars, or record conditions, the same information must be shown as for inbound equipment.

Cars Received or Delivered in Interchange

12. Inspection records should show the date, initial or name of the company delivered to or received from, time of inspection, initial, number and kind of car; whether loaded or empty, conditions, defect card (if any) on car or defect card received from or furnished to the delivering line, whether shopped, let run or set back.

13. A clear and comprehensive record of all defects must be made with due regard to the provisions of the A.A.R. Rules.

Inspection of Cars at Industries

14. Cars inspected at mills, elevators, refineries, mines, and other industries and warehouses should be individually recorded on inspection sheets giving condition of each car whether OK for commodity intended or whatever condition is found. Record should show the industry at which inspection is made such as "Red Star Mill," "IXL Refinery," etc.

Inspection of Cars for Various Classes of Lading

15. The inspection and carding of cars for various classes of lading must be made in accordance with the general instructions provided in the car folio, or other instructions. Complete record should be made of all cars carded and the kind of lading for which carded. Any employee used in inspection and carding of cars should be familiar with these instructions.

RESPONSIBILITY

1. It will be noted that the successive changes in the A.A.R. Rules from year to year have eliminated many items from those formerly classified as delivering line responsibility, as well as combinations denoting unfair usage. The spirit of the A.A.R. Rules has been to widen the field of owner's responsibility and to correspondingly lessen that of the handling line.

2. "Owners Responsibility" and "Delivering Line Responsibility" are clearly defined in the A.A.R. Rules. Particular attention is directed to Rule 32 which specifically sets forth the agencies under which, if a car is damaged, the handling line must assume responsibility if in interchange or absorb cost of repairs if made by it.

3. Due attention must also be given to Rule 4 which specifies the extent to which parts of cars must be damaged before being considered as cardable in interchange.

4. Where evidence shows that damage is the result of unfair usage by the agencies specified in Rule 32, defect cards should be issued at the time of interchange. If we damage a car on our line under such agencies we should apply our defect card at once or at nearest available point. In cases where damage is of an extensive nature, disposition under Rule 112 should be considered.

5. When a car is damaged in switching, road service or train movement and the damage is not due to any agency specified in Rule 32, or when car becomes defective in ordinary handling to the extent that it would not be practical to make repairs, it should not be reported as destroyed but should be handled under Rule 120 and held for disposition.

6. When there is any doubt as to how damage could have occurred in fair service, an investigation should be made at once through the Transportation Department to ascertain the facts of the case and billing for repairs should be handled in accordance with the information thus obtained. This information should be noted on inspection and repair records for future reference. Foreign companies often take exceptions to charges where the repairs made are such as might be taken as an indication of handling line

responsibility. It is, therefore, essential that inspection and tracing records be complete.

7. Divided responsibility no longer applies when derailment is caused by a loose, bent, broken or missing part. The handling line is responsible for such part that causes derailment. For example; if a brake hanger breaks and allows brake beam to drop down, derailing a car, the derailment responsibility also includes the brake hanger because the failure of this part was the primary cause. If, however, the derailment is the result of a worn part, such as a worn flange wheel, car owner is responsible for the replacement of the wheel.

8. Paint damage on cars caused by chemical loaded in bulk is not considered as a delivering line responsibility.

9. Car owner will be responsible for repairing damage to the safety appliance details specified in the interpretation following Rule 33 when not involved with other Rule 32 damage. This applies to all cars except tank cars.

10. Attention is directed to Rule 36. A large number of defect cards are being issued against this Company at interchange points for missing placards on loaded cars requiring them, for failure to remove placards from loaded cars not requiring such placards and for failure to remove placards not required on empty cars. Inspectors should observe whether or not placards on cars conform with the requirements of Rule 36. The propriety of placards on loaded or empty cars must be given constant attention by repair track forces as well as inspection forces at all points to avoid issuance of defect cards against this Company when cars leave our line.

11. Attention is directed to Rule 35 which places responsibility with the delivering line for the expense of closing dump doors on empty open-top cars offered in interchange as specified in this rule. Empty cars with dump doors raised to within three inches of closed position are considered as meeting the requirements of this rule.

12. In connection with missing friction draft gears, it should be understood that the gear must be missing complete to be considered as a handling line responsi-

bility. If a portion only of the friction draft gear is gone this does not constitute missing draft gear and owner is responsible.

13. When system or foreign cars are in shop with defects indicating delivering line responsibility which are not covered by defect card, and cause of the damage cannot be determined on the Division, such cases must be reported to Traveling Car Clerk supervising the territory for handling and disposition.

DEFECT CARDS

1. A defect card issued against this Company is an order to pay for the cost of repairing the defects shown thereon and, when issued, cannot be repudiated under the A.A.R. Rules on the grounds of ignorance or error. It is, therefore, strictly up to the party issuing a defect card to know that it is due under the A.A.R. Rules.

2. Defect cards must be dated as of the date damage occurs, or the date of interchange, or the date wrong repairs are made.

3. Defect cards must be plainly written. Show correct location and give a clear description of the defects. The reason for issuing a defect card must be shown, using the terms specified in Rule 32 (derailed, sideswiped, etc.,) or if other reasons pertain, they should be specifically stated so that there will be no doubt or question as to validity of issue.

4. When a defect card is issued in exchange for car repair material secured locally from other companies, the card must be marked "Material only" and show if new or second hand. The name of the company from which the material is secured must be shown at the lower left hand corner of the card.

5. Defect card copies, retained by repair points, should be left in the defect card book for ready reference.

6. When cars are extensively damaged and forwarded home for repairs with defect card attached, the card, in addition to the defects noted, should bear the notation "Home for repairs" as provided in Rule 4. If the damage is to an extent where it would be impractical to cover all the defects, it will be sufficient to list the major items of damage and mark the

card "Home for repairs." It is important to show on such defect cards the stenciled light weight of the car, the date built or rebuilt, kind of car and class per Rule 112.

7. System cars carrying defect cards should be repaired at first opportunity. All system cars undergoing repairs must be examined for defect cards, and if any are found, the card must be removed as soon as ALL the defects listed thereon are repaired and billing repair card rendered to cover. The defect card should be pinned to the billing repair card and forwarded to Topeka in regular transmittal with other car repair billing. In case the defect card is a Santa Fe card, or an Interchange Bureau card issued against our line, it should be attached to the 1203 repair record and filed at the point where the card is removed.

8. When system cars are found with foreign company defect cards and ALL the defects listed thereon have already been completely repaired at some other point, the defect card must be sent at once to the Traveling Car Clerk supervising the territory for system tracing and final disposition. In case only partial repairs were made, billing repair card covering the remaining portion of the repairs made at the point removing the card should be sent in with the defect card.

9. When partial repairs are made to a system or foreign car on authority of defect card, the requirements of Rule 5 must be observed. Items repaired should be crossed off of the original defect card which must be left on the car, and an exact copy of the defect card should be made on our defect card, Form 1177, with the defects which were not repaired crossed off. The name of our Company must be crossed off of our card and the name of the road issuing the original card written in. The card board copy of the rewritten defect card should be sent in with billing repair card to cover.

10. Defect cards are not to be removed from foreign cars, except in cases where we make complete repairs of all defects listed on the card, or where partial repairs had been previously made and we complete the repairs.

11. System cars carrying foreign company defect cards must be carefully inspected to see if all the damage is fully covered by the card and, if not, Joint Inspection Certificate, Form 1237-A, should be prepared to cover all additional damage and improperly repaired items, if any. The joint inspection certificate should give a description of the defect card on car and show the defects covered by the card, as well as the defects for which additional protection is due. Example; "Un Pac defect card No. 9648 issued 7-21-44 at Denver for the following defects." List the defects covered by the defect card and follow up with the caption "Associated defects not covered by defect card." Then list the additional defects. Form 1237-A, original and two copies, should be sent to Traveling Car Clerk supervising the territory for further handling.

12. Joint inspection must be made at the first opportunity after the cars are received home in order that the request for additional protection will not be questioned because of failure to secure joint inspection within the time limit specified in Rule 4.

13. In case of system cars carrying defect cards which read "Car in flood" or "Superstructure damaged by fire," or other similar general statement of damage without specifying defective parts, the road issuing the defect card must be given the opportunity of participating in joint inspection. In the event the carding road does not avail itself of this opportunity within the time specified, joint inspection certificate should be prepared in the regular manner. See interpretation following Rule 4.

14. Should a foreign car owner authorize us to dismantle his car, and the car is carrying a defect card to cover missing or damaged parts, the card should be forwarded through Traveling Car Clerks to the owner for his protection.

15. Any foreign company defect card covering missing or damaged parts on a system car that is destroyed or dismantled should be billed under the provisions of Rule 94.

16. Copies of all defect cards issued on all Santa Fe System Lines should be sent direct and at once to the Traveling Car Clerk supervising the territory. This is important and must not be overlooked.

ACCIDENT REPORTS

1. It is an A.A.R. requirement that accident reports be checked by the parties who prepare and handle A.A.R. billing in order that the circumstances under which cars are damaged will be known and proper responsibility determined.

2. When cars are made defective, or when in accident, or derailed, either by switching or in train, such cases are covered by Form 810 for trainmen and Form 1178 for enginemen and from these reports information should be had in making up Form 1207 by the car department.

3. In cases where the information pertaining to the cause of damage is not definitely shown on the 810 and 1178 reports, or when conflicting information is shown, other reports made by the Transportation Department should be reviewed before 1207 reports are made.

4. Under "Cause of Accident," sufficient details must be shown on 1207 reports to clearly reflect whether the damage to cars is owners or handling line responsibility and, in cases of handling line responsibility, the Rule 32 term applicable should be shown. Such terms as "accident" and "wreck" are indefinite and should not be used. The terms describing specific unfair usage agencies as used in Rule 32 should be given.

5. In cases where couplers are pulled out or where brake beams drop or any part fails that may involve a derailment, the 1207 report should show whether there was or was not a derailment.

6. Every effort should be made to see that correct car numbers and initials are reported.

7. The amount of damage to cars should be carefully estimated by the car foreman. The estimate should be based on A.A.R. Rule prices for labor and material and the amount reported should be correct in so far as possible.

8. In cases where foreign cars are damaged to the extent of \$100.00, the date built or rebuilt, lightweight and class of car per Rule 112 should be shown on 1207 reports. This information may be shown on the line following each such foreign car listed on 1207 report.

9. In the "disposition" column, the 1207 report should show if repaired, partially repaired, sent to shop, held for disposition, let run or whatever other disposition is made and, in cases where defect card is applied to car, notation to this effect should be made on the report. Where repairs are made, the station at which repaired should also be shown on the reports.

10. In cases where cars are damaged by unfair usage and no accident reports to cover, investigation should be made at once to determine the conditions under which the damage occurred and, if possible, secure the necessary reports. If after investigation the circumstances of damage cannot be developed, 1207 report should be rendered showing the damage and using the Rule 32 term applicable with advice that cause is unknown. Example; "Derailed—cause unknown."

11. Employees originating repair records must examine all accident reports for the purpose of ascertaining causes of damage so that responsibility and cost of repairs will receive proper disposition. The reports must also be checked in the car foreman's office with billing repair cards, before they are transmitted, to assure proper handling in connection with billable and "no-bill" repairs.

12. When a car is damaged at one point and moved to another point for repairs, the point at which repairs are made must be promptly furnished with copy of 1207 report to assure proper disposition of responsibility for repairs.

13. All Pullman cars damaged in accident must have 1207 reports rendered to cover. Reports should be made to cover parts which fail and also any other defective condition which would be considered as being of an accidental nature, particularly metallic steam connectors and steam end valves broken or missing.

14. Slid flat wheels on Pullman cars should be reported on Form 1207. The conditions under which the sliding occurred should be reported, when known. The report must show the result of the air brake test in all cases of slid flat wheels removed from Pullman cars.

15. The information shown on 1207 reports will often determine responsibility for repairs made to Pullman cars. It is, therefore, essential that the actual circumstances under which damage occurs be reported, when known. Care must be given the preparation of these reports to assure prompt disposition of the billing and avoid extended correspondence in connection therewith.

16. Copies of all 1207 reports must be sent to Traveling Car Clerk supervising the territory. Copies must also be sent to Topeka to permit check with billing repair cards.

17. Copies of Form 1207 and other accident reports should be kept on file where the records may be readily referred to.

18. When repairs are made covering damage to foreign cars, copies of the 1207 reports that are sent to the Traveling Car Clerks should be held until repairs are completed and billing repair cards are rendered; then, before mailing these copies of the 1207 reports, notation should be placed on them showing serial number of the billing repair card and whether the repairs were billed against owner or "no-billed." Example; "100—B. O." (Billed owner), "101—N. B." (No-billed).

19. In cases where cars are damaged under Rule 32 conditions and the repairs are billable against owner under the interpretation following Rule 33, due to there being no other damage, a notation to this effect should be placed on the reports. Example; "102 B. O. R-33-D only." It should be understood that damage to tank cars under any Rule 32 condition is not chargeable to owner.

20. When 1207 reports cover damage to a car and the defects consist of Rule 108 items only and such items are straightened on car, the notation should read "No. 1179—Rule 108 items only—straightened on car." See Rules 8 and 108.

21. When 1207 reports indicate that material has been applied by train crews in repairs to foreign cars, Traveling Car Clerk's copies of the reports should be held until billing repair card is made and serial number of the 1179 is placed on the 1207 report.

CARS DAMAGED TO EXTENT OF RULE 44

1. Responsibility for cars damaged to the extent specified in Rule 44 will depend on the nature of the defective condition, location of the defect, and especially the circumstances under which the defective condition developed. It is, therefore, most important that Rule 44 be given careful study and disposition handled in accordance with the provisions of this rule.

2. When a foreign car is damaged to the extent shown in Rule 44, investigation must be made to determine whether the car was or was not subjected to any of the unfair conditions of Rule 32, and in particular to develop the exact circumstances under which the damage occurred.

3. In cases where investigation develops car was damaged in ordinary handling, statement must be furnished to car owner showing when, where and how the damage occurred in order to establish responsibility of car owner for the repairs. This statement must not be of a negative character by stating that the car received no rough handling, nor subjected to any Rule 32 condition, but must show the circumstances under which the damage actually occurred, in order that car owner may clearly understand that the damage was the result of ordinary handling. The statement together with four copies of inspection certificate must be promptly forwarded to Mechanical Superintendent when necessary to request disposition from car owner under Rule 120. In cases where it is not necessary to report car under Rule 120, one copy of the statement should be attached to billing repair card.

4. Attention is called to that part of Rule 44 wherein responsibility is placed with car owner when the damage is confined to steel center sills within the space from end sill to rear face of body bolster, providing after investigation it is found that car was not subjected to any of the unfair Rule 32 conditions specified in Rule 44. In such cases, no statement need be furnished to establish car owner's responsibility.

5. When failure of underframe occurs through old or progressive fracture, investigation must be made

and if it is found that car was not subjected to any of the unfair Rule 32 conditions specified in Rule 44, a statement to this effect, together with joint inspection certificate showing old or progressive fracture, will constitute sufficient evidence that damage occurred in ordinary handling. Statement to this effect together with four copies of the joint inspection certificate must be promptly forwarded to Mechanical Superintendent for handling.

6. When failure of underframe is discovered when car is in train or road haul or upon arrival at terminal and prior to switching, investigation must be made and if it is found that car was not subjected to any of the unfair Rule 32 conditions specified in Rule 44; that there is no knowledge or record of the defective condition existing prior to car being placed in such train and that there was no switching of one or more cars in train enroute, the damage will be considered as owner's responsibility. Statement to this effect together with four copies of inspection certificate must be promptly forwarded to Mechanical Superintendent for handling.

7. In any case where disposition of car is requested from owner under Rule 120, repair point will promptly advise estimated cost of making temporary repairs that would be necessary for safe movement of car home on its own wheels.

8. It will be up to the car foreman and others concerned to thoroughly familiarize themselves with the various requirements of Rule 44, in order to avoid mishandling of the cases coming under the provisions of this rule.

DISPOSITION OF CARS UNDER RULE 112 HANDLING LINE RESPONSIBILITY

1. When a foreign car is destroyed or extensively damaged, Mechanical Superintendent and Car Accountant must be immediately notified and disposition secured from the Assistant to Vice-President. Sufficient details should be furnished to indicate the extent of damage or if car is totally destroyed.

2. Rule 112 gives handling line the option of repairing a damaged foreign car or send home with defect cards attached.

3. If handling line desires to settle on basis of depreciated value, Rule 112 gives owner the option to request return of a damaged car regardless of its condition or whatever portion may remain. It must be understood, therefore, that such cars will be held intact until formal disposition has been secured from owner.

4. When a foreign car is badly damaged, a careful inspection should be made and the cost of repairing the damage determined on basis of A.A.R. prices for labor and material. This cost should be compared with depreciated value of the car and repair points must be particular in observing if the cost of repairs will amount to more than the A.A.R. depreciated value of the car, less salvage.

5. Extensive repairs to damaged foreign cars should not be attempted without first obtaining authority from the Assistant to Vice-President. Repair points will prepare and promptly forward to Mechanical Superintendent the following information.

- 1—Major defects
- 2—Depreciated value, stenciled lightweight, date built or rebuilt, kind of car and class per Rule 112.
- 3—Cost of repairing the damage
- 4—Cost of temporary repairs necessary for safe movement of car home on its own wheels.
- 5—If car is damaged to an extent requiring loading on another car for home movement, so state.
- 6—Serviceable parts specified in Rule 112 that can be returned if requested by owner in case settlement is made on basis of depreciated value. Do not report parts that are not specified in Rule 112.

6. If owner elects to have a badly damaged car returned rather than settle at depreciated value, he will authorize and assume cost of temporary or partial repairs (as outlined in Rule 112) necessary for safe movement to point designated by owner. When car owner authorizes such repairs, notation should be made on Form 1179 "Repairs authorized by owner"

and copy of the authority attached to billing repair card.

7. When settlement for damaged cars is made on basis of depreciated value, Rule 112 permits owner to instruct handling line to return serviceable parts specified in this rule. Such parts will be shipped at owner's expense.

8. When owner requests return of serviceable parts repair point will prepare statement showing each part and its weight. This statement in triplicate with copy of bill of lading should be forwarded to Mechanical Superintendent who will transmit to the Assistant to Vice-President.

9. When it is decided to send damaged foreign cars home with defect cards attached, the stenciled lightweight, date built or rebuilt, kind of car and class per Rule 112 (A-B-C-D, etc.) must be shown on the defect cards; for example, LW 46800—Blt. 10-31, Class A—gondola. It will be up to the party issuing such defect cards to see to it that this information is not omitted.

10. Rule 112 outlines the method to be followed in arriving at the depreciated value of a destroyed or damaged foreign car and repair points should be familiar with this rule and the preparation of information essential to settlement at depreciated value.

11. When foreign cars are destroyed or extensively damaged the information indicated by the following sample must be secured and made available immediately after the accident to assure proper disposition of car.

Initial.....Number.....Kind.....
 Stenciled Lightweight.....Date Built.....
 Date Rebuilt.....
 Class as per Rule 112:
 (A-B-C-D-E1, E2, or E3)

Tank Cars:

Class 1, 2, 3, etc.

Insulated or non-insulated.

Heater pipes—size and lineal feet.

If built date on tank shell is different from built date on underframe, so state.

If stenciling on car indicates special protective coating inside of tank, show kind of coating and date of application.

Wheels:

Cast iron.....1-W wrot steel.....
 2-W wrot steel.....MW wrot steel.....

Show if car equipped with:

"AB" air brakes

A.A.R. approved auto loading device

Refrigerator cars with circulating fans

High tensile steel parts, show parts and total weight.

Show condition of following parts:

Cast steel truck sides

Metal truck bolsters

Metal body bolsters

Metal draft arms

Friction draft gears

Cast steel yokes

Metal ends

"AB" air brake equipment

Auto loading device in cars so equipped

Air circulating fans in refrigerator cars.

Special castings on tank cars

Special valves on tank cars

12. In connection with handling under Rule 112, attention is directed to the provisions of Per Diem Rule 7 as follows:

1. When a car has been destroyed and reported under Mechanical Division Interchange Rules, the per diem shall cease from the date of notice to owner.

2. If, on receipt from owner of valuation statement provided for by Mechanical Division Interchange Rule 112 showing settlement value of destroyed car, the holding road decides to repair the car or send it home for repairs on authority of defect card, per diem on such car shall cease from date of notice to owner of its destruction to date valuation statement is mailed by the owner.

3. (a) If the car is settled for at its depreciated value because the cost of the repairs equals or exceeds the depreciated value less salvage, or if the car owner desires to have the car repaired, per diem shall cease from the date of original notice to owner.

(b) If the handling road, at owners request,

restores the car to service, per diem will begin on the day following the date on which the car is released to service but not later than sixty days from date the handling road agrees to restore the car to service.

(c) If the handling road, at owner's request, sends the car home for repairs, per diem shall cease from date of original notice to owner until date car leaves holding road, but not later than sixty days from date car owner requested car sent home, whether on own wheels or loaded on another car.

4. If the handling road orders material from the car owner Mechanical Division Interchange Rules, the provisions of Per Diem Rule 8 will apply.

DISPOSITION OF CARS UNDER RULE 120 OWNER'S RESPONSIBILITY

1. When a foreign car becomes defective and requires general repairs for which owner is responsible, it should be promptly reported to Mechanical Superintendent and handled in accordance with the provisions of Rule 120. A careful estimate of the cost of repairs must be made and, if labor cost of repairs exceeds the limits specified in Rule 120, authority should be secured from car owner before repairs are made.

2. Inspection certificate must be made to accompany the request for disposition using Form 1237-A for reporting all defects found on car. The estimated cost of making the repairs on basis of A.A.R. prices, excluding cost of repairs to trucks, separated between labor and material should also be reported.

3. Four copies of the inspection certificate, Form 1237-A must be furnished to Mechanical Superintendent who will forward the original and one copy to the Assistant to Vice-President, with two copies of a Rule 44 statement when such a statement is required. One copy each of Form 1237-A and the Rule 44 statement should be sent to the Traveling Car Clerk supervising the territory.

4. Repair points should, when forwarding Form 1237-A, advise whether or not it will be necessary for owner to furnish any material in case repairs are

authorized or if any blueprints will be required, as outlined in Rule 120.

5. When a car is reported to owner under Rule 120, Car Accountant must be notified as per diem will cease from date of such report. See Per Diem Rule 8 under the subject "Material Ordered for Foreign Cars."

6. When car owner authorizes repairs, notation should be made on Form 1179 "Repaired on authority of owner" and copy of the authority attached to billing repair card.

7. If car owner authorizes repairs the requirements of Rule 120 must be complied with in making the repairs.

8. Rule 120 does not permit the total charge for actual repairs to exceed the estimate by more than the tolerances specified in this rule, therefore, if it is found when commencing repairs that the renewal of additional items (not included on the original Form 1237-A) is necessary and the cost of renewing such items will exceed the estimate by more than the tolerances specified in Rule 120, the work should be stopped and a revised Form 1237-A prepared to include the additional items found necessary to repair and forwarded to car owner requesting additional authority to make the repairs.

9. If owner elects to have car dismantled, instead of repairing, he will furnish statement showing estimated weight of material in car for which credit is due to assist handling line in arriving at proper credit.

10. When car owner authorizes destruction of car, credit will be allowed in accordance with Rule 120 for all material at A.A.R. scrap prices, less cost of dismantling on the per pound basis specified in Rule 107. Following is an example of salvage statement.

2 E couplers 5x7—E knuckles 11"	} (Use scrap prices shown for these items in Rule 101)
8 cast iron wheels—9" journal	
4 axles—80 M copy.	
8 journal bearings 9"	
Air brake brass K-type 10 lbs.	
Credit for remaining metal parts in car at 1/2 cent per pound.	
Deduct cost of dismantling.	

11. Credit is allowed at A.A.R. scrap prices on per pound basis for all metal parts, with the exception of couplers, wheels, axles and journal bearings, which are credited on basis of scrap prices specified in Rule 101 for these items.

12. In arriving at the net amount due owner, deduct the cost of dismantling from the material allowance. The cost of dismantling is computed on basis of total weight of metal contained in the car at the per pound rate specified in Rule 107.

13. Rule 120 gives car owner the privilege of requesting return of serviceable items of material specified in this rule when authorizing destruction of car. The total weight of such items at A.A.R. scrap prices, plus the percentage rate specified in Rule 120 should be deducted from the value of the salvage less cost of dismantling, and the remainder will be the amount due owner for the parts retained. Such parts as are returned to owner will be shipped at car owner's expense.

14. When owner requests return of material from dismantled car, repair point will prepare statement showing each part and its weight. This statement in triplicate with copy of bill of lading should be forwarded to Mechanical Superintendent who will transmit to the Assistant to Vice-President.

15. Particular attention is directed to that portion of interpretation following Rule 120 which specifies that in no case should car be loaded on another car and shipped home, except on authority from car owner.

DAMAGED CARS BILLED TO SHOPS FOR REPAIRS

1. When foreign cars are damaged and are billed to shop for repairs, a close inspection should be made by the car foreman who will make a record of the damaged parts, being particular to make a separate record of old defects, if any, not associated with the new damage, in order that there will be no question as to responsibility. In case of extensive wrecks, the car foreman or his representative will accompany the wrecking crew and make inspection and record of the damaged equipment at the time.

2. When a damaged foreign car is billed to shop

for repairs, all castings and parts, that can be identified as being part of such car, should be properly marked and sent with the car to avoid ordering similar parts from owner and in order to avoid delay in making repairs and the accumulation of unnecessary per diem.

3. In all cases where damaged foreign cars are billed to shop for repairs, Form 1207 must be promptly furnished to the officer in charge of the shop where repairs are to be made. When this is not done and it is necessary to order material from car owner, placing of the order may be delayed due to not knowing whether the damage is owner's or handling line responsibility, which information must be given when ordering material.

4. Form 860 should be applied to a car when billing it to shop for repairs. The card should be properly filled out and should show the date, place and cause of damage.

5. When necessary to make repairs before forwarding a car to shop, billing repair card should be prepared to cover all repairs made, whether of a temporary or permanent nature, and the original card should be sent to the shop to be consolidated with the shop billing when repairs are completed. Copy of the repair card should be retained at repair point, with notation placed thereon to show the original card was sent to shop. Serial numbers should not be assigned to these cards.

6. When a foreign car damaged to the extent shown in Rule 44 is billed to shop for repairs, statement as required by Rule 44 must be furnished to the shop. Copy of this statement should be sent to Traveling Car Clerk supervising the territory.

TANK CARS

1. Tank cars should be given special attention as to inspection account being used for transporting dangerous commodities, and it is imperative that they comply with requirements of the Bureau of Explosives Regulations and are in proper physical condition to load and run.

2. Inspectors should inform themselves concerning the special provisions of rules and practice governing tank cars.

3. Special attention is directed to inspection of tank cars and recording physical defects. Requests for defect cards are being presented currently by tank car owners when receiving their cars home. Our records of inspection must be relied upon for satisfactory disposition of such claims.

4. Inspection of empty tank cars should be made on arrival in yards or before set for loading. Inspection should be made of loaded tank cars before movement from loading rack.

5. When tank cars are received from shippers or received in interchange loaded with dangerous articles requiring inflammable placards, inspectors must see that the required number of placards are attached to each car before allowing cars to go forward.

6. When tank cars are made empty, placards not required must be removed before cars go forward or are offered in interchange. When empty cars are received in interchange, defect card should be secured from delivering line and inflammable placards removed. The painting over of inflammable placards pasted on tank cars constitutes removal. For further information regarding application and removal of placards on loaded and empty cars, see A.A.R. Rule 36 and ICC Regulations for handling dangerous articles.

7. Periodical retests of safety valves and tank shell of tank cars will be governed by the requirements of the current issue of the A.A.R. Code of Interchange Rules.

8. For information regarding handling and stenciling of leaky tank cars see A.A.R. Interchange Rule 2.

9. Outlet valve chamber caps hanging by chain on tank cars offered in interchange in violation of Rule 3 requirements is a delivering line responsibility. Such caps shall be reapplied and securely tightened at point of interchange by the receiving line, and defect card issued by the delivering line to cover the expense.

10. Dome covers, bottom outlet valve chamber caps, safety valves or safety vents missing from tank cars is a delivering line responsibility.

11. When steel tank shells of tank cars, where secured by bolster or center anchorage, are shifted

account of all anchor bolts or rivets sheared off in ordinary handling, Rule 44 provides statement be furnished car owner showing circumstances under which the damage occurred in order to establish responsibility of car owner for the repairs.

12. When steel tank heads on tank cars equipped with bolster or center anchorage are found bursted, special care must be taken to determine whether or not failure was due to causes mentioned in Rule 32. If produced by any one or more of these causes (inferior material, burned in flanging, etc.), car owner is responsible and must be furnished with statement showing actual condition of tank head which caused the failure, otherwise delivering line is responsible.

13. Car owner is not responsible for the cost of repairing any Rule 32 damage to safety appliances on tank cars as outlined in Rule 33.

14. When making charges for grinding in safety valves, per Rule 107, if necessary to machine the valve, the actual labor to perform the machining should be reported on billing repair card as this work is chargeable in addition to the grinding.

15. It is required that splices of tank car running boards be made over the running board supports as described in Rule 33. Splices at any other location will be considered as wrong repairs.

16. When car owner is responsible for renewal of running boards on tank cars, billing repair card must show applied sizes and number of running board applied, number and size of bolts R&R or renewed, number and diameter of any rivets used and also show if running board was painted.

17. For repairs to tank car hand rails, show on billing repair card if extra heavy or single weight pipe or pipe fittings applied. Also, show in "Why Made" column if E.H. or S.W. standard to car regardless of whether E.H. or S.W. pipe or pipe fitting actually removed.

18. The actual hours required to repair steel tanks of tank cars must be reported separately as Rule 107 specifies a separate labor rate for this work.

19. When necessary to raise and lower tank shell on car in connection with repairs, it must be so re-

ported on billing repair card. Rule 107 provides a specified labor allowance for each end so raised.

20. If it is found necessary to steam out the tank before repairs are made, it must be so reported, as labor charge including steam is specified in Rule 107.

21. Rule 107 provides a specified allowance for cleaning out tanks of tank cars preparatory to making repairs. This operation must be reported on billing repair card when performed.

22. When tank is tested after repairs are made, the number of gallons of water used must be reported on billing repair card, as a charge at the A.A.R. rate per 1000 gallons is specified in Rule 107. Also, show actual time consumed in making test.

23. When tank or safety valves of tank cars are tested, a copy of the certificate of test must be pinned to billing repair card, Form 1179.

24. When safety valves on tank cars are tested and adjusted, the billing repair records must specify the pounds pressure at which the valve opened before adjusting.

25. Safety valves must not be tested on tank cars under load. For further information regarding handling of loaded tank cars with safety valves due for test, see A.A.R. Interchange Rule 3.

TEMPORARY REPAIRS—WRONG REPAIRS

1. The Arbitration Committee has ruled that temporary repairs constitute NO REPAIRS and not wrong repairs; however, a separate record should be made of temporary repairs and the records should be so marked.

2. Temporary repairs may be defined as any temporary addition to a car to make it safe to move to destination, or any temporary repairs made to a car in order to protect lading.

3. Such items as nailing a board over a hole in flooring or nailing a piece of tin over a hole in siding, when original parts are broken, are examples of temporary repairs.

4. Temporary repairs should not be made when standard repairs are practicable, as they represent an entire loss of all material and labor used. Such re-

pairs could, in some cases, be avoided by a little forethought on the part of the car foreman.

5. Particular attention is directed to Rule 21 which permits charge against owner for the cost of making temporary repairs. Any other temporary repairs are chargeable to car owner only when authorized by him. When temporary repairs are made at the request of or on authority of car owner, notation should be made on the billing repair card and repair record card to show, "Temporary repairs made on authority of car owner." Copy of the authority should be attached to billing repair card when forwarding. When possible repair points should be furnished with copy of authority from car owner, instead of a quotation from it. Mechanical Superintendents and others should bear this in mind.

6. Care should be used to distinguish the difference between "temporary repairs" and "wrong repairs."

7. Defect cards must be applied to a car at the time of making wrong repairs except, in ordinary cases of improper repairs of owner's defects, where we elect to assume the expense of making such improper repairs and make no charge, as outlined in Rule 87.

8. In all cases where wrong repairs are made, they should be reported on Form 1179 and where defect card is issued, notation to this effect should be made on the billing repair card and record repair card.

9. A careful study of the A.A.R. Rules should be made in order to determine to what extent it is permissible, under the present rules, to change the construction of a car, and what substitutions of materials may be made without constituting wrong repairs.

10. Particular attention is directed to Rule 17 regarding substitution of couplers, knuckles and brake beams. The various substitutions are tabulated to show what applications will constitute proper, improper or temporary repairs. These tables should be studied and given careful consideration in order to avoid making wrong or temporary repairs.

11. Under Rule 17 and the interpretations following, various items of material are described and it is specified if the substitutions are considered as correct repairs or wrong repairs. In cases where substitutions are classed as wrong or improper repairs,

it is indicated if defect card is to be issued for labor only or for labor and material. All provisions of this rule should be given careful study.

12. Attention is directed to Rule 70 which covers the substitution of wheels. This rule must be given careful attention in order that improper substitution of wheels will be avoided.

13. Under Rule 88, if wrong repairs are made to owner's defects by using material from our own stock, instead of ordering from owner special material not mentioned in Rule 122, defect card should be issued for labor only for correcting the improper repairs and defect card should be marked "Labor only" except as otherwise provided in Rule 17. In cases where the wrong repairs consist of the improper substitutions especially mentioned in Rule 88, defect card should be issued for material and labor regardless of responsibility for repairs.

14. A thorough understanding of the provisions of the rules is essential, in order that it will be understood when defect card is due for labor only of correcting improper repairs. When defect card is due for labor only, there must be no failure to make notation on the defect card to show, "Labor only."

15. Rule 122 provides that the company having car in its possession shall provide from its own stock such items as lumber, forgings, hardware stock, paint, hairfelt, piping, air brake material and all A.A.R. standard material. The provisions of this rule should not be overlooked, and unnecessary orders should not be placed with car owners for such materials.

16. All requests received from foreign railroads or private car owners for defect cards to cover wrong repairs made to foreign cars, must be immediately sent to Traveling Car Clerk supervising the territory, for investigation and further handling.

JOINT EVIDENCE—FORM 1205

1. Joint evidence was adopted solely for the protection of the car owners against wrong repairs to their equipment and does not concern the intermediate or handling line. The matter of wrong repairs is a feature which rests between car owner and the road making the wrong repairs except as otherwise provided in the rules.

2. The obtaining and use of joint evidence is clearly set forth in Rules 12 and 13. It is not required that we obtain joint evidence for wrong repairs on cars not of Santa Fe ownership.

3. Joint evidence must be obtained and corrections of wrong repairs must be made within the time limits specified in Rule 12. This makes it imperative that we give the wrong repair feature on system cars prompt attention, as failure to secure joint evidence and to correct wrong repairs within the time limits provided by the rules will result in the correction of wrong repairs at our own expense.

4. It will be expected that joint evidence be secured at the interchange when cars first arrive home, but, if overlooked, it should be obtained at any point where wrong repairs are found whether or not car is in interchange movement. Particular attention to this matter is insisted upon when cars are in shop. Joint evidence cards should be looked for and removed if wrong repairs are, or have been corrected, and forwarded in regular transmittal with other car repair billing.

5. At points where it is impracticable to secure the signature of a foreign railroad inspector, the signature of our inspector is sufficient. The signature of a joint inspector alone is also sufficient.

6. A record of all joint evidence cards should be kept, so that copies of lost or illegible cards may be furnished.

7. When necessary to render new joint evidence cards for any reason, the original card should be pinned to the new card; however, the original card should be used when practicable.

8. Separate joint evidence cards, Forms 1205, should be made for each item of wrong repairs unless two or more items would necessarily be renewed in connection with each other. Alterations and erasures must not appear on joint evidence cards.

9. Joint evidence will not be made for minor individual items of wrong repairs such as knuckle pins, train line nipples, brake hanger pins, carrier iron bolts, wrong size air brake and repack stencil letters, wrong size lightweight stencil letters, etc.

10. Settlement for wrong trucks will be made on authority of defect card, the same as other wrong

repairs. When wrong trucks are found under system cars, a joint evidence card must be made to cover. If repairs are corrected at time of inspection, joint evidence should be attached to billing repair card and forwarded along with other car repair billing. If repairs are not corrected at time of inspection, joint evidence card should be made in duplicate, one card attached to car and the other sent to Traveling Car Clerk supervising the territory.

11. When wrong repairs other than trucks are corrected, joint evidence cards should be forwarded with regular billing transmittals. Forms 1179 need not be rendered in such cases until requested, but when rendered should be numbered consecutively with current billing.

12. When air brakes on system cars are cleaned account inoperative and air date on car shows previous cleaning was done by a foreign line within 60 days, joint evidence must be secured to cover showing defective condition of air brakes and joint evidence card forwarded in the usual manner along with regular billing transmittals.

13. A number of our system cars are now equipped with one-wear and multiple-wear wrought steel wheels, and it is the intent to maintain this standard under system cars so stenciled. It is important that joint evidence be obtained when cast iron wheels are found under system cars stenciled for any type of wrought steel wheels and no defect card on car. This feature must be observed by all concerned. If repairs are not corrected at time of inspection, joint evidence card should be made in duplicate, one card attached to car and other sent to Traveling Car Clerk supervising the territory.

14. Particular attention is directed to Rule 81. When system cars are found with wheels loose, indication of being loose due to oil seepage, or out of gage, joint evidence must be promptly obtained to cover in order to secure protection under the one year limit provided in this rule. Wheel numbers, maker's name and date cast or made should be shown on joint evidence card as per following example:

G. W. Co—K-179684 cast 9-16-43

G. W. Co—K-179693 cast 9-17-43

15. In rendering joint evidence, care should be taken to set forth clearly the items of wrong repairs and how repairs should have been made, giving such information as will enable Audit Office to understandingly check the joint evidence against foreign repair slips.

16. In case of wrong brake beams removed from system cars, joint evidence should reflect the wrong repair feature involved. Example:

<i>Description of Wrong Repairs</i>	<i>How Repairs Should Have Been Made</i>
1. Brake beam with strut not designed for third point suspension R&L4.	Brake beam with strut designed for third point suspension standard to car.
2. Brake beam with one hole strut not designed for leveling link attachment, R&L1.	Brake beam with two hole strut designed for leveling link attachment standard to car.
3. No. 2 plus brake beam R&L3.	No. 3 brake beam standard to car.

17. Inspectors should always comply with the request of the foreign car owner for joint inspection and should not refuse to sign joint evidence when wrong repairs are so found. This is a courtesy due from the railways to each other and their private line patrons and does not in any way involve the companies represented by the signers unless they made the wrong repairs.

CONDUCTOR'S REPORT—FORM 1523

1. Instructions provide that train crews will render Form 1523, only when there are defective conditions or damage to equipment and when repairs are made to any car.

2. When defective conditions are reported on a 1523, notation should be made on the report by the inspectors to show if the car was "Bad Ordered," "Let Run" or "Repaired."

3. Car inspectors will, when possible to do so, check repairs reported on the 1523 to determine if the kind of material, location and car number and initial have been correctly reported. When the reports include

the application of knuckles, the inspectors should make careful check to determine the type applied and the type of coupler to which applied. In case a "D" or "E" knuckle has been applied, the depth of knuckle face should be checked against information reported on the 1523.

4. Form 1179 must be made to cover all billable material applied in repairs to foreign cars by train crews and notation should be made on 1179 "Repaired by train crew." When repairs are made in train yard covering defects reported on the 1523, check should be made to see that Form 1179 has been turned in to cover. The 1179 serial number should be placed on the 1523 report to indicate that billing has been rendered.

5. No other repairs should be included on Form 1179, covering repairs made by train crews.

6. Division points will check 87 reports and where it is found that repairs are made to foreign cars and no 1523 report rendered, the matter should be called to attention of Transportation Department requesting that 1523 be furnished.

7. When a 1523 reflects that a car, carrying delivering line defects, has been picked up at a non-inspection interchange point investigation should be made to determine if defect card is due.

8. The 1523 reports should be filed in date order and must not be attached to repair cards.

CAR NUMBERS AND INITIALS

1. Initials are a common stumbling block with carmen, notwithstanding that they determine against whom bill should be rendered. The initials of some railroad companies conflict with those of other railroads and in such cases the name of the railroad must be written in full or abbreviated on billing repair cards and other car records, thus: Cin. Nor.; Can. Nat., Mich. Cent., Main. Cent., Miss. Cent., etc. Do not show names of car owners as "Monon," "Big Four," "Cotton Belt," etc. Give correct initials or name of owner in all cases.

2. The car initials, U.P., N.P., M.P., W.P., etc., when written in long hand can be mistaken one for the other. It would be preferable to have such cars

reported an Un. Pac., Nor. Pac., Mo. Pac., West Pac., etc. If desired, car initials may be hand printed if hand writing is not readily legible.

3. Names of private lines must be either abbreviated or full name shown so as to be readily identified. If any doubt exists as to whom car belongs, obtain all the initials or marks that are on it and compare with agent's records.

4. Foreign cars arriving at shops must have car number and initials on Form 1203 compared with those on car by incoming shop inspector and the outgoing shop inspector must make the same comparison on completion of repairs.

5. Be sure that car numbers and initials are correctly shown on car repair records, otherwise it will be necessary to trace for corrections. If figures are transposed or numbers and initials are carelessly reported on billing repair cards, the company billed will take exceptions resulting in correspondence which could have been avoided if proper care had been used at time records were prepared.

6. Forms 1179 covering exchange of wheels must be checked with Forms 1179-A before forwarding in order to make sure that the car number, initials and wheel locations agree.

REPAIR RECORDS AND BILLING REPAIR CARDS FORMS 1203 AND 1179

1. Inspectors must fill in all information called for on the face of Form 1203 when bad ordering cars. Defects for which cars are bad ordered should be clearly shown.

2. For each car passing over the repair tracks, there must be a Form 1203 to cover whether or not any repairs are made.

3. Repairs made in train yards should be written on Form 1179, using one form for system cars and an original and one copy for foreign cars.

4. Repairs made to system cars on repair tracks should be written on Form 1203.

5. Repairs made to foreign cars on repair tracks should be written on Form 1179 in duplicate or carbon copied on back of Form 1203. When Form 1179 is made in duplicate, the original will be known as the

billing repair card and the duplicate retained at repair point will be known as the record repair card. This card must be attached to Form 1203.

6. Cars shopped for repairs must be carefully inspected by the car foreman or shop inspector before work of repairing is begun, and the work to be done entered on the original record, including the location of each item and the cause for making the repairs. This information must not be assumed but must be determined by an actual inspection. The common terms "broken," "bent," "missing," etc., if used, when caused by derailment, cornering, sideswiping, or other Rule 32 agency, must be qualified to show such cause.

7. When the defect for which a car is bad ordered is not repaired, disposition should be shown on the face or back of Form 1203 showing "OK—let run." The car foreman or inspector passing on such defects and permitting them to run should place his initials on the 1203 card.

8. All repairs should be inspected and written up fully before cars are released from repair track. When Form 1179 is made for repairs to a foreign car, the work performed as well as the material used must be checked to see that all items of repairs are reported on Form 1179 and to see that all repairs shown thereon have actually been made.

9. Each operation must be shown on Form 1179 with weights, sizes where required, and kind of material used, and, when required by the rules show whether new or secondhand. Where labor operations are performed and no material is used, the repair card should be made to clearly show what was done. Reason for making repairs should be shown in the "Why Made" column. When repairs are made to any item that requires additional information to indicate whether owner's or delivering lines responsibility. Form 1179 must be made to reflect it; thus, the reason for renewing siding should be shown as "broken in," "broken out," "decayed," etc. To show the cause of making such repairs as "broken," is neither sufficient nor definite enough information to justify billing car owner.

10. Rules 9 and 104 specify various items of material that must be reported on Form 1179 as new or second hand.

11. Separate Forms 1179 should be rendered, covering repairs made to each car, as shown below:

1. Repairs to owner's defects.
2. Repairs to handling line defects.
3. Repairs made on authority of defect cards.
4. Repacking journal boxes, as per Rule 66.
5. Closing hopper and drop doors, on authority of defect card as per Rule 35.
6. Applying or removing placards, etc. on authority of defect cards per Rule 36.

12. Do not confuse owner's defects with those chargeable to the delivering line. Such repairs should be billed on separate Form 1179. A notation must be made on billing repair cards covering repairs to handling line defects showing that the repairs are "No-bill" and the Rule 32 agency involved; for example, "No-bill-cornered," etc. This notation should be placed in the middle and center of Form 1179 and not in the "Repairs Made" or "Why Made" columns. In cases of slid flat wheels and cut journals, repair points should not mark the billing repair cards "No-bill."

13. When preparing billing to cover work performed on repair track, place one item only on a line. Always show before the item of repairs the end of car at which repairs are made. Show car loaded or empty, kind of coupler attachment and type of truck by placing an "X" in the spaces provided at top of repair card. Group repairs for "A" end, also for "B" end. Do not mix "A" and "B" ends. In reporting work done, the principal items of repairs should be shown first with the auxiliary items following in order.

14. The applied sizes of lumber AS APPLIED TO THE CAR must be shown on Form 1179. For further information, see Rule 102.

15. The number and size of bolts, and purpose for which they are used must be shown on Form 1179. Weights of bolts need not be shown. Nuts, when applied, must be specified, except those used on bolts renewed, in which case an average of one nut per bolt will be assumed as used, regardless of whether double nuts are used. Nut locks or lock nuts, when used, must be reported as additional charge is permitted for same whether or not applied in connection with bolt or nut renewal.

16. For items of labor computed on bolt basis, show on billing repair card, the size (length and diameter) and number of bolts renewed or R&R. For brake hanger pins or bolts, show length only.

17. In reporting length of "I," or "J," or "U" bolts, pipe hanger or other type, measurements should be taken from center of "I" or bottom of "J" or "U" types to threaded end.

18. When truck, draft or other helical springs are applied, the height and outside diameter must be shown on Form 1179, also show whether new or secondhand. For truck or draft springs applied, show if single or double coil, and when double coil spring is applied, show the condition of both coils removed.

19. The actual weight of forgings (size need not be shown), structural or pressed steel shapes and weight and kind of castings must be shown on Form 1179, except where weight of same can be accurately determined by definite description or where arbitrary weight is specified in Rule 101 tables.

20. Arbitrary weights listed under "Weights of Miscellaneous Items" in Rule 101 need not be shown on Form 1179 as these will be inserted by Topeka.

21. Paint and nails must be shown on Form 1179. Quantity need not be shown in those cases where it can be properly determined by the billing clerks.

22. For items of labor computed on rivet basis, the number and diameter of rivets used, and purpose for which used must be reported on Form 1179. The length of such rivets need not be shown. For coupler yoke rivets show length.

23. For items of labor for straightening or repairing parts removed from car, computed on weight basis, the weight of material must be shown on Form 1179 in the "Repairs Made" column.

24. Where repairs of an extraordinary nature are made involving items for which no specified allowance is provided in the A.A.R. Rules, the actual time consumed for each item together with the total actual time consumed on the whole of the repairs must be reported on Form 1179. Straightening of metal parts on car is to be reported on actual time basis.

25. If necessary to remove load to make repairs, it must be plainly shown on Form 1179.

26. Cotter keys necessarily renewed in connection with change of wheels, brake beam or other repairs must be reported on billing repair card to permit charge for same. The size of cotter keys need not be shown.

27. When brake beam supports are necessarily R&R in connection with change of wheels, brake beam or other repairs, billing repair card must so specify and show securement to permit additional labor charge.

28. When wheels are changed under passenger equipment cars, billing repair card should show if "four-wheel" or "six-wheel" truck and box numbers for each pair of wheels changed. For "six-wheel" trucks, show if center or outside pair.

29. When STEEL wheels of any kind are applied or removed, see instructions given under the subject "Wheels and Axles" regarding information that should be shown on billing repair cards concerning wheel stenciling on car. This information is important and must not be overlooked.

30. In the event of first application of "D" or "E" type coupler, or when A.A.R. approved draft gear is applied in place of non-approved or obsolete type of draft gear, see instructions given under the subject "Couplers and Draft Gears" regarding information that should be shown on billing repair card concerning coupler or draft gear stenciling on car. This information must not be overlooked.

31. When repairs of any kind are made to foreign cars, a billing repair card must be furnished car owner, except as otherwise provided in Rules 8 and 108.

32. The A.A.R. Rules specify conditions under which defect cards must be issued when wrong repairs are made. In such cases, a notation must be made on Form 1179, showing that a defect card has been issued for wrong repairs. This notation should be placed in the "Repairs Made" column.

33. When car repair material is obtained from other local companies in exchange for defect card, see instructions given under the subject "Material Ordered for Foreign Cars" regarding information that should be shown on billing repair card in con-

nection therewith. This is important and must not be overlooked.

34. When extensive repairs are made to a system car on defect card authority, a brief record should be made showing the lightweight, date built or rebuilt, class of car per Rule 112 (A,B,C, etc.), kind of wheels, type of air brakes, and other details for which Rule 112 specifies additional allowance in computing depreciated value. This information should be shown on a separate Form 1179 and attached to the billing repair cards covering the repairs made.

35. When repairs are made to a system or foreign car on authority of a defect card, a notation must be made on the billing repair card in the "Repairs Made" column, showing name or initials of road issuing the defect card and date issued. Such billing repair cards should be consecutively numbered with other billing.

36. When repairs are made to a foreign car on authority of a defect card, issued by other than owner of the car, Form 1179 must be made in triplicate covering all repairs chargeable on authority of the defect card. The original repair card and one copy should be pinned to the face of defect card and forwarded with regular billing. The original is for car owner and the copy for the road or company issuing the defect card. In cases where the road issuing a defect card is the owner of car or where there is a defect card covering damage to a system car, only the original 1179 is necessary to be forwarded with defect card. The same principle will apply in furnishing wheel slip, Form 1179-A, when defect card includes protection for defects on wheels or axle.

37. When corrections are necessary, before billing repair cards have been sent to the owner, they must be made on the station repair record as well as on the original. Care must be taken to evenly match the original and copy, placing a carbon between them so that the copy will reflect the same information as the original.

38. Under Rule 91, when billing repair cards are returned by owner for correction or on account of exceptions, they must not be defaced in any manner on the face of the cards. In view of the provision of this rule, there must be no failure to return the cards,

as received, furnishing necessary information or explanation by letter.

39. For details of repairs for which owners are responsible, the A.A.R. Code of Rules provides ample information. All repairs must be reported on Form 1179 and employees engaged in this work will be held responsible for proper billing information and for omissions.

40. It is to be understood that the information shown on Forms 1179 represents many thousands of dollars of Company labor and material and the importance of showing ALL repairs to foreign cars cannot be emphasized too strongly.

41. It is the intent that repair parts, which may be applied to foreign cars for which a secondhand price is allowed and which are not readily distinguished from new material be suitably marked. This for identification purposes when preparing original repair records.

42. Forms 1179 must be rechecked before transmittal to see that the date, car number, initial, cause of making repairs, repair station and code number have not been omitted. Forms 1179 covering change of wheels must be checked with Forms 1179-A to make sure that the car number, initial and wheel locations agree.

43. It is essential and it will be insisted upon that the repair station and code number be shown on billing repair cards and wheel slips by use of stamp provided for this purpose. Forms 1179 and 1179-A must be stamped before the books are placed in use.

44. Forms 1179 must be consecutively numbered beginning each month with number "1" and each 1179 made to carry its consecutive number to and including the last day of the month. When volume of repairs to a car requires the use of more than one repair card, each should carry its consecutive number with the suffix "A", "B", "C", etc., each card showing a different letter. Example: 150-A, 151-B, 152-C, etc. The use of these letters must also be consecutive with their position in the alphabet so it will be known that no repair cards are missing. The number assigned to Form 1179 should be shown on Form 1203 or 1179 copy, in order that the record at repair points

will indicate that a billing repair card has been rendered for every foreign car repaired.

45. Separate serial numbers must be used on Form 1179, covering repairs to passenger cars, in the same manner as for freight cars.

46. When more than one Form 1179 is required to cover repairs made to a car, or when a repair card is supported by wheel slip, Form 1179-A, they must be pinned together at top and in center of Form 1179, preferably through the word "Railroad." The right-hand edges should be even.

47. When folding large Forms 1179 for transmittal to Topeka, car number and initials should be on the outside so this data can be seen without unfolding the cards.

48. When transmitting billing repair cards to Topeka, forwarding station will prepare Form 1181 in triplicate, retaining one copy, and attaching original and one copy to billing repair cards. Serial numbers of billing repair cards covering repairs to freight and passenger equipment cars must be reported in the spaces provided on Form 1181. The number of defect cards, gas certificates, Pullman sheets and joint evidence cards included in each transmittal must likewise be reported.

49. Copies of transmittal Forms 1181 should be filed in date order as this will permit ready reference to the last serial number used in the last transmittal. The billing repair cards in the next transmittal will then start with the next consecutive serial number. This must be closely observed in order to avoid skipping of serial numbers and mix-ups in transmittals which are not uncommon results when carelessly handled.

50. Questions arising in connection with responsibility for repairs should be taken up with local officials, and, if necessary, referred to Traveling Car Clerks.

51. When new men are assigned to inspection and writing billing repair cards on repair tracks or a new clerk is assigned to the handling of car repair records and billing details in car foreman's office, Mechanical Superintendents will advise the Traveling Car Clerk supervising the territory.

WHEELS AND AXLES

1. The handling of repair records, Forms 1179 and 1179-A, and disposition of wheels and axles removed from foreign cars will be in accordance with the following instructions:

2. Repair points will prepare and forward billing repair card Forms 1179 direct to Topeka and wheel slip Forms 1179-A to central wheel shop.

3. Repair points should prepare wheel slips in triplicate, retaining one copy for file. The original and one copy should be held and forwarded to wheel shop when wheels are shipped.

4. Repair points will write billing repair cards to show wheels applied and instead of writing "1 Pr. new 33 inch cast iron wheels and SH AAR 5x9 axle" with reason for removing wheels, they can write "1 Pr. wheels per wheel slip attached" with location given, or if, say, three pair wheels, "3 Pr. wheels per wheel slips attached R&L 1-2-3." Cause for removing wheels and axle need not be shown on Form 1179.

5. When preparing wheel slips, repair points will show the cause of removal of wheels and also show all other information required by the headings of the columns on Form 1179-A, but not the dimensions of axle removed nor the condition of the mate wheel as this information will be inserted by wheel shop foreman who will also show the service metal details and gage readings for wrought steel wheels removed. When removal is due to a defective wheel, the wheel defect and the A.A.R. symbol term as specified in the A.A.R. Rules must be used. Repair points will be particular in showing the wheel and axle information specified in Rule 9.

6. The letters "C.I." for cast iron wheels, "C.S." for cast steel, "M.W." for multiple-wear wrought steel, "2-W" for two-wear wrought steel and "1-W" for one-wear wrought steel should be used on wheel slips to indicate the "Kind of Wheels" removed and applied. One-wear wrought steel wheels which have been turned as specified in Rule 98 and stamped "1-WT" must be so reported.

7. When new wheels having cast dates older than one year at time of application to foreign cars, repair points should place the notation "New wheels" at top

of wheel slip on right side in order to verify and insure to car owner that the wheels are new.

8. For wheels applied to foreign cars, repair points must be careful to note if the axle applied is new or secondhand and after carefully checking the required axle dimensions, be particular in showing the correct information for the axle applied in the space provided on Form 1179-A.

9. When wheels are removed and turned or journal reconditioned and the same wheels are reapplied to car, repair points will attach the completed wheel slip to billing repair card and forward to Topeka in regular transmittal.

10. Repair points removing wheels from foreign cars or system cars will mark defective wheels with A.A.R. symbol markings to show defect causing removal. If axle has cut journal, it should be marked "cut journal." Initial and car number should be marked on the axles. This information is most important and is insisted upon. The markings should be legibly applied with yellow crayon at the time wheels are removed from car, and, before loading wheels for shipment to wheel shop, recheck should be made to insure application of the markings has not been omitted.

11. The record of wheels and axles R&R under system cars must be complete. Wheels and axles removed from system cars, except under defect card conditions, will not have wheel slips handled through wheel shops.

12. When wheels are removed from system cars on authority of defect card issued by a foreign company, the wheels and wheel slips are to be handled the same as for a foreign car.

13. When wheels are removed from a foreign car on authority of defect card issued by a foreign company other than the owner of the car, repair point will furnish wheel slips in triplicate which will consist of one for the owner, one for the defect card and the other to be returned to the repair point.

14. Repair points, when loading defective wheels, should see that those removed from foreign cars are given preference in order to have them reach wheel shops in first shipment after removal.

15. If a loading point does not have a full car load to ship direct to wheel shop and the wheels are sent to some other point on the Division for car load shipment, the wheel slips should be sent to Master Mechanic, who will forward to wheel shop as soon as the wheels are loaded for wheel shop shipment.

16. Form 1181 will be used when forwarding wheel slips to wheel shops and a separate transmittal should be made for each car in which wheels, removed from foreign cars, are shipped. Wheel slips must be mailed promptly after the loading of wheels, in order that they will reach wheel shops by the time the wheels are received. Repair points will prepare Form 1181 in triplicate, retaining one copy and forwarding two copies to wheel shop. These forms to show initial and car number from which each pair of wheels was removed and also show initial and car number in which wheels are shipped.

17. At repair points where wheel shops are located, Forms 1181 are not required for transmittal of wheel slips. After wheels are disposed of by wheel shop, such points should mail the original Form 1179-A to Topeka and retain the copy. If possible to dispose of wheels immediately after removal and before time of forwarding Form 1179, the original Form 1179-A may be attached to Form 1179 which will complete the handling.

18. Wheel shops will give preference to and make prompt inspection and disposition of wheels and axles removed from foreign cars and will see that wheel slips are immediately mailed to Topeka.

19. Wheel shops will inspect wheels and axles, apply wheel defect and remount gages and complete the wheel slips, using the wheel defect terms and A.A.R. symbols as specified in the A.A.R. Rules. Also, when completing wheel slips for wrought steel wheels removed from foreign cars, wheel shops will check and insert gage readings and service metal details as required by Rule 98.

20. When completing wheel slips for wheels removed from foreign passenger equipment cars, wheel shops will observe the Passenger Car Rule requirements, particularly the service and remount wear limits for journals specified in P.C. Rule 7, which differ from those specified for freight equipment cars.

21. For identification of the various wheel defects and proper use of standard limit gages, reference should be made to the A.A.R. Wheel and Axle Manual. It is essential that wheel defects be classified in accordance with the terms applicable to each type of wheels.

22. In case of wheels removed account cut journal or other axle defects, careful inspection must be made to determine if one or both wheels are condemnable account owner's defects. See Rule 98. Wheel shop will see to it that this information is not overlooked when completing wheel slips.

23. Wheels out of gage, loose wheels or wheels removed with indications of being loose, wheel shop will check both wheels and axle and complete wheel slip to show if O.K. or scrap according to what is found. If scrap, show the defect for which scrapped.

24. In cases where the wheels removed are not condemnable for service defects, but are condemnable by remount gages or other remount limits specified in Rule 82, the wheel slips must be completed accordingly. This information is essential and must not be overlooked by wheel shop when completing wheel slip.

25. Wheel shop will carefully check all axle dimensions as to service condition or fitness for remounting to apply to foreign cars, and will write in the required axle dimensions on wheel slip showing if axle is O. K. or scrap. If scrap, show the defect.

26. When either the length or diameter of journal or the diameter of wheel seat is different from dimensions at opposite end of axle, the dimension nearest the condemning limit should be reported. See Rule 9 and interpretations following.

27. When wheel shop inspection of an axle from which wheels have been dismounted discovers an undersize wheel seat or when Magnaflux tests disclose seams or fractures which necessitate scrapping of axle, the defect for which axle is scrapped should be shown on wheel slip. This is important and must not be overlooked.

28. It is the intent that the completion of wheel slips at wheel shops will be made only after the final inspection and handling of both wheels and axle have been made.

29. The completion of wheel slips at wheel shops should be handled by competent employees. Every care must be exercised in order that correct and complete information will be reported on wheel slips. Employees engaged in this work should be thoroughly familiar with the wear limits and condemning limits of both service and remount defects for wheels and axles as specified in the A.A.R. Rules.

30. After wheels are disposed of by wheel shops, the completed wheel slips, original and copy should be promptly forwarded to Topeka. These should be attached to one copy of Form 1181 and wheel shops should retain the second copy of Form 1181. Date of transmittal by wheel shops should be shown on Form 1181. Topeka will attach original wheel slip to billing repair card, which will be used for billing, and will return copy to repair point to be attached to repair record.

31. Particular attention is directed to the 1940 A.A.R. Standard passenger car axles having increased diameter wheel seats. The 1940 A.A.R. Standard axle may be applied to foreign passenger equipment cars as correct repairs in place of the former standard axle. See P. C. Rule 7.

32. Reclaimed axles which may be considered as new, that is, axles upset, reformed and reworked to a smaller size in accordance with the provisions of Rule 86 and not previously used as such class, should be stenciled "NEW" at the wheel shop in order to enable repair points to identify the axles and prepare wheel slips accordingly when such axles are applied to foreign cars.

33. When axles are new, wheel shop must see to it that they are stenciled "NEW" before being placed in stock.

34. Rule 98 permits the use of A.A.R. Standard axles having wheel seats not more than $\frac{1}{8}$ -inch in excess of standard diameter for remounting second-hand wheels. No tolerance in excess of the standard diameter is permitted for mounting new wheels. See car folio instructions in this respect.

35. When mounting wheels, wheel shops will classify them as number "1", "2" or "3" and stencil these markings on the axles. The stenciling should be applied so it will last, as wheels may remain in stock for some time before being used.

36. New wheels mounted on axles, suitable for applying to foreign cars, should be stenciled "1." Secondhand wheels on axles, suitable for applying to foreign cars, should be stenciled "2." Any wheels on axles, which are not suitable for applying to foreign cars, due to wheels having remount defects, etc., or axles not conforming to A.A.R. requirements, should be stenciled "3." The number "3" wheels are for use under system cars only and must not be applied to foreign cars.

37. Before wheels are placed in stock, wheel shops will obliterate all previous markings from the wheels and axles.

38. Service metal on wrought steel wheels shall be measured and determined by using the A.A.R. steel wheel gage. The amount of service metal available will be measured on back face of the wheel rim. In arriving at service metal figures, the gage should be applied to three points around the circumference of the wheel and at least a quarter circle apart. The reading on the gage must be reported for the thinnest point.

39. The term "service metal" refers to the amount of metal ABOVE the condemning line and not the total thickness of the rim. The condemning line for wrought steel wheels under freight equipment cars is $\frac{3}{4}$ " above the measuring point as measured on back face of rim. The condemning line for wheels under passenger equipment cars is 1 inch.

40. Two-wear (2-W) wrought steel wheels are considered on the same basis as multiple-wear wrought steel wheels in so far as substitution of wheels and billing is concerned. Such wheels are to be reported on service metal basis the same as multiple-wear wrought steel wheels when preparing wheel slips.

41. When finger reading on steel wheel gage indicates less than $\frac{2}{16}$ inch service metal from full flange requirements, such wheel shall be considered as having full flange contour, providing it does not require turning for other reasons.

42. In all cases of multiple-wear wrought steel wheels removed readings must be shown at top of wheel slip to indicate for each wheel (1) overall tread thickness, (2) amount of metal (dead metal) between

measuring point and condemning line, (3) amount of service metal to be turned off, as indicated by the wrought-steel wheel gage finger to restore full flange contour. See Rule 98. Example:

One wheel	2¼—¾—7/16
Mate wheel	2½—¾—4/16

In reporting the gage readings in above example, the figures may be simplified and shown at top of wheel slip as follows:

(1)	36—12—7
(2)	34—12—4

In showing the service metal in the above example, this would appear on the wheel slip in the "Before" and "After" turning columns as follows:

Before	After
24/16	17/16
22/16	15/16

43. When multiple-wear wrought steel wheels are applied, the amount of service metal on each wheel must be shown on wheel slip. Repair points must also be particular in showing whether or not the wheels applied have full flange contour and in case they do not have, the gage readings must be shown at top of wheel slip.

44. It is not necessary to show on wheel slip the exact diameter of multiple-wear wrought steel wheels applied or removed. A.A.R. prices for multiple-wear wrought steel wheels are based on two diameter sizes, the 33 inch and the 36 inch wheel. It will be sufficient to show on wheel slip the nominal diameter of such wheels.

45. One-wear wrought steel wheels are identified by the marking "1-W" stamped on back of flange near wheel number or manufacturer's name. Do not mistake one-wear wrought steel wheels for multiple-wear wrought steel wheels that have been withdrawn from passenger service, due to limited service metal and placed under freight cars for final wear.

46. One-wear wrought steel wheels which have been reclaimed by turning in accordance with Rule 98, and have the letter "T" stamped on the wheel following the identification mark "AAR-1W" on back face of rim, should be shown on wheel slips as "1-WT"

wheels. A careful study of Rule 98 is necessary, in order that complete and correct information may be reported.

47. One-wear wrought steel wheels, stamped "AAR-1W" or "AAR-1WT," are considered the same in so far as the substitution of wheels is concerned.

48. "DAVIS" wheels are cast steel and can readily be identified by the fact that the markings are CAST on the back side of wheels. Wrought steel wheels have the markings stamped into the back face of rim. Do not mistake "DAVIS" cast steel wheels for multiple-wear and one-wear wrought steel wheels.

49. Under Rule 70, the type of steel wheels standard to car is governed by the wheel stenciling on car. When car is stenciled for one type of wheels and the wheels removed are of another type, the stenciling on car will govern the standard to car. It is, therefore, important that the stenciling on car be carefully checked when changing wheels under foreign cars in order to determine the type of wheels standard to car. If no wheel stenciling on car, cast iron wheels are considered as standard to car.

50. Under no condition is it permissible to alter or originate wheel stenciling on a foreign car, unless requested by owner to do so or when requested by special instructions.

51. When STEEL wheels of any kind are applied or removed, notation should be made on Form 1179 to show whether the car did or did not carry stenciling for type of wheels standard to car. When a car is carrying wheel stenciling, show how stenciled, using the terms specified in Rule 70. This information is essential and must not be overlooked.

52. When a car is carrying stenciling for steel wheels at one or more locations but not for all locations, repair card should show stenciling as found on car. If car is carrying the stenciling "NEW STD" for wheels as permitted by Rule 16, repair card should so state.

53. When employees are sent on the line to change wheels, the car foreman will see to it that the wheel stenciling information is obtained. This information is essential and must not be overlooked.

54. In order to avoid undue loss in the exchange of wheels under foreign cars, it will be up to the

car foreman and others concerned to be thoroughly familiar with the provisions of Rules 70 and 98, and be particular to observe the material value of the different types of wheels as indicated by the prices specified in the A.A.R. Rules.

55. When changing wheels under foreign cars and wheels standard to car are not on hand, repair points should be particular to apply wheels that will involve the minimum loss in money value when substituting other types of wheels that are available.

56. When removing wheels from foreign cars due to handling line defects for which we are responsible, particularly cut journals and slid flat wheels, every effort should be made to apply wheels that will involve the minimum loss; for example, when removal of cast iron wheels standard to car is due to cut journal and no service defects on the wheels, material charge for new cast iron wheels applied in a case of this kind would be confined to secondhand value and should be avoided as much as possible. The same principle applies to one-wear wrought steel wheels. See Rule 98.

57. In cases where a particular type of wheels have been requested by private car owners or when required by special instructions, repair points will be governed accordingly where possible to do so.

AIR BRAKES

1. Periodical cleaning of freight air brake equipment on foreign cars will be performed upon expiration of the time limits specified in Rule 60 and the work performed will be in accordance with the requirements of this rule.

2. When foreign cars are on repair track for other work, periodical cleaning of air brakes will be performed upon expiration of time limits specified in Rule 60 for such cars.

3. "AB" type freight brake equipment using the former type brake cylinder modified is subject to the time limits specified for the K-type air brakes in so far as cleaning periods are concerned.

4. The expiration of time limits for periodical cleaning of air brakes must be carefully observed. Charge for COT&S of air brakes account old date is not permitted until the time limits as specified by

the A.A.R. Rules have fully expired. If, for example, the air date on car shows last cleaning on the 21st day of the month, the cleaning date is not due until the 22nd day of the expiration month.

5. It should be noted that Rule 60 requires *all* old stencil marks are to be obliterated, and it is insisted that, in all cases where air brakes are cleaned, this provision must be observed.

6. Failure to obliterate old stencil and apply new stencil will be sufficient cause for cancellation of cleaning charge against car owner.

7. The stenciling for periodical air brake cleaning, etc., is of such importance that special care must be taken to obtain in full detail the correct record of old markings before removing same. If old markings are indistinct due to grime, etc., they should be carefully cleaned in order to ascertain, if possible, the correct information.

8. All old stencil marks must be scraped off and painted over with quick-drying black paint, which should be sufficiently dry before applying the new marks. The place of cleaning, the initial of road, month, day and year of cleaning must be stenciled with white paint on the outer side of the auxiliary reservoir as described in Rule 60. If this location does not present a clear view from outside of car, the stenciling should be located near handle of release rod on the reservoir side of car. On tank cars having but two longitudinal sills, this stenciling may be located on reservoir side of center sill at center of car.

9. The stencils should be kept clean and the markings should be applied in a neat and exact manner. After the new marks have been applied, they must be carefully inspected to insure correctness of same in all details.

10. The stenciling showing air brakes cleaned must not be changed unless all work is properly performed as specified by Rule 60.

11. Air brake stenciling, if properly applied, should remain legible for at least six months and the company applying such stenciling is responsible to that extent.

12. For system cars on which air brakes are cleaned account inoperative and air brake stencil

on car indicates last cleaned on some foreign road less than 60 days previously, repair point must secure joint evidence as per Rule 12 and send to Topeka with other car repair billing.

13. No charge is permitted for cleaning either triple valve or brake cylinder unless the triple, cylinder, retaining valve and dirt collector (when so equipped) are all cleaned at the same time.

14. No charge permitted for the separate cleaning of emergency or service portions of "AB" freight brake equipment; however, billing repair card should be furnished showing the portion R&R, also name of road and date of last cleaning. If, in such cases, the body of either portion removed is broken or defective, billing repair card should so state.

15. The term "air brakes cleaned per Rule 60" shown on billing repair card will be accepted as evidence that all work has been properly performed.

16. When air brakes are cleaned, billing repair card must show type of triple valve removed and replaced.

17. When triple valve only is changed, labor charge for triple valve R&R is not permitted; however, billing repair card must be prepared and furnished to show type of triple valve R&R, name of road and date of last cleaning.

18. In all cases where body of triple valve removed is broken, repair point must see to it that this information is reported on billing repair card.

19. Attention is directed to the items of material which are NOT included in the average charges specified in Rule 111 for the cleaning of freight brake equipment per Rule 60. Such parts when necessarily renewed in connection with COT&S of air brakes must be reported on billing repair card to permit additional charge.

20. When pressure retaining valves are renewed or repaired, billing repair card must show the type of valve removed as well as the type of valve applied to assure proper charge and credit as indicated in Rule 101.

21. The A.A.R. Standard double spring type, three position pressure retaining valve is equipped with two high cap nuts which have a groove cast across the top and have non-removable valves and springs.

The non-A.A.R. Standard double spring type, three position pressure retaining valve is equipped with two short cap nuts which have the numerals 8-10 across the top and have removable valves and springs. Repair points must be careful to observe this difference when renewing or repairing this type of retaining valve and be particular to show on billing repair card if A.A.R. Standard or non-A.A.R. Standard removed or applied.

22. The A.A.R. Standard double spring type, three position pressure retaining valve converted to the four position type valve is identified by the letter "C" stamped following the cast piece number.

23. When brass plug with slotted opening is found in the exhaust port of spring type pressure retaining valves, it must be so maintained.

24. Pressure retaining valves cleaned and tested on or off car, or R&R account of any other repairs, when not in connection with COT&S of air brakes, is billable. Labor charge is specified in Rule 111 and repair points will see to it that billing repair cards are rendered for this work.

25. When necessary to R&R retaining valve in connection with pipe repairs, repair card should show "Retainer R&R," instead of counting as one connection.

26. Dirt collector in branch pipe cleaned and drained is billable when not in connection with COT&S of air brakes. Labor charge is specified in Rule 111 and repair points will render billing repair cards for this work when performed.

27. Triple valve gaskets renewed when triple valve is not removed for other repairs, charge for labor and material permitted. Show on billing repair card if applied to "AB" type valve, K-type triple valve, etc.

28. When reporting pipe work on Forms 1179 the number of connections made and the number of ends of pipe threaded must be shown, as the labor charge is made on that basis. Size of pipe need not be shown for connections made and threads out.

29. For pipe work on AB freight brake equipment, billing repair card must show number of cap screws or bolts R&R and number of connections

made. The number of connections to include the flanged union connections as well as the pipe connections.

30. For air brake pipe or pipe fittings renewed, billing repair card must show if single weight (SW) or extra heavy (EH) applied. It will not be necessary to show this information for such parts removed.

31. When repairs are made to train pipe, branch pipe, retainer pipe, etc., show on billing repair card the size of each nipple and piece of pipe, also size and kind of each pipe fitting used.

32. Pipe nipples do not exceed 12" in length. If longer than 12" it must be considered as pipe and charged for by the foot plus threading at both ends.

33. Pipe unions must be shown as "lip type" or "ground joint type" as the ground joint union is worth almost twice as much as the lip type.

34. Any fixtures, such as pipe clamps, hangers, etc., necessarily R&R to make repairs are charged additionally and must be so reported on billing repair card.

35. No labor charge allowed for tightening train pipe fittings, unions, couplings, etc., or any details R&R in connection therewith when none of the details are renewed.

36. No labor charge permitted for testing or adjusting air brakes; however, cotter keys renewed account damaged in connection therewith are billable.

37. Air brake hose removed account porous as determined by soap suds test, billing repair card must specify that soap suds test was made. The letters "SST" may be used to indicate that soap suds test was made. For defects which will justify removal of air brake hose see Rule 56.

38. For air hose applied, billing repair card must show if new, secondhand or spliced per A.A.R. Specifications. The letters "SPS" may be used to indicate spliced per A.A.R. Specifications. See Rule 9.

39. Rule 101 prices for air hose and angle cocks include the connections to apply and when either or both are renewed and there is no other pipe work, it is not necessary to show connections on billing repair card. If the angle cock is renewed when re-

pairs are made to train line, its price includes the R&R of air hose. If the angle cock and air hose are removed and replaced when making repairs to train line, report as connections instead of showing R&R.

40. Car owner is responsible for damage to air brake hose, angle cock or train line on freight cars, due to couplers passing providing no Rule 32 agency involved.

41. In reporting air hose removed account damaged by couplers passing do not show "cut" for this condition in "Why Made" column of billing repair card as this may be taken for hose cut by knife, the latter being a handling line responsibility.

42. When angle cock with self-locking handle is applied, billing repair card must so indicate. For angle cock removed, show if self-locking or plain handle.

43. Plain handle for angle cocks or angle cocks with plain handle not permitted in making repairs to foreign cars. See Rule 19.

44. The substitution of angle cock without supporting flange in place of angle cock with supporting flange standard to car is considered as wrong repairs.

45. The substitution of old style release valve in place of the new style variable type is considered as wrong repairs.

46. When angle cocks, cutout cocks, pressure retaining valves and release valves or detail parts of same, are renewed, ground in or otherwise repaired, account defective, charge shall be made for complete cock or valve and average credit allowed according to prices shown in Rule 101.

47. No charge allowed for angle cocks, cutout cocks, etc., renewed account piece of pipe broken off in same. Removal of broken pipe from such parts is part of the operation made necessary due to the broken pipe.

48. Missing dirt collectors as outlined in Rule 59 and missing angle cocks, air hose, release valves, retaining valves, cutout cocks, triple valves, reservoirs and brake cylinders as specified in Rule 58 are a delivering line responsibility; however, delivering line is not responsible for repairs to or renewal of pipe and pipe fittings in connection therewith when not missing or damaged under Rule 32 conditions. It

should be understood that the complete part must be gone to be considered as missing under this rule.

49. Periodical cleaning of passenger brake equipment will be in accordance with Passenger Car Rule 7 and will be performed upon expiration of time limits specified in this rule.

50. P.C. Rule 21 provides separate charges for the cleaning of triple valves or control valves, brake cylinders, dirt collectors, slack adjusters, high speed reducing valves, pressure retaining valves, etc. Repair points will list these details separately in preparing billing repair cards for the cleaning of passenger equipment brakes per P.C. Rule 7.

51. When either equalizing or quick-action portions of the Universal control (UC) valve becomes defective or inoperative within the time limit of P.C. Rule 7, such portion may be given the required attention separately, including separate stenciling.

52. Passenger equipment: Triple valve or brake cylinder may be cleaned separately if defective or inoperative within the time limit of P.C. Rule 7, including separate stenciling.

53. Passenger equipment: Charge is not permitted for cleaning triple valve, control valve or the portions of same, unless dirt collector is cleaned at the same time. See P.C. Rule 7.

54. Passenger equipment: No charge permitted for cleaning brake cylinders unless slack adjuster, if car is so equipped, is cleaned at the same time. See P.C. Rule 7.

55. Average COT&S charge specified in P.C. Rule 21 for cleaning and repairing P.C. control valves or Universal control valves includes all labor used in connection therewith but does NOT include material value of any parts renewed which are to be charged additionally. Repair points must see that all parts renewed are reported on billing repair card.

56. When equalizing portion U-12-C is applied in place of equalizing portion U-12 removed, car owner is not responsible for the betterment of improved cylinder cap unless the equalizing portion U-12-C is standard to the car as indicated by the stenciling. Repair points must see to it that such substitutions are avoided as much as possible. The same principle applies when the quick-action portion U-12-BD is

substituted by or for quick-action portion of U-12-B or quick action portion U-12.

57. For each portion of Universal control (UC) valve removed from and for each portion applied to any car, the proper designating symbol as determined by the description shown below must be reported on billing repair card. This information is of such importance that special care must be taken to ascertain the correct designating symbol:

Symbol	Description
Eq. P. U-12	Equalizing portion U-12 — Without strainer cap.
Eq. P. U-12-C	Equalizing portion U-12-C — With improved cylinder cap having hair strainer.
Q A P U-12	Quick-action portion U-12—Without quick service or strainer, one ball check, body $\frac{3}{4}$ -inch shorter than U-12-B portion.
Q A P U-12-B	Quick-action portion U-12-B—With quick service and no strainer, two ball checks, body $\frac{3}{4}$ -inch longer than U-12, vertical grooves on each side of body.
Q A P U-12-BD	Quick-action portion U-12-BD—With quick service and same body as U-12-B and strainer bolted between body and high pressure cap.

58. A little forethought at the time Universal control (UC) valves are exchanged on foreign cars will often avoid loss of betterment charge. For information regarding charges and credits for betterments on Universal control (UC) valves, see corresponding item in P.C. Rule 21.

59. Particular attention is directed to that portion of P.C. Rule 8 which specifies the air brake parts for which delivering line is responsible when missing from passenger equipment cars. It should be understood that the complete part must be gone to be considered as missing under this rule.

BRAKE BEAMS AND ATTACHMENTS

1. The various classes of brake beams and the substitutions thereof are tabulated in Rule 17. This

table should be given careful study in order to avoid improper substitutions.

2. Brake beams applied to cars built on or after January 1, 1935, or rebuilt on or after August 1, 1937, must not be of less than No. 15 regardless of the beam removed being of a lower capacity. It should be understood that the No. 3 beams when standard to car are to be renewed in kind.

3. When brake beams are renewed in kind or a higher capacity beam is applied, up to and including the No. 15, it is not necessary to make any notation on repair card regarding brake beam stenciling or the type of beams at other locations; however, when a No. 3 beam is removed or applied notation must be made on repair card showing how the car is stenciled for brake beams, and, if there is no stenciling, notation must be made on repair card "No brake beam stenciling" and, also, show the type of beams at other locations in accordance with the Note under Rule 17.

4. R.S.S. & T. brake beams are repaired beams which have been reworked, tested and marked in accordance with the requirements of A.A.R. Standard Specifications for Repairs to Freight Equipment Beams. The marking consists of a dash of white paint on the fulcrum between the pin hole and compression member.

5. Secondhand brake beams which do not meet requirements for RSS&T beams must be marked "System Cars Only" to eliminate possibility of such beams being applied to foreign cars as RSS&T beams.

6. Repaired brake beams with heads having opening between upper and lower brake shoe lugs worn beyond RSS&T wear limits do not meet requirements for RSS&T beams. The use of brake head wear plates to compensate for such wear in excess of RSS&T wear limits will not meet requirements for RSS&T brake beams.

7. No charge allowed for application of brake head or truss rod nut when beam is not removed from car and no labor charge allowed for R&R of brake beam for the purpose of tightening truss rod nuts account loose. Such beams should be removed and replaced with new or RSS&T brake beams when possible.

8. The average labor allowance for R&R of brake beam as specified in Rule 107 includes R&R of such auxiliary items as brake lever, connecting pins, etc. Does not include R&R of safety supports when necessary. If necessary to renew cotters billing repair card should so specify.

9. Brake beam chair castings are not considered part of brake beam and when renewed, billing repair card must so specify.

10. Sliding chair castings should be transferred from beam removed to beam applied; however, sliding chairs of a type which cannot be removed in good condition without dismantling the beam may be scrapped and need not be transferred to the beam applied. In such cases the transferable type sliding chairs may be put on the beam applied and charge rendered against owner to cover.

11. For limits of wear and defects which justify renewal of brake beams, brake hangers and brake hanger pins, reference should be made to Rule 63.

12. Brake beams found with more than one class number cast on strut shall be classified under the lowest marking for charge and credit purposes.

13. For repairs to "hangerless" type brake beams, show on billing repair card work performed on actual time basis. For permissible substitution of other type beams in place of the "hangerless" type, see Note under Rule 17.

14. When application of center hung brake beam in place of top hung beam removed from foreign cars necessitates change in brake hangers, charge against car owner is permitted for the brake hangers so applied.

15. When safety supports are necessarily R&R in connection with wheel changes in unit type trucks or brake beam renewals, additional charge is permitted and repair points must not overlook reporting this information on billing repair cards.

16. When necessary to jack and block truck side to permit application of rivets in brake beam safety support, additional labor charge is permitted and must be shown on billing repair card when performed.

17. For bottom rods applied to foreign cars, billing repair card must show weight and if new or secondhand. When forged hollow design bottom rods are applied or removed, so state.

18. Brake connection rods with malleable jaws may be charged out as "wrot" for the complete brake connection rod. See table of arbitrary weights in Rule 101 for brake connection rods, brake levers, connecting pins, etc.

19. The application of brake head wear plates to compensate for brake head wear on brake beams under cars will be in accordance with provisions of Rule 63.

20. For brake shoe keys applied to foreign cars, the A.A.R. Standard (K-34) or A.A.R. Alternate Standard (K-40) must be used to justify charge. The "K-34" brake shoe key is the regular tapered key conforming to current specifications. The "K-40" brake shoe keys are the spring and lock types as shown in the Manual of A.A.R. Standard and Recommended Practice.

21. Attention is directed to Rule 61 regarding inspection of brake rigging when periodical cleaning of air brakes is performed or when car is on repair track for other work.

22. When new brake shoes are applied to foreign passenger equipment, show on billing repair card if passenger type brake shoe applied and also thickness of the shoe removed at the thinnest point.

23. For brake beams renewed on passenger equipment cars, billing repair card must show cause of removal, weight and kind of beam removed and full description of beam applied. Show labor on actual time basis.

TRUCKS AND PARTS

1. The permissible substitutions of truck bolsters, truck sides and spring planks are clearly outlined in Rule 17. This feature must be given careful attention by all concerned in order to avoid making of wrong repairs on foreign equipment.

2. When truck sides are renewed, billing repair card must show if "U," "T" or "L" section for the truck side removed as well as for the truck side applied.

3. The repairing of pressed or structural steel bolsters by riveting patch plates is proper repairs providing such patching restores original strength of the part. Charge for such repairs confined to

secondhand value of the bolster repaired. See Rule 23 regarding welding of cracks or fractures in cast steel bolsters.

4. When renewing center plates, center plate rivets, side bearings, side bearing bolts or rivets, side bearing shims or adjusting side bearing clearance, billing repair card must specify if car was or was not jacked.

5. Center plate rings applied between upper and lower center plates to provide for side bearing clearance is a temporary repair for which no charge is allowed. The use of such liners must be in accordance with the provisions of Rule 20.

6. In adjusting side bearing clearance, the use of cut washers between upper and lower center plates is not permitted.

7. No restrictions in Rule 23 as to welding of fractured spring plank except that spring planks reduced to less than $\frac{1}{4}$ inch in thickness due to corrosion are not to be welded. Spring planks must be removed for welding.

8. The repairing of spring planks by riveting patch is permissible provided such patching is performed in a substantial manner. Charge for such repairs confined to secondhand value of the spring plank repaired. This charge limit will also apply in cases where spring plank is straightened, or straightened and repaired by plating or welding. Repair points should bear this in mind with view of renewing spring planks which are broken to an extent where cost of repairs exceeds secondhand value.

9. Show on billing repair card the weight of spring plank repaired or straightened. When spring plank to which safety bars are riveted or welded is removed for straightening, the additional weight of the safety bars is in order when computing straightening charge.

10. When necessary to jack and block truck side to permit application of spring plank rivets, billing repair card must so specify as additional charge permitted for this work.

11. No charge permitted for replacing truck spring shims which have shifted out of position.

12. When spring caps are renewed, show on billing repair card if new or secondhand, kind of ma-

terial, weight of each and retaining bolt if renewed. No charge permitted for truck spring cap retaining bolt when renewed separately.

13. Coil truck spring (A.A.R. Std.) applied in place of defective or missing snubber or elliptic truck springs standard to car, constitutes wrong repairs subject to defect card for labor only in case of owner's defects.

14. Truck spring snubbers or elliptic springs on foreign cars should be renewed in kind wherever possible; however, when material to replace in kind is not available, unit types of spring snubbers of same capacity may be substituted one for another as correct repairs.

15. National type B or B-1 trucks: When springs are renewed on this type truck, billing repair card should so specify. Show labor on actual time basis plus jacking where necessary. See Rule 107 for this detail.

16. For journal box lids renewed on foreign cars, show on billing repair card if new or secondhand and also the corresponding item in Rule 101 to indicate type of lid applied.

17. For journal boxes applied to foreign cars, show on billing repair card if new or secondhand and size. Example: 1 new 10" journal box R 4. Material charge specified for journal boxes in Rule 101 includes lids and dust guards.

18. Journal box lid bolt when applied separately, charge confined to secondhand lid to which the bolt is applied. In the event type of lid cannot be determined, charge confined to secondhand value of lowest price lid listed in Rule 101. Billing repair cards should reflect type of lid to which separate bolts are applied.

COUPLERS AND DRAFT GEARS

1. In the application of couplers, yokes, springs, followers, draft gears, lugs, keys, etc., Forms 1179 must show whether riveted yoke or key attachment or transom draft gear. These detailed operations as specified in Rule 107 must be carefully studied so that whatever operation is performed Form 1179 will show specific details in order to classify same and assess the correct labor charge to cover. Under

"Key attachments" information should be written to show if short horizontal key or binder type. In case of vertical key, short horizontal key or binder type attachment billing repair card should indicate if both coupler and draft gear removed or if coupler only or draft gear only removed.

2. For coupler yoke rivets or space block rivets renewed billing repair card must specify if coupler was or was not removed and replaced.

3. When knuckle is renewed separately, billing repair card must show type of coupler repaired. Show new or secondhand, type and size (9" or 11") for knuckle applied. For knuckle removed show type, size and cause of removal.

4. Knuckle pins renewed, show new or secondhand and cause of removal. Not necessary to show type of coupler repaired when knuckle pin only is renewed.

5. When coupler with riveted yoke attachment having other than friction draft gear is slackened at the back end for followers or springs, or both, when not necessary to R&R coupler to make these repairs, billing repair card should so state account separate labor charge specified for this operation in Rule 107.

6. For couplers or parts thereof renewed, see Rule 9 for descriptive information which must be shown on billing repair cards.

7. For defects which justify renewal of couplers and parts thereof, and the use of wear limit gauges in connection therewith, see Rule 18.

8. When coupler body only is renewed, show new or secondhand, type and size of shank for coupler applied. For coupler removed show type, size of shank and cause of removal.

9. The various substitutions of couplers and knuckles are tabulated in Rule 17 to show what applications will constitute proper or improper repairs. This should be given careful study in order to avoid making wrong repairs.

10. When A.A.R. Standard riveted yoke is applied account defective non-A.A.R. Standard coupler or defective non-A.A.R. Standard yoke removed, any serviceable non-A.A.R. Standard details thus removed may be treated as scrap, except that such non-A.A.R.

Standard cast steel yoke and key and coupler body, if not defective, should be held for car owner's disposition as outlined in interpretation following Rule 17.

11. For couplers and parts made of high tensile steel and marked "HT," billing repair card must so specify.

12. Type "D" knuckles applied to type "E" couplers constitute wrong repairs and no charge permitted for the type "D" knuckles so applied. See table in Rule 17 covering substitution of "D" and "E" knuckles.

13. In case of a type "E" coupler applied in place of defective type "D" or "E" coupler removed with serviceable type "D" knuckle, the reapplication of the serviceable "D" knuckle to the type "E" coupler applied constitutes wrong repairs and no charge permitted for the type "D" knuckle so applied. See table in Rule 17 covering substitution of "D" and "E" knuckles.

14. When couplers or friction draft gears are pulled out on line, the condition of the parts should be ascertained before billing is rendered. If the parts are located they will not constitute "Missing" material under Rule 95. If after investigation such parts cannot be located, to ascertain condition, this will constitute missing material under Rule 95.

15. Cars must be maintained within the limits of standard height for couplers, measured from the top of the rails to center of face of coupler knuckle. As far as possible, this adjustment should be made when cars are empty.

16. For coupler height requirements and methods of adjustment see Rule 20 for freight cars and P.C. Rule 7 for passenger carrying equipment cars. Note in particular that the use of cut washers between center plates for the purpose of coupler height adjustment is not permitted.

17. When cars cannot be raised to full standard height limits, they should be raised to or beyond $\frac{1}{2}$ inch in excess of minimum dimensions specified in the rules, in which cases billing repair card should show raised as high as practicable. A similar charge may be made for lowering cars to standard height. Billing repair card must show the height of coupler before and after altering.

18. When adjusting coupler height, the coupler should first be placed in proper alignment with draft gear. Shims may be applied to carrier iron for this purpose as outlined in Rule 20 for which charge is permissible.

19. Burning out of key slots in any type of coupler body is prohibited. There is no objection to drilling out the metal between the rivet holes in the coupler butt for vertical key attachment purposes.

20. In the event of first application of "D" or "E" type coupler the car is carrying markings for couplers, the markings must be changed to correspond with the coupler applied, in which case notation should be made on Form 1179 in the "Repairs Made" column to read "coupler stenciling changed," and in the "Why Made" column show "account repairs." When there are no coupler markings on car, none should be applied and notation should be made on Form 1179 in the "Repairs Made" column "no coupler markings."

21. When A.A.R. approved draft gear is applied in place of non-approved or obsolete type of draft gear and car is carrying markings for latter gears, such markings must be changed as outlined in Rule 17, in which case notation should be made on Form 1179 in the "Repairs Made" column to read "draft gear stenciling changed," and in the "Why Made" column show "account repairs." When there are no draft gear markings on car, none should be applied and notation should be made on Form 1179, in the "Repairs Made" column "no draft gear markings."

22. The various makes of friction draft gears are classified into three sections, A.A.R. approved, non-A.A.R. approved and obsolete gears. Draft gears not listed in either the approved or non-approved sections are considered as obsolete gears. See friction draft gear table in Rule 101. For substitution of draft gears see provisions of Rule 17. This must be given careful study in order to avoid improper substitution of draft gears on foreign equipment and loss of labor and material charges in connection therewith.

23. Repair points should note that the Cardwell L-25-SA friction draft gears are now listed in the

non-approved section of the draft gear table in Rule 101.

24. Non-approved friction draft gears applied in place of approved friction draft gears removed for owners defects are subject to defect card for labor only. Material charge for the non-approved gear applied limited to scrap value. This substitution should be avoided as much as possible.

25. New non-approved friction draft gears applied in place of non-approved or obsolete gears where sill spacing and coupler pocket limits are such that an approved gear could be applied, charge for the new gear so applied is confined to secondhand value. It should, however, be understood that charge new is permitted where sill spacing and coupler pocket limits do not permit application of an approved gear. Example: charge new is permitted for new Cardwell L-11-S friction draft gear applied in place of defective G-11 gear removed. This gear is used with the 18½-inch coupler pocket which is too short for the approved gears which are all designed for the 24½-inch coupler pocket.

26. The term "interchangeable as to sill spacing and coupler pocket limits" means that gear applied should preferably be of the same height, width and length of the gear removed. In the substitution of gears the length (including the number of followers required for the type of gear applied) must be such as to properly fit the coupler yoke. Gears applied are to conform with draft sill construction of car and, if practicable, with existing draft gear supports and guides. Any modification of the sill construction such as cutting or burning of slots for accommodation of transverse spring rods or of holes for accommodation of different designs of guides or supports, is not permissible.

27. Cardwell "L" interior parts or casings may be substituted for "G" interior parts and casings. The "L" casing will function correctly with the "G" parts. The "G" casings will function correctly with the "L-X" parts but not the "L-S" parts. Neither "G" nor "L" type gears will function properly if mixed interior friction members are applied.

28. The type of Cardwell gears are determined by the interior friction parts applied and the length of pocket. Example: an 18½-inch gear having the

L-11 type of casings and "G" parts will be a Cardwell G-11 type draft gear.

29. When entire Cardwell gears are not renewed and repairs are made by renewing one or more interior parts, it is essential that all the interior parts be checked to see if these are all of one type, if not, remove the part or the minority type parts and apply parts that will match the type of parts not removed. This in order that the complete gear when assembled and reapplied will have a full complement of interior friction parts of the same type.

30. Close observation of the different types of Cardwell gear interior parts will readily show that the projections of the center friction members of one type will not match the recesses of the side friction members of another type. Also, the bearing surfaces of the interior friction members of one type are cast at an angle different from the bearing surfaces of the interior friction members of another type with the result that the bearing surfaces do not have full contact when different types of interior friction members are mixed. Such mixing of interior friction members will not permit proper functioning of the gear and must be avoided.

31. Cardwell gear parts are charged out at factory price (plus percentage specified for store expense) with the provision that the net charge for new or secondhand parts applied will not exceed (except for obsolete gears) 50 percent of the price specified for new gear. Repair points will bear this in mind when renewing parts of Cardwell gears (other than obsolete gears). Example: on Cardwell "L" or "G" type 18½-inch gears the value of two new casings alone will exceed 50 percent of the price for new gear. If the value of the parts requiring renewal in such gears exceeds 50 percent of the price for new gears, consideration should be given to applying a complete gear.

32. Charge for complete obsolete gears applied is limited to scrap value; however, the parts applied in repairs of obsolete gears may be charged out at their new or secondhand value. Repair points will bear this in mind when repairing obsolete gears to renew only the defective parts of such gears. Example: charge for complete Cardwell "B" type 15½-inch gear applied is limited to scrap value of about

one dollar; however, full charge may be made for new parts applied providing at least one of the old parts remain.

33. Prices specified in Rule 101 for Cardwell friction draft gears do not include the inside and outside spring seats, springs and spring rods. These items when renewed must be reported on billing repair card to permit additional material charge.

34. Friction draft gear parts are charged by the piece. It is not necessary to report weights; however, casting numbers of the parts should be reported.

35. Friction draft gear or any parts thereof renewed, show on billing repair card new or secondhand, type, make or name and part or parts defective. It is essential that billing repair card show condition of casing for the gear removed as the amount of credit due for the gear removed will be governed by the condition of the casing. See note preceding table of friction draft gears in Rule 101.

36. On national M-17 or M-17-A draft gears, the largest and heaviest portion which is the friction member will be considered as casing for the purpose of computing credit allowance under the note preceding table of friction draft gears in Rule 101.

37. The National M-17-A and the National M-17-A (certified) draft gears are approved gears. Do not mistake these for the non-approved National M-17 gears.

38. Miner A-2-XB and Miner A-22-XB gears are listed in the approved section as well as the non-approved section. The A.A.R. approved Miner A-2-XB are identified by the cylinder D-7940 and the A.A.R. approved Miner A-22-XB identified by the cylinder D-7935. Billing repair card should reflect this information when gears of this type are applied in repairs to foreign cars.

39. When gears applied are of a different length from that of the gear removed (same coupler pocket length), billing repair card must account for the follower plates applied or removed as the case may be.

40. In cases of defective experimental friction draft gears removed from foreign cars, such draft gears should be held and promptly reported to car owner for disposition as outlined in Rule 17.

41. Charge is permitted for tightening Cardwell spring rods and when performed separately as outlined in Rule 107 must be reported on billing repair card.

42. When draft springs are renewed, billing repair card must show if new or secondhand and also if applied to a friction draft gear or applied to a non-friction draft arrangement such as the "Miner tandem" gear.

CAR BODY

1. Rules 107 and 101 specify average labor allowances and applied prices of various car parts. Such allowances and applied prices frequently include auxiliary items necessarily R&R or renewed in connection with the part specified. A careful study of the allowances and applied prices will enable preparation of billing repair cards in an understandable and intelligent manner.

2. Labor charge for straightening parts in place on car is on basis of actual time and includes fuel used in heating.

3. In computing weight for parts that have been removed from car for straightening, the weight of attached parts secured by rivets or welding which are not R&R from the part straightened should be included in reporting weight of such items on billing repair card.

4. When high-tensile steel parts are applied in repairs, billing repair card must so specify account additional charge permitted when standard to car.

5. Paint: Rule 107 allowances and other established labor charges which specifically include material for paint also include material for shellac and varnish when used in lieu of paint.

6. No labor charge is allowed when sill steps, sill step braces or supports, handholds, ladder treads, ladders, and other items specified in Rule 108, are straightened or tightened on car.

7. Sill steps: Weight shown in table in Rule 101 is an arbitrary weight for sill steps only including treads. Lateral braces and rivets securing same are to be considered as extra fixtures.

8. Metal ladder brackets should be considered as independent of the ladder in so far as billing charges

are concerned. If straightening is involved, additional weight of brackets is in order when removed from car with ladder.

9. When metal ladders (including treads) are removed from brackets for repairs or renewal of ladder, charge for bolts or rivets securing ladder to brackets is proper. When brackets are removed from car with ladder, charge for bolts or rivets securing brackets to car is proper.

10. Ladder treads: Labor charge for "self-securing" ladder treads in connection with R&R of stiles is confined to the R&R of ladder stiles. This applies to the type of ladder treads which hook into the ladder stiles for securement.

11. Charge for riveting over ends of ladder treads with both ends riveted to prevent same from coming through ladder stile should be on actual time basis.

12. Brake step platform: Rule 101 indicates the auxiliary details included in the average allowance specified for wood brake step applied. Charge for wood brake step board when R&R only in connection with other repairs is on securement basis. Labor charge for renewal or R&R of metal brake step platform is on basis of rivets and bolts R&R plus R&R of brake shaft when necessary.

13. Hand brakes, patented or special type, when necessary to remove from car and dismantle for cleaning and lubricating, repairing, straightening or adjusting, and reassemble, labor charge is proper as specified in Rule 107. Charge extra for all bolts and rivets used in assembling and application to car.

14. Defective geared hand brake when removed from a foreign car or defects that are chargeable to owner should be held and promptly reported to car owner for disposition as outlined in interpretation following Rule 17.

15. Hand brake wheels, patented type, are chargeable as manufactured articles on basis of Rule 105 instead of table of arbitrary weights in Rule 101.

16. Bell crank bracket on geared hand brake is not considered a brake shaft support and charge for straightening same on car is permissible on basis of actual time.

17. For brake chain renewed on foreign cars,

show on billing repair card if new or secondhand, weight and securement.

18. Hand brake shaft ratchet wheel shims or keys used to secure or tighten up ratchet wheels on brake shafts, charge as specified in Rule 101 is proper.

19. Hand brake rods: Arbitrary weight specified in table in Rule 101 for brake connection rods is an average intended for application to all brake rods, whether hand or power operated brakes, other than bottom rods.

20. When roof running boards are renewed, or removed and replaced, the average allowance specified in Rule 107 is based on the width and length of running boards renewed and the length of running boards removed and replaced. This specified allowance includes labor and material for all screws and bolts passing through such running boards. When running boards are renewed, billing repair card must show applied sizes to include thickness, width and length. Example: "2 pcs. run. bd. $\frac{1}{8}$ "x5 $\frac{1}{4}$ "x10'-6" each—dec. & bro."

21. When running board saddles are renewed, billing repair card must show if running boards are removed and replaced or renewed, or only loosened and raised to apply new saddles. Running boards loosened from old saddles and not entirely removed cannot be counted as R&R, therefore, it is necessary to show screws in such running boards, separating between those securing running boards raised and new saddles, and those securing running boards raised and old saddles, as such screws carry different charge. Screws securing running boards renewed or completely R&R need not be shown. Example:

4 new saddles 3"x4"x22".

4 saddle bolts $\frac{1}{2}$ "x7".

1 pc. new run. bd. 1"x6"x12'-6".

1 pc. run. bd. R&R 1"x6"x8'-4".

8 screws in old run. bd. raised and new saddles.

6 screws in old run. bd. raised and old saddles.

22. When loose running board is secured, show on billing repair card the number of screws used. The use of nails or drive screws is prohibited in repairs to running boards.

23. Lumber: In reporting siding, lining, flooring, running boards, etc., renewed, the kind of lumber

used need not be shown on billing repair card. The average material price for lumber as specified in Rule 101 includes pine, fir, elm, oak and hickory, dressed and framed per board foot measure. Note that the material price specified for lumber is not confined to new lumber. See Rule 17 for permissible substitutions of different kinds of lumber used in renewing various wood car parts.

24. The applied sizes of lumber as applied to the car must be reported on billing repair card. When sheathing, roofing, lining or flooring is applied, show number of pieces used stating length, thickness and width. For further information in this respect see Rule 102.

25. When flooring, side planks or end planks are applied, billing repair card should show if matched lumber or straight edge lumber applied as required by Rule 9. Show symbol "M" to indicate matched lumber or symbol "SE" if straight edge lumber is applied. This information is necessary for the purpose of computing foot board measure under Rule 102.

26. Particular attention is directed to the item in Rule 107 which provides charge for renailing loose roofing, ceiling, siding and flooring, also separate item in Rule 107 covering renailing of lining and slats per end or section. This work is frequently done when conditioning empty cars for loading and repair points must see to it that such work is reported on billing repair cards when performed.

27. When reporting siding, flooring and roofing renailed, the total aggregate lineal feet of nailing strips to which renailed must be reported on billing repair card. Example: if 10 feet of siding is renailed at side plate, 10 feet at belt rail and 10 feet at the sill, billing repair card should reflect "30 lineal feet of siding renailed." See item in Rule 107 for reporting lining renailed.

28. When renewing sheathing that is bolted to metal posts and braces, the number and size of bolts removed and replaced must be shown as well as those renewed. This is necessary to arrive at correct labor charge.

29. On single sheathed cars, additional labor charge is proper for bolted sheathing or lining necessarily R&R to renew floor boards.

30. Lining: Average applied price specified in Rule 107 includes material for nails, paint and cement, but does not include bolts. Show on billing repair card size of bolts removed or replaced in connection with lining repairs as well as bolts renewed.

31. Lining: Charge is proper for lining necessarily R&R to apply bolts or rivets securing grab irons or end or side ladders.

32. Lining or ceiling: Billing repair card should specify if nails are set or are not set. If nails are set, billing repair card should show if holes were or were not puttied in order that the correct charge as specified in Rule 107 may be determined.

33. Flooring clips: Additional material charge is proper for floor clips standard to car when applied in connection with renewal of bolted flooring.

34. Flooring: Threshold plate bolts charged extra in old boards when in connection with floor boards renewed.

35. Flooring: Chain wells R&R on auto loader cars. Allowance for bolted flooring in Rule 107 does not include R&R or renewal of bolts securing auto loader chain wells passing through floor R&R or renewed.

36. Insulation in side and end walls of refrigerator cars may be spliced as provided in interpretation following Rule 16.

37. Metal roof sheets, when renewed, show on billing repair card size of sheets and number applied and whether sheets extend half or full width of car. Also, show amount of roof boards and running boards R&R on account of same.

38. Metal roof sheets repaired, show number and size of sheets, and if soldered, the quantity (in pounds) of solder used, and paint. Also bolts or nuts R&R or applied. Where rivets are applied the diameter and number should be reported.

39. End of car pushed out: The end framing, either whole or in part, when pushed out, must be replaced and secured by anchor rods, bolts, corner bands or by some substantial means, other than nailing, to justify charge.

40. Metal ends of car, when bulged out, labor charge is permitted on actual time for jacking and

straightening necessarily performed on such ends to provide for brake shaft clearance, etc.

41. Doors: Rule 107 defines the different types of doors and specifies charges in connection therewith. This rule must be closely observed when billing for door repairs or renewals in order that billing repair card will reflect the correct description and to assure proper charges in connection therewith.

42. A framed door is one where the vertical stiles and horizontal rails are framed, tenoned or mortised into each other.

43. Cost of center door post does not enter into the cost of door repairs under any condition. Door prices specified in Rule 101 do not include labor or material for center door post when same is attached to door.

44. Doors: Additional charge for R&R of monogram plates, sign plates, placard boards, etc., is proper in connection with door renewals.

45. Metal doors, when removed from car for straightening, charge on basis of complete weight of door. When straightened on car charge on basis of actual time.

46. Metal side and end doors: Average price specified in Rule 101 includes renewal of doors constructed of plain sheets as well as those of corrugated construction.

47. Metal side and end doors: When necessary to renew only a section of door, charge on basis of material plus rivets or bolts used. Total charge not to exceed the cost of complete door.

48. When billing for doors replaced or rehung, billing repair card must show whether door is partly off or entirely off rail. The term "off one hanger" or "off complete" may be used.

49. Doors replaced, if out of guide brackets, must be reported on billing repair cards as Rule 107 provides labor charge to cover. This is a frequent repair and repair points will see to it that billing repair cards are rendered to cover.

50. Doors refitted on refrigerator cars: Planing and refitting of doors to permit proper closing constitutes permanent repairs and charge on actual time basis is proper.

51. Side doors missing on refrigerator cars is a delivering line responsibility regardless of the circumstances under which such doors became missing. It should, however, be understood that car owners are responsible for missing side doors on house cars other than refrigerator cars unless missing as a result of some Rule 32 condition or car bears evidence of being sideswiped, cornered, etc.

52. Drop doors closed on authority of defect card per Rule 35. Any repair to defective doors or door mechanism is not subject to this item but should be treated the same as any other repairs according to responsibility.

LOAD R&R ACCOUNT REPAIRS

1. When a load or any part of it is necessarily moved to make repairs, as specified in Rule 107, billing repair card must so state. The moving or shifting of live stock in cars to make repairs constitutes R&R of load. Repair points will see to it that this work is reported on billing repair cards when performed.

2. When necessary to remove load in open top cars in connection with transverse tie rods applied or repaired, billing repair card should so state. See Rule 21 regarding transverse tie rods on open cars when sides are bulged beyond clearance limits of handling line.

3. No charge is permitted for removing load in connection with R&R or renewal of pressure retaining valve bolts or rivets.

4. No charge allowed versus owner for adjustment of lading shifted against brake shaft.

5. For lumber used in adjusting loads, material charge should be computed on basis of method outlined in Rule 102.

REPACKING JOURNAL BOXES JOURNAL BEARINGS

1. Periodical repacking of journal boxes on foreign cars will be performed upon expiration of the time limits specified in Rule 66. The work performed will be in accordance with the provisions of this rule and charge rendered versus owner regardless

of responsibility of handling line for change of wheels or other repairs.

2. When wheels are changed or other work performed which necessitates removal of packing from four or more boxes and repacking date is between nine and fourteen months old, the provisions of paragraph (g-2) of Rule 66 must be observed in regard to repacking of all boxes under the car. Repair points will see to it that this feature is not overlooked and billing repair cards prepared accordingly.

3. When all boxes are repacked in accordance with the requirements of Rule 66 due to change of one or more pair wheels in each truck and repacking date is between four and nine months old, the stenciling may be changed as indicated in paragraph (g-3) of Rule 66, for which one-half hour labor may be charged.

4. Charge for repacking of journal boxes is not permitted until full expiration of the time limits specified in Rule 66. For example: when repack date on car shows boxes last repacked on 21st day of the month, periodical repacking is not due until the 22nd day of the expiration month.

5. When car bears no stenciling showing date of previous repacking, all boxes must be repacked per Rule 66.

6. When journal boxes are repacked in accordance with Rule 66, the repack markings must be stenciled as required by this rule. No change to be made in the stenciling unless all boxes are repacked and the work complete, in all details, has been performed.

7. It is the intent of Rule 66 that periodical repacking of journal boxes be performed only when cars are on repair track or tracks where suitable facilities have been provided to perform the work.

8. Separate Forms 1179 must be prepared when billing for periodical repacking of journal boxes. Billing repair card must show length of journal, work performed per Rule 66, name of road and date of last repacking, "no date" or "date illegible," and if repacked prior to expiration of 15 months, shop purpose for which car was shopped. For work performed on six-wheel trucks, add the notation "six-wheel trucks" on billing repair card.

9. Repacking of journal boxes on foreign passenger equipment cars will be performed upon expiration of time limit specified in P.C. Rule 7. The work to be performed as outlined in detail in Rule 66 for freight cars with the exception of the repack date stencil which will be located as provided in P.C. Rule 7. Billing repair card to be prepared same as for freight cars and in addition thereto must show number of boxes repacked.

10. The term "journal boxes repacked per Rule 66" shown on billing repair card will be accepted as evidence that all work has been properly performed.

11. For journal bearings or wedges renewed in connection with periodical repacking of journal boxes, billing repair card for the journal bearings or wedges should show "Repacked—Rule 66." Do not report journal bearing or wedge renewals on the billing repair card for repacking journal boxes.

12. For journal bearings applied, billing repair card must show new or secondhand (broached), length of journal, box number and defect for which removed. For defects which justify renewal of journal bearing see Rule 66. For journal bearings applied show length and not number. All Santa Fe standard journal bearings are "solid."

13. Delivering line is responsible for missing journal bearings and also for journal bearings, journal wedges, box bolts and dust guards renewed in connection with wheels and axles removed for delivering line defect. Renewal of journal bearings under these conditions not being chargeable to owner, consideration should be given to use of serviceable broached brasses when available.

REWEIGHING CARS

1. Attention is directed to Rules 30 and 31 covering this subject. Rule 30 outlines when and how the reweighing of cars is to be performed while Rule 31 specifies conditions under which the reweighing is chargeable against car owner. For periodical reweighing of foreign cars, the expiration of time limits as specified in Rule 30 must be observed.

2. Cars to be lightweighted must be dry and free from snow and ice, temporary fixtures which affect

weight of car must be removed, floor and hoppers must be clean, and in the case of refrigerator cars brine tanks and ice bunkers must be empty.

3. When cars are restenciled after reweighing, all old stenciling to be renewed must be obliterated with quick-drying paint. It will be necessary only to renew all lightweight numerals, station symbol, date (month and year), and load limit numerals. The capacity numerals and letters "CAPY," "LD LMT" and "LT WT" must be renewed when indistinct. It should be understood that the renewal of only a portion of the lightweight numerals and load limit numerals will not meet Rule 30 requirements. When load limit is marked with the star (*) symbol it must not be changed as this indicates car owner has reduced the load limit of car account structural limitations or other reasons. See Rule 30.

4. Particular attention must be given to the proper location of lightweight stenciling. This stenciling, as well as size of letters and figures, should be in accordance with A.A.R. Standards for Marking and Lettering of Cars.

5. The application of new lightweight markings as to location should conform to the standard of car; however, the stenciling of new lightweight markings within a few inches from location of previous marks to avoid delay in restenciling car account wet paint over old marks is not such as to justify claim for wrong repairs.

6. For cars reweighed and restenciled in accordance with the provisions of Rule 30, billing repair card must show station symbol and date of last previous weighing, old and new lightweight, also the old and new load limit markings. If car bears no load limit markings or when load limit is marked with the star (*) symbol, billing repair card should so indicate. Billing repair card must clearly indicate reason for reweighing car such as old date, no lightweight marking on car, or other causes as specified in Rule 31.

7. Tank cars and live poultry cars are to be reweighed only on authority of car owner. This also applies to refrigerator cars designed and constructed for passenger train service.

REMARKING AND RELETTERING FREIGHT CARS

1. Attention has been called to the need for brightening the numbers and initials on freight car equipment, particularly cars of steel construction. This condition makes it extremely difficult for number takers to be certain that they have taken the correct numbers and in consequence there are numerous errors in the records which are costly to correct. When the lettering or numbering is found in bad condition, the identity should be renewed by restenciling.

2. If there is not sufficient paint on car to properly retain the new stenciling, one coat of paint should be applied as a panel back of the stenciling so that the paint used in applying the numbers and letters will hold, otherwise the marking applied will soon become illegible and make it necessary to again apply the identity marking within a short period. Before applying paint to steel, it should be scraped so as to clean off all loose paint.

3. Detention of equipment for such stenciling should be avoided as this work can be done when cars are on repair tracks for other work.

4. Rule 107 specifies charge for restenciling of car to preserve its identity and billing repair cards for this work to be prepared accordingly.

WELDING

1. The specifications and regulations for fusion welding by either the electric or oxy-acetylene process, or bronze welding, are fully set forth in Rule 23 and must be complied with.

2. The provisions of Rule 23 must be given careful study in order that foremen and employees engaged in repairing car parts by welding will know the defects and parts which may or may not be repaired by the welding process. All welders doing this work must be certified as required by Rule 23.

3. Rule 23 specifies the parts which must be marked after welding for record purposes, such markings to be in accordance with the requirements of this rule.

4. The welding limitations and heat treatment requirements of the various car parts tabulated in Rule 23 must be carefully observed. Note in partic-

ular the specified parts which require removal from car for welding.

5. For parts requiring heat treatment after welding, the heat treatment for such parts must be in accordance with the provisions of Rule 23.

6. Charge for acetylene and electric welding of freight car parts as specified in Rule 107 includes all necessary welding material, gas or current, and all labor in preparing parts for welding. Does not include jacking of car if necessary, nor annealing, normalizing or stress-relieving where required.

7. Where annealing, normalizing or stress-relieving is properly performed, as required by Rule 23, this information must be shown on billing repair card for which additional charge will be made on per pound basis of the part welded.

8. For welding performed, billing repair card should reflect the kind of material and weight of part welded, heat treatment when performed per Rule 23, welding process used, number of welds made, thickness of part welded and length of each weld.

9. Measure thickness through section of part welded and not through reinforced section of weld. Where parts vary in thickness, charge on basis of mean average thickness between points of weld. The length of weld chargeable to be the length of bevel or opening cut made at point of fracture in preparation for weld.

10. For building up worn surfaces by either electric or acetylene process, charge is determined on basis of (1) average thickness of the built-up section as thickness of the part welded and (2) each square inch of area of the built-up section as one lineal inch of weld.

11. Total charge for repairing a part by welding is limited to cost of such part new, or, gross second-hand value for parts listed in Rule 104. For example: the cost of welding several fractures on a spring plank may exceed its secondhand value. In cases of this kind the weight of the part welded should be reported on billing repair card in order to permit proper charge.

12. For fillet welding performed on freight cars, charge is based on each lineal inch of weld or frac-

tion thereof regardless of depth or width of bead. Billing repair card should reflect the length only in lineal inches in reporting size of such welds, thus; "Electric fillet weld—8 in."

13. Do not confuse fillet welding with ordinary welding. A shim placed on carrier iron and welding performed around the edge of shim to hold it in place would be an example of "fillet" welding to be charged out on lineal inch basis. A fracture in truck bolster welded through entire thickness of the part welded would be an example of ordinary welding to be charged out on basis of thickness of the part welded and length of the weld.

BOLTS AND RIVETS

1. When bolts or rivets are applied, show on billing repair card purpose for which they are used, thus; carrier iron bolts, center plate rivets, etc. For bolts applied show number used and size (length and diameter). For rivets applied show number used and diameter size (length need not be shown). For bolts damaged in repair, or rivets cut account repairs, billing repair card should so state.

2. Bolts substituted for rivets, in cases of owner's defects, where rivets are standard to the car, are considered as temporary repairs, no bill, except as otherwise provided in Rule 17. It should be noted that bolts substituted for rivets are considered as proper repairs where used in securing ladders, ladder treads, handholds, sill steps and uncoupling lever brackets; also, proper to use bolts for securing coupler and draft gear supports on tank cars. Bolts are not to be substituted for rivets which pass through the shell or metal jacket of tank of tank cars.

3. The substitution of bolts for rivets, or bolts used as rivets in coupler yoke is considered as temporary repairs for which no charge is permitted as specified in Rule 17.

4. When nuts are applied to journal box bolts, brake hanger bolts, carrier iron bolts, or coupler and draft gear support bolts, Rule 64 specifies that such common nuts must be secured with nut lock or lock nut to justify charge. This also applies to the complete bolt when applied in such cases.

5. Additional material charged is permitted for nut locks or lock nuts when renewed and repair points must not overlook reporting this detail on billing repair cards.

6. In reporting length of "I," "J" and "U" bolts, measurement is to be taken from center of "I" or bottom of "J" or "U" types to the threaded end.

7. The renewal or R&R of all items not specifically covered in the rules, which are secured by bolts, nuts, rods, pins, key bolts, anchor bolts, eye bolts, "J" or "U" bolts, turnbuckles, lags, screws, rivets, or welding, are to be charged on that basis.

8. On passenger equipment cars the labor allowance as specified for bolts in P.C. Rule 21 applies only to such bolts as are renewed or R&R separately and not in connection with other repairs. When a complete part is R&R or renewed for which no allowance is specified, charge should be on actual time basis regardless of method of securement.

9. All spring cotters, split keys, nuts, lock nuts, etc., must be reported on billing repair card whether applied separately or in connection with items R&R or renewed.

MANUFACTURED ARTICLES

1. Manufactured articles are those which are not subject to competitive prices, and which can only be obtained from one manufacturer or concern.

2. Manufactured articles which are not included in Rule 101 for freight cars and P.C. Rule 22 for passenger equipment cars are to be charged at current market prices.

3. The term "current market prices" refers to the net store department cost which is obtained by adding to the factory price the percentage specified in Rule 105 to cover store expense, interest on stock investment, commercial and deadhead freight haul.

4. For manufactured articles, store department price should be secured to which should be added the percentage specified in Rule 105, and from total of these items scrap credit should be deducted. Computation should be made to left of miscellaneous column and net charge carried to miscellaneous column.

5. Pressed steel parts such as end sills, center sills, draft sills, body bolsters, truck bolsters, metal ends of cars and other pressed steel shapes should be regarded as manufactured articles only when protected by a patent and obtainable from one manufacturer, and are not obtainable in the open market.

6. Truck bolsters, truck sides, etc., which are made by more than one steel company cannot be considered as a manufactured article.

7. Such articles as bottom outlet valve extension or nozzle, or bottom washout casting which require machining may be charged out at net store department cost.

8. Individual friction draft gear parts should be charged at factory prices as indicated in note preceding table of friction draft gears in Rule 101. Example: "Cardwell casings, center friction member, side friction member, etc. Cardwell spring rods and springs are charged out on per pound basis at the A.A.R. rate specified in Rule 101.

9. In the case of secondhand manufactured articles not included in Rule 101, when net store department cost of new material cannot be determined, secondhand materials of this kind are to be charged out on the weight basis at the A.A.R. rate per pound.

MATERIAL ORDERED FOR FOREIGN CARS

1. In ordering material from foreign car owners, Mechanical Superintendent should be promptly notified and wire order placed direct and at once on car owner, the wire to be immediately confirmed by letter with copy to Car Accountant and Storekeeper, sending to Storekeeper 1109 requisition covering the material ordered with notation made thereon reflecting car number, initial and items of material. The wire order, as well as the 1109 requisition, must show if owners or handling line responsibility. The 1109 requisition should also show ordered by wire, giving date of wire.

2. When material for repairs to foreign cars is received from owners, records must so state showing weight and class of material, and must be charged at full invoice cost.

3. When owner's invoices reflect a price and an additional charge to cover store expense or other

percentages, the sum of the invoice price and such percentages shall be used as the "invoice cost," and so reported on records.

4. A copy of the transportation expense bill must be attached and accompany billing repair card Form 1179 regardless of whether shipment is made by freight or express and regardless whether repairs are owner's or delivering line responsibility. Material must not be shipped deadhead but should be handled as revenue billing to comply with requirements of the Interstate Commerce Commission given in Conference Ruling 383. Such bills must show all transportation charges from point of origin to point of destination.

5. When a defect card is issued in exchange for car repair material secured locally from other companies, such defect cards must be marked "Material only" and show if new or secondhand. The name of the company from which the material is secured must be shown at the lower left hand corner of the defect card. Notation should be made on billing repair card in the "Repairs Made" column to show that the material was furnished by another company, thus; "Material furnished by the (name of company) on authority of defect card issued for material only." When material is furnished by car owner locally and delivered by truck, billing repair cards should so indicate.

6. In ordering material from foreign car owner, consideration should be given to the repair material described in Rule 122 which the repairing line is to furnish from its own stock, lumber, forgings, hardware stock, paint, hairfelt, piping, air brake material and all A.A.R. Standard material. Car owner may decline furnishing such items and if furnished may reclaim the transportation charges and per diem involved.

7. The term "forgings" includes commercial shapes such as channels, Z bars, etc., which should be furnished by repairing line. Pressed steel shapes which require special dies for their forming should not be classed as forgings; such material to be furnished by car owner as indicated in Rule 122.

8. If car owner advises he is unable to furnish material which had been properly ordered under Rule 122, the repairing road cannot be held responsible for the improper or temporary repairs made

in direct consequence of failure of car owner to furnish proper material. Any such improper or temporary repairs of owner's defects are chargeable to owner.

9. In connection with handling per Rule 122, attention is directed to the provisions of Per Diem Rule 8 as follows:

(a) When a car is detained awaiting the receipt of repair material, which under Mechanical Division Interchange Rules must be obtained from owner, the per diem shall cease from the date the necessary material is ordered from the owner until the date on which it is shipped in the manner prescribed by Mechanical Division Interchange Rule 122, as evidenced by carrier's shipping receipt.

(b) When car is reported to its owner under Mechanical Division Interchange Rule 120, per diem shall cease from date of such report.

If owner authorizes the repair of such car, and no repair material is required from owner, per diem shall begin after repairs are completed, but in no case to exceed 60 days from the date such authority is given. If repair material must be obtained from the owner under Mechanical Division Interchange Rules, per diem shall begin after repairs are completed, but in no case to exceed 60 days from date such authority is given, plus the number of days intervening between the date necessary material is ordered and the date on which material is shipped in the manner provided by Mechanical Division Interchange Rule 122, as evidenced by carrier's shipping receipt.

(c) Under paragraphs (a) and (b), if more than one order for material is made, the first order only shall stop the per diem.

In case all or any part of the material is duplicated by car owner on account of the original shipment becoming lost before delivery to the road holding the car, or while in the possession of the express company, per diem shall cease from the date of the original order until the date on which the duplicate shipment is made as evidenced by carrier's shipping receipt.

PASSENGER EQUIPMENT CARS

1. As an introduction to this subject, all parties concerned are referred to the Preface and general information contained in this pamphlet.

2. Defects for which the delivering line is responsible under the A.A.R. Passenger Car Rules must be carded at time of interchange. Particular attention should be given to P.C. Rule 8 for information regarding delivering line responsibility on passenger equipment cars.

3. All repairs to foreign passenger car equipment must be reported on billing repair card Forms 1179 showing all operations in detail the same as for freight car repairs except that box numbers shall be reported for wheels, brake beams, journal boxes and contained parts.

4. For repairs to train pipe, steam end valves, couplers, brake beams and other such operations as are not covered by specified labor allowance in P.C. Rule 21, or applied price in P.C. Rule 22, billing repair card must show actual number of hours for all labor consumed to permit labor charge on actual time basis.

5. Material not listed in P.C. Rule 22 or Rule 101 of the freight car rules will be charged out at net store department cost. Billing repair cards must show sufficient details, including local store department price, for any such material of special make and cost.

6. The A.A.R. definition of passenger train cars shall determine whether or not cars are of passenger construction. See P.C. Rule 19 for details.

7. On cars with lighting system using illuminating gas moving from one railroad to another, the receiving road shall issue gas certificate or defect card authorizing the delivering road to bill against it for the gas in such cars at time car was received. See P.C. Rule 17.

8. Defect cards or gas certificates covering illuminating gas in cars must show the size and number of holders, and the number of atmospheres of gas in each size of holder. This information is essential for billing purposes.

9. Defect cards or gas certificates secured from receiving road on gas illuminated cars leaving our

line are to be included in regular car repair billing transmittals to Topeka. Forms 1179 need not be made to accompany such defect cards or gas certificates.

10. Settlement for passenger equipment cars destroyed will be in accordance with P.C. Rule 18. The principle as to handling and option given car owner as to settlement on depreciated basis or return of car home, as outlined in Rule 112 for freight cars, also applies to passenger equipment badly damaged in unfair usage.

11. Railway Express Agency Cars: Billing repair cards are to be prepared against the Railway Express Agency in accordance with the A.A.R. Rules to cover all repairs to cars of its ownership. Billing to be handled the same as for cars belonging to other railway companies.

12. Defect cards must be secured from foreign lines for all delivering line's defects on Railway Express Agency cars received in interchange, and billing rendered thereon by the station making the repairs.

13. Cars bearing the legend "Santa Fe" on the side letter board and also stenciled "Railway Express Agency" on the sides are owned by the Santa Fe and care must be taken not to confuse these cars with the express and refrigerator cars owned by the Railway Express Agency, which are not lettered "Santa Fe." This also applies to cars of foreign lines over which the Railway Express Agency operates.

METALLIC STEAM CONNECTORS STEAM TRAIN LINE

1. In all cases where rubber steam hose is removed, whether owner's or delivering line defects or in correcting wrong repairs, the purchaser's initials cast on the rubber hose, also size and number of coupler head, must be shown on billing repair card. Repair points must see to it that this information is not overlooked.

2. For metallic connectors removed and applied, show on billing repair card the size and if insulated or non-insulated as indicated in P.C. Rule 22. For connector applied show if complete with coupler head.

3. Billing repair cards must show what parts are defective on metallic connectors removed to assure proper charges and credits as outlined in P.C. Rule 22.

4. In repairing metallic connector on car and defective joint gaskets only are renewed, show on billing repair card the joint gaskets applied and the labor on actual time.

5. When metallic connector is necessarily R&R for reconditioning account joints inoperative due to dirt or corrosion, no parts renewed, show labor for this work on actual time basis.

6. For steam end valves removed and applied, billing repair card should show type and size as indicated in P.C. Rule 22, labor on actual time basis, and cause for removal. If the operating attachments, such as valve handle yoke and drop handle, are necessarily renewed, billing repair card should so specify.

7. P.C. Rule 13 lists the minor operations for which no labor charge is allowed. The item "Unions or connections tightened" does not apply to steam lines covered with insulation. Charge is permitted for tightening such steam lines when loose or leaking on actual time basis to include insulation or other parts necessarily R&R in connection therewith.

8. On freight equipment cars, delivering line is responsible for rubber steam hose missing complete, also missing end steam valves and metallic connectors or rubber hose substituted therefor, where cars are stenciled that they are so equipped.

9. On passenger equipment cars, delivering line is responsible for missing rubber steam hose, metallic steam connectors, end steam valves and any portion of steam train line missing with end steam valves.

10. Metallic steam connector will be considered as missing on passenger cars in interchange when rubber steam hose is on the car, whether or not car is stenciled for metallic steam connectors. This is a delivering line defect in interchange for which defect card protection should be secured.

11. On passenger equipment cars, delivering line is responsible for steam lines or any parts thereof damaged or missing as a result of (1) failure to

uncouple steam connections when uncoupling cars, (2) couplers passing, (3) from contact with bumping post or substitute for same, (4) or other P.C. Rule 8 agency.

12. It should be understood that steam lines damaged as result of train parting due to broken knuckle, etc., is owner's responsibility providing no P.C. Rule 8 condition involved. In such cases, if steam connections are pulled off on line, the condition of the parts should be determined before billing is rendered. If the parts are located, they will not constitute missing material.

13. Elbow or other pipe fitting used in place of end steam valve is considered as a delivering line defect in interchange on basis of missing end steam valve for which defect card protection should be secured.

14. For delivering line responsibility in case of burst or broken steam pipes or water pipes and fittings due to freezing, see P.C. Rule 8.

15. Under P.C. Rule 16, private or other passenger equipment cars, except regular line cars, when offered in interchange equipped with steam couplings that will not couple with the standard of the receiving line must be changed by receiving company; the steam coupling removed to accompany car and be reapplied when car leaves the line.

PULLMAN CARS

1. A.A.R. Rules do not govern the responsibility for damage to Pullman cars as this is covered by special agreement between the respective companies.

2. Copy of the Pullman Repair Schedule covering labor charges for various items of repairs is furnished each repair point. This schedule and all letter instructions pertaining to Pullman billing should be filed together for ready references.

3. Repair bills are not to be made on A.A.R. basis. Form 1188-A has been provided for reporting in detail all work performed and material used on Pullman cars, and should be used for that purpose.

4. Forms 1188-A should be consecutively numbered in the upper right hand corner beginning each month with number "1." Billing should be prepared in triplicate sending original and one copy to To-

peka in regular transmittal. The third copy to be retained at repair point and filed in numerical order according to the number assigned to each form. In cases where the billing covers wheels with generator pulley, or any repairs to lighting or air conditioning equipment, a fourth copy of Form 1188-A should be made and forwarded direct to the Car Lighting and Air Conditioning Engineer at Topeka, and each copy of such sheets marked in the lower left hand corner "Copy to Car Light. Engr."

5. All repairs made to Pullman cars must be reported on Form 1188-A without regard to cause. Each repair item should be shown separately opposite the name or number of car repaired with all the information for which the form provides, except columns headed "Class" and "Credits" which are for Audit Office use only. Money extensions for both labor and material will be inserted in the "Amount" columns by Topeka.

6. Where the labor schedule does not provide an allowance for any operation performed, actual time should be reported which should include all preparatory work.

7. Particular care must be exercised in reporting material applied in repairs to Pullman cars. When Santa Fe material is used it must be shown as "SF" in the proper column, and when Pullman material is used it should be reported as "Pull"; likewise, the disposition of parts removed must be shown in the proper column to definitely indicate whether retained by Santa Fe or returned to Pullman Company. It will be up to the parties preparing Forms 1188-A to see to it that the correct information is reported.

8. All repairs made to a Pullman car should be shown on the same Form 1188-A where it is possible to do so. In cases of accidental damage, irrespective of cause, repairs to other Pullman cars should not be reported on the same Form 1188-A; however, where one or more Pullman cars are involved in the same accident and all repairs can be reported on the same Form 1188-A, that will be proper.

9. Repairs to Santa Fe owned Budd-built lightweight sleeping cars operated by the Pullman Com-

pany should be reported on separate Forms 1188-A. The original complement consisted of five cars; namely, the Navajo, Isleta, Oraibi, Taos, and Laguna.

10. Wheel slips, Form 1179-A, covering wheel changes under Pullman cars should be made to reflect all required information and should be retained at the repair point for future reference. It will not be necessary to attach such wheel slips to Pullman billing; instead, Form 1188-A should be prepared to show complete information for the wheels changed including RS numbers of the wheels applied and removed. For the wheels removed, be particular to show if treads were turned or not turned and in case wheel treads are ground or journals reconditioned this work must also be reported on Form 1188-A.

11. For slid flat wheels removed from Pullman cars, show on Form 1188-A the amount of service metal before and after turning and also show if the wheels had full flange contour. In case additional metal is turned off to restore full flange contour beyond the amount required to remove the flat spots, this information should also be reported on Form 1188-A. Example:

Before	After
20/16	15/16
3/16 account slid flat	
2/16 additional to restore FFC	

12. Form 1188-A should clearly show disposition made of the wheels removed and also show whether the wheels were returned to the Pullman Company locally or at another point.

13. Unless otherwise provided, wheels removed at intermediate points should be held and disposition secured through the Assistant to Vice-President. In such cases, Forms 1188-A should be forwarded to Topeka in regular transmittal with notation showing disposition has been requested and date of such request. After disposition has been secured and wheels are shipped to point designated by Pullman Company, supplementary Form 1188-A should be furnished to show loading expense and disposition of wheels. In the event Pullman Company requests the wheels be taken into Santa Fe stock,

the RS numbers should be obliterated by the repair point where the wheels are located and Santa Fe markings applied.

14. When requesting disposition of wheels the following information should be furnished: Date and place of removal and name or number of car from which removed, RS number of wheels and whether or not they have full flange contour and the amount of service metal based on full flange contour. Also, give condition of axle, whether OK or scrap.

15. When Pullman wheels are shipped, either for turning or other disposition, Form 1188-A must be made at point of shipment to cover the expense of loading. The shipment should be waybilled on regular revenue waybill at commercial rate consigned to the Pullman Company in charge of the proper officer of that company. At points where there is no Pullman representative, shipment should be consigned to the Pullman Company in care of the proper railroad official. The transportation charges should be collected at destination if there is a Pullman representative authorized to pay such charges; otherwise, transportation bill should be remitted to the Treasurer by the local Agent as cash for collection from the Pullman Company.

16. Bills should be made for the cost of unloading and handling of wheels furnished by Pullman Company for stock, and when defective wheels are returned to Pullman Company, bill should be made for the cost of handling and loading as well as blocking when performed. Actual time consumed in loading and unloading wheels should be reported on Form 1188-A, also the rate of pay for each employe engaged in the work.

17. When necessary to apply Santa Fe wheels under Pullman cars, bill should be made on Form 1188-A to cover all labor and material used, and wire must be sent to the Master Mechanic or Division Foreman at the point where car terminates its run, advising of the application of Santa Fe wheels. Copy of such wire should be attached to the Form 1188-A covering application of the Santa Fe wheels. The receiving terminal will watch for the car and if possible remove the Santa Fe wheels and apply Pullman wheels (or advise otherwise), rendering bill against the Pullman Company for the exchange

of wheels plus the mileage wear made by the Santa Fe wheels at the rate of 85c per 1,000 miles per pair.

18. When Universal or D-22 control air brake valves are cleaned, Form 1188-A must specify the portions cleaned to show whether complete valve or a portion only is cleaned. If cleaned locally, repair point must see to it that all repair parts used are reported as these are charged in addition to the cleaning.

19. When air brake valves are shipped to another point for cleaning and repairs, the removing point in addition to properly tagging the valve for identification will mark the valve with yellow crayon showing Pullman name or number of car from which removed. The removing point will promptly advise the repair station of the valve shipment, and will hold billing covering the removal of valve, cost of crating and carting to train, until repair station completes its work on the valve. Repair station will advise removing point what parts are applied, labor and material, and if none so state, and will advise cost of crating and carting from and to train. Removing point will consolidate the above and add carting from train when valve is received showing mileage to and from repair point, making bill in full on Form 1188-A.

20. It is the intent that such parts as metallic steam connectors, steam end valves and regulators removed from Pullman cars be returned to the Pullman Company regardless of responsibility for repairs or whether Santa Fe or Pullman material is used in making repairs. At points where Pullman store is located such parts may be returned direct. At other points, care must be exercised when shipping the material to see that it is properly tagged and marked so no error will be made in identification and return to Pullman Company. The material should be shipped commercial billing and advice should be given to the point to which shipped. When such parts become defective or are pulled off on line or at intermediate points, the parts may be turned over to the porter in charge of the car for placement in locker if space permits. For parts so disposed of, appropriate notation should be made on Form 1188-A in the disposition column.

21. When Pullman cars are interchanged to this line with defects for which delivering line is responsible under the A.A.R. Rules, defect card when received should be forwarded to Traveling Car Clerk supervising the territory. If repairs to such defects are made they must be billed on Form 1188-A and notation placed thereon to show that car was received in this condition from another road, giving the name of the road, date and place.

22. When Pullman cars are interchanged from this line to another with defects for which, under the A.A.R. Rules, the delivering line is responsible, this Company will furnish on demand its defect card in order to keep the car in forward movement.

23. When ordering material from the Pullman Company for repairs to its cars, it is not necessary to state whether owner's or handling line responsibility.

24. Form 1207 covering damage to Pullman cars should be made in accordance with the instructions given under the subject of "Accident Reports."

25. When slid flat wheels are removed from Pullman cars, sufficient investigation should be made to determine if possible when, where and under what conditions the sliding occurred. Reports covering slid flat wheels removed from Pullman cars should show if air brakes did or did not function properly and results of air brake test in connection therewith.

26. When preparing reports to cover parts that fail or any defective condition on Pullman cars which would be considered as being of an accidental nature, the defect should be accurately described and evident cause reported. Sufficient details should be shown on such reports to determine if result of negligent handling or simply due to failure of the part.

27. Copies of all such reports must be sent to Topeka promptly.

REPAIRS TO CONTRACTOR'S EQUIPMENT

Bills to cover cost of repairs to contractor's equipment should be made on basis of A.A.R. Rules. If the equipment is accompanied by a messenger, or a representative of the contractor is present, request

should be made for written acknowledgment authorizing bill for payment. The name and address of contractor should be secured together with any other information that will facilitate collection of charges. Repairs should be recorded on Form 1179 to be prepared locally and accompany miscellaneous bill. Forms 1179 should not bear serial numbers.

LAND SHOW AND THEATRICAL CO. CARS

1. Billing should be rendered on basis of A.A.R. Rules and billing repair cards prepared locally to accompany miscellaneous bill.

2. Bills covering cars under this heading must be collected before the equipment leaves town regardless of whether owner is or is not a member of the Association of American Railroads.

3. Repair points must particularly note that Forms 1179 are to accompany bills presented for payment and are not to be included in regular transmittals. Forms 1179 should not bear serial numbers in such cases.

DAMAGE TO CARS BY LOCAL INDUSTRIES

When cars are damaged by private industries, a close inspection of the damage should be made and a CAREFUL estimate on A.A.R. basis furnished to party responsible to secure acknowledgment of responsibility and authority to render bill for repairs. When such authority is secured miscellaneous bill on A.A.R. basis, supported by Form 1179, should be prepared locally. Forms 1179 should not bear serial numbers.

MECHANICAL DEPARTMENT LABOR FURNISHED OTHER DEPARTMENTS

When labor is furnished for transfer or adjustment of loads, it should be distributed to Station Labor Account. Unloading stock wheels and axles for Store Department should be distributed to Stock C. Other Mechanical Department labor used for the benefit of any other department must be distributed to account benefited. This to relieve Account 314 from charges that are sometimes incor-

rectly distributed. Supervisors of such work must see to it that time is properly reported to cover items of this nature.

SUPPLIES FURNISHED PASSENGER CARS

1. Reports showing all supplies furnished passenger cars, other than system equipment, accompanied by receipts obtained from parties in charge of the cars should be forwarded to the General Storekeeper at Topeka for billing. Care must be taken to ascertain the ownership of the car and if Pullman, to whom leased.

2. Collection should be made locally for supplies furnished to equipment in service of land, show or theatrical companies before departure of the equipment and report thereof, including copy of Agent's remittance slip, forwarded to General Storekeeper for billing.