

# TM 11-1056

WAR DEPARTMENT TECHNICAL MANUAL

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# TRAILER K-34-D

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TM 11-1056, War Department Technical Manual, Trailer K-34-D,  
is published for the information and guidance of all concerned.

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X

(For explanation of symbols see FM 21-6.)

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## DESTRUCTION NOTICE

**WHY**—To prevent the enemy from using or salvaging this equipment for his benefit.

**WHEN**—When ordered by your commander.

- HOW**—1. Smash—Use sledges, axes, hammers, crowbars, heavy tools, etc.  
2. Cut—Use axes, handaxes, etc.  
3. Burn—Use gasoline, kerosene, oil, flame throwers, incendiary grenades, etc.  
4. Explosives—Use TNT, grenades, etc.

## USE ANYTHING IMMEDIATELY AVAILABLE FOR DESTRUCTION OF THE EQUIPMENT

**WHAT**—Place 2 pounds of TNT over the axle inside each wheel. Insert caps with at least 5 feet of safety fuse in each charge. Ignite the fuses and take cover.

Time required: 1 to 2 minutes. Return and douse tires with gasoline. Ignite the gasoline.

## DESTROY EVERYTHING

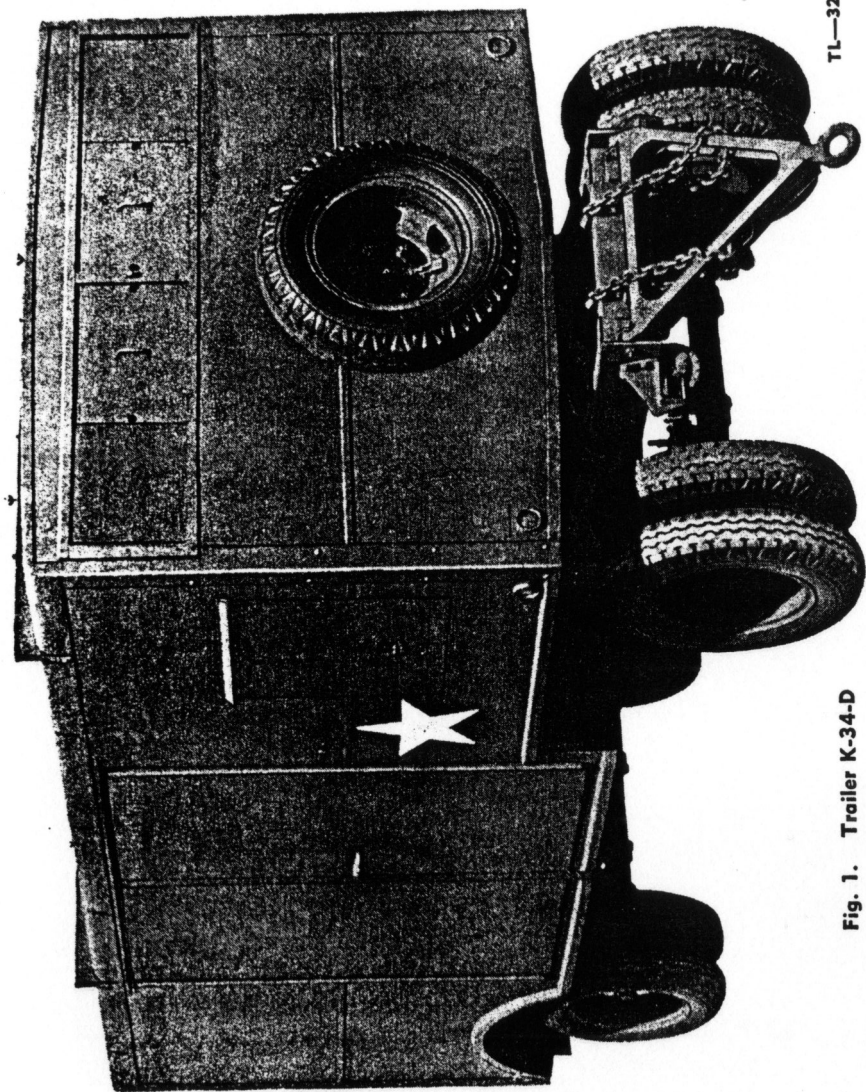


Fig. 1. Trailer K-34-D

TL-32814

# SECTION I. DESCRIPTION

## 1 Description

Trailer K-34-D is a 4½-ton, drop-frame, four-wheel trailer designed to be pulled behind almost any type of heavy-duty towing vehicle. The chassis frame is an all-welded unit of pressed high-tensile steel. The drawbar is an all-welded unit, composed of steel castings and commercial channel steel. The safety chains are attached by means of eye-bolts to the front cross member of the dolly frame. The trailer is mounted, both front and rear, on disc-type, dual wheels.

The serial plate of Trailer K-34-D is located on the right, or curb side, at the bottom of the front panel. On it can be found the serial number, publication numbers, and a general description of the trailer.

## 2 Axles

The two axles are of tubular type, fabricated from one-piece, seamless, high-tensile steel tubing, with dimensions 4½ inches overall with ½-inch wall thickness. Both axles are cambered; the camber is shown by center punch marks at each end of the axle, and by a small gap in the welding that secures the brake flange to the axle. The axle assembly is equipped with heavy-duty tapered roller bearings. Simple adjustments may be made through large castellated nuts and D-washers.

## 3 Brakes

All four wheels are provided with brakes which are double-anchor, two-shoe, heavy-duty, internal-expanding type. They have a lining 16½ inches in diameter, 4 inches wide, and ½-inch thick. The slack adjusters, mounted on the axles, provide adjustment on the cam shafts for the brakes. In addition, the conventional adjustment through the brake drums is provided. The brake system includes air reservoirs (such as are mounted on power trucks only), which afford full emergency protection. The hand brake affords brake action on the rear wheels only. These are the usual cable-type brakes, attached to the slack adjusters. The trailer hose connections, located at the front of the trailer, are provided with dummy covers fastened securely to the trailer by chains.

## 4 Wheels and Tires

The wheels are 20-inch by 7-inch, ventilated, steel disc type. There are six mounting studs, an 8¾-inch bolt circle, and a 5⅛-inch dish. Tires are 7.50 inches by 28 inches, eight-ply, dual pneumatics, manufactured for transport, heavy-duty truck, and bus use.

## **5 Shock Absorbers**

Trailer K-34-D is equipped with two Gabriel direct-acting shock absorbers on each axle, making a total of four shock absorbers on the vehicle. These shock absorbers can be adjusted to give more or less pressure as desired. Full instructions for this adjustment may be found in Section III, Maintenance.

## **6 Electrical System**

The wiring system is the six-to-eight-volt type. The light equipment includes two dome lights mounted on the ceiling of the trailer; one combination service stop and blackout tail light, and a combination blackout stop and tail light, the latter two being mounted on the rear of the vehicle. A blackout switch is placed on the left (road) side of the front of the trailer. A jumper cable supplies current from the towing vehicle to the trailer lighting system through a socket. This socket is located on the left (road) side of the front frame member.

## SECTION II. OPERATION

### 7 Controls

The controls furnished are in accordance with the usual trailer-truck combination practice. The operator should be thoroughly familiar with the location and use of all control devices before attempting to operate this vehicle. The controls are as follows:

*a. Hand Brake.* The hand brake is located on the right (curb) side, at the center of the trailer and underneath the side rub-rail. The brake is worked by pulling the hand lever toward the operator. It can be used alone or as a supplement to the air brakes. However, when parking the loaded vehicle on a grade, it is advisable to use the chock blocks as well as the hand brake.

*b. Chock Blocks.* There are four chock blocks provided with each trailer, two at the front and two at the rear of the rear wheels. While the vehicle is in motion, they are mounted on hooks which are welded to the nearest cross member.

*NOTE: Extreme care must be exercised to insure that when the chock blocks are suspended from the hooks, they are hung from the chain link nearest the chock block. This will prevent the blocks from swaying, and touching any part of the trailer.*

*c. Light Connection.* This vehicle is equipped with a coupling socket, which is to be found on the left (road) side of the front cross member.

*d. Blackout Switch.* The blackout switch is on the left side of the front cross member. There is no off position on the switch; it is either at blackout position or at standard light position. The switch may be operated by means of a coin or a screwdriver.

### 8 Coupling Trailer to Truck

*a. Connection.* When connecting the trailer to a truck, place the drawbar eye of the trailer hitch in the pintle hook on the rear of the towing vehicle. Lock it there by means of the pin provided for the purpose.

*b. Safety Chains.* Attach the hook end of each trailer safety chain to the rear of the towing vehicle. Heavy cast steel eyes are provided on the towing truck for the purpose.



c. *Jumper Cable.* Connect the electric jumper cable between the trailer and the towing vehicle.

d. *Air Hoses.* Connect the air hoses between the trailer and the towing vehicle. Be very careful that the service hose connection is hooked to the service air line, and the emergency hose to the emergency line. The trailer connections are tagged SERVICE and EMERGENCY, respectively. Check the slack spring to be sure it is properly connected. Be sure the hand brake on the trailer is released.

## 9 General Operating Instructions

a. *Checks and Cautions.* It is good driving practice to test the operation of the trailer brakes before attempting to drive at road speed. Check the air pressure on the dash gauge to be sure it is at least 60 pounds. Check the operation of the lights. When turning corners, be sure to allow for the fact that the trailer rear wheels turn inside the turning radius of the truck. When backing, the truck should be steered in the direction opposite to that toward which the trailer is to be turned.

b. *Braking Trailer.* The trailer brakes should be applied simultaneously with the truck brakes. They should be applied easily and released at once if they grab. A grabbing brake fails to operate with maximum efficiency; abuse and misuse will result in excess wear on the brake lining, and will greatly reduce the life of the entire brake system.

c. *Uncoupling Trailer from Truck.* Reverse all procedures given in paragraph 8.

d. *Daily Inspection.* To insure maximum mechanical efficiency, it is essential that the vehicle be inspected systematically at short intervals. During operation the driver should be alert for unusual sounds or abnormal driving characteristics. Only under exceptional circumstances should a trailer be operated after indications of trouble have been noticed. When the vehicle is in service, it is good practice for the operator to make a careful inspection of the general mechanical condition of the trailer at each halt. Minor defects discovered can be corrected immediately, thus avoiding any major failures.

e. *Lubrication.* See the lubrication chart, page 30, for the type of lubricant to be used, when and where to lubricate, and the method to follow.

## 10 Mechanical Inspection and Adjustment

A routine list of inspections to be performed is as follows:

(1) *Fifth Wheel.* Examine for sheared bolts. If defective bolts are found, replace them.

(2) *Drawbar Hinge.* Check the drawbar hinge for excessive play. If this condition is found, rebush the hinge.

(3) *Lights.* Check all lights and wiring for proper operation.

(4) *Axles.* Check the axles for correct alignment. (See Fig. 2.)

(5) *Springs.* Check the springs for broken spring leaves, and for tightness of the U-bolt nuts.

(6) *Brakes.* Check linkage and operation. Tighten any loose hose-line connections. Check the front end couplings. Adjust the brakes for equalization at the slack adjusters if required. About every 2,000 miles drain the moisture from the air filters. Remove the filter cartridge and wash it in gasoline.

(7) *Radius Rods.* Check the radius rods for worn bushings and bearings. Check for proper adjustment and tighten all lock nuts.

(8) *Shock Absorbers.* Check the upper and lower mounting studs and nuts on each shock absorber to insure perfect tightness of the nut. If an adjustment is necessary, see Section III, Maintenance, for full details.

(9) *Wheels.* Tighten all wheel nuts. Check the bearing adjustment.

NOTE: *Every four months, or at the end of every 5,000 miles (oftener under hard service conditions), remove, wash, repack, and adjust the bearings; check the brake lining and the brake drums; equalize all brakes.*

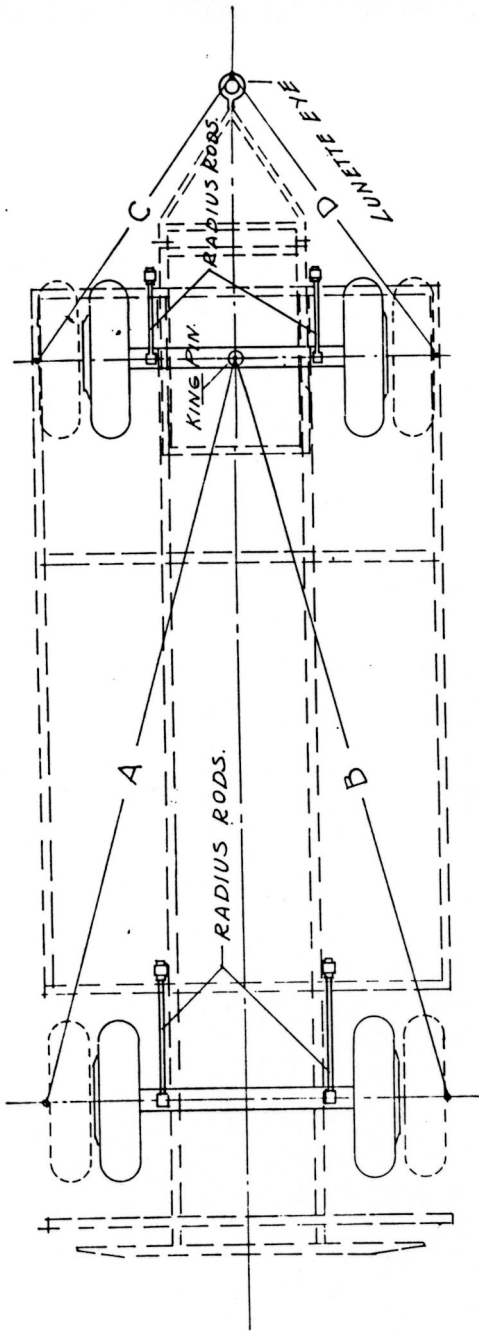


Fig. 2. Axle alignment diagram

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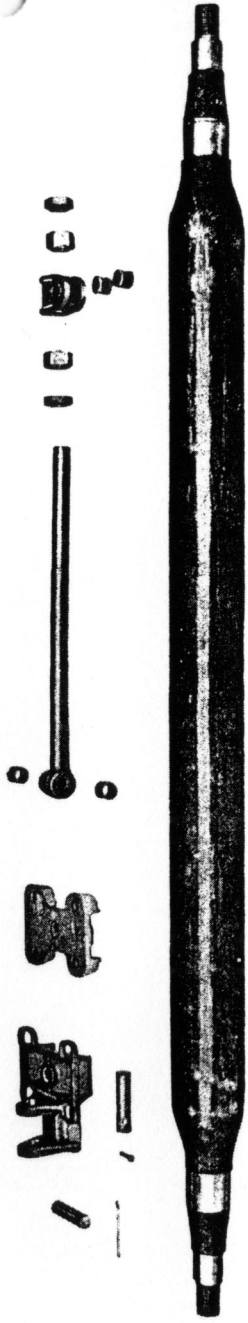


Fig. 3. Axle assembly

TL-32816

## SECTION III. MAINTENANCE

### 11 Axle Alignment and Disassembly (Figs. 2 and 3)

*a. Rear Alignment.* Drop a plumb bob from the center point of the kingpin to the front axle, marking the spot on the axle which is directly under the plumb bob with a center punch. With a steel tape measure from this mark to the right and left hub caps on the rear axle, measuring to the same relative point on each. These two measurements should be equal, allowing a variation of not more than plus or minus  $\frac{1}{4}$  inch. Make any necessary adjustments by means of the adjustable radius rods.

*b. Front Alignment.* Make a punch mark on the exact center of the front edge of the lunette eye. Using a straight edge, line up the center punch mark on the lunette eye with the center punch mark on the front axle. With a steel tape measure the distance from the punch mark on the lunette eye to the leading edge of the right and the left hub caps. These measurements should be the same. Any necessary adjustments may be made by adjusting the radius rods.

*NOTE:* After all adjustments have been made, be sure that all lock nuts on the radius rods are tight.

*c. To Disassemble Axle and Spring Assembly.* The axle and spring assembly can be disassembled by jacking up the end of the trailer from which the axle and the spring assembly are to be removed, and blocking up the opposite end of the trailer. After all weight has been removed from both front and rear tires, remove the pins in the rear spring hanger, and the entire spring and axle assembly can be rolled from under the trailer for any adjustment, repair, or replacement.

### 12 Brake Adjustment and Repair (Figs. 4 and 5)

*a. Minor Brake Adjustment.* Jack up both wheels (either front or rear, as the case may require), and turn the slack-adjuster nut counter-clockwise until the wheels cannot be moved. Back the adjustment nut off two notches until no drag is felt on the wheel when it is revolved by hand.

*b. Brake Relining.* Visual inspection of the brake shoes and brake linings may be made without removing the wheels from the axles. Remove the two dust shields which are bolted to the brake adapter, thus exposing the entire brake assembly for checking. If inspection shows that relining is necessary, proceed as follows: Remove the wheel hub

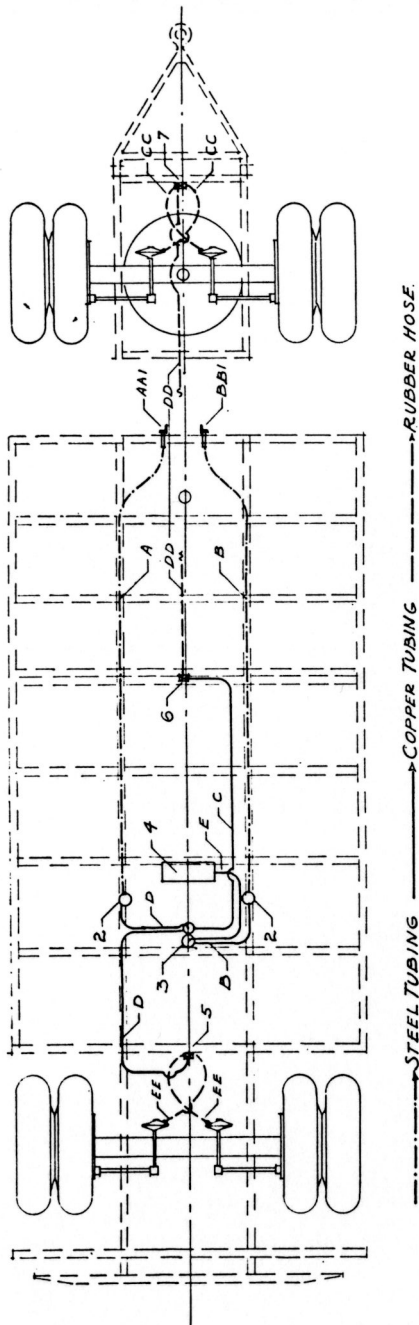


Fig. 4. Brake operation system

TL-32817



Fig. 5. Brake assembly

TL—32818

and drum as an assembly; take off the brake shoes, remove the worn brake lining, clean all foreign matter from the shoes, and install the new brake lining. Adjust the brakes in accordance with customary procedure.

*c. Brake Drum Replacement (Fig. 6).* Brake drums should be replaced only when they are badly cracked or scored. Heat checking, unless extreme, does not necessitate replacing drums. If, however, replacement must be made, proceed as follows:

- (1) Remove the wheel-and-hub assembly, remove the nuts that hold the drum to the assembly, and take off the drum.

- (2) Clean all foreign matter from the drum pilot, and install the new drum.

- (3) Tighten the nuts in opposite pairs successively and a little at a time, so that the drum is tightened evenly on the pilot. It is advisable to center-punch each nut at two opposite points, in order to lock it into position.

*d. Major Brake Adjustment.* This paragraph is to be consulted only when new linings or brake drums have been installed.

- (1) Replace the wheel-and-drum assembly. If it does not fit into place smoothly, back off the adjustment nut on the slack adjuster in order to free the S-cam.

- (2) With the wheel in place, turn the slack adjustment nut until the shoes fit tight against the brake drum. Proceed as in a minor brake adjustment (paragraph 12a).

*e. Hand (Parking) Emergency Brake.* This is located on the right or curb side of the vehicle, directly underneath the bottom body rub-rail, and is a very simple assembly. The only adjustment possible or necessary is to the cable which connects the hand lever and the brake cam. If this cable stretches, it may be tightened as follows: Set the hand lever in the off position, remove the coupling clamp at each end of the cable, and pull the cable up snug. Replace the clamps and tighten.

*f. Servicing Slack Adjuster.* If tightening the adjustment nut on the slack adjuster fails to bring the brake shoes up against the brake drum, the worm or the worm gear is probably worn or stripped. To replace these parts proceed as follows:

- (1) Loosen the adjustment nut and remove the worm.

- (2) If inspection shows that the worm is stripped, replace with a new worm and screw the adjustment nut in.





Fig. 6. Hub and drum assembly

TL-32819

(3) If the worm is in good condition, remove the lock ring and shield from the side of the slack adjuster, and inspect the felt and the worm gear. Replace any defective parts.

(4) If the slack adjuster needs to be rebushed, drive out the old bushing and insert a new one. Be sure that it is reamed to  $\frac{1}{2}$ -inch inside diameter.

*g. Brake Operation System.* Assuming the air pressure is normal (60 pounds or slightly over), if the brakes fail to function satisfactorily, the source of trouble may be found in the relay emergency valve. If this condition occurs, it is best to remove the emergency valve and replace it with a new one, or a rebuilt unit. Field repairs should not be attempted on the unit unless the emergency is great. If the emergency valve is functioning properly, the brake chamber rods should be checked to be sure that they are delivering a full stroke to the slack adjuster. If they fail to do so, they should be serviced or replaced. It is always good practice while checking for brake faults, to be sure that all brakes are adjusted properly at the adjustment nut on the slack adjuster. (See Fig. 4.)

#### *h. Brake Diaphragm Adjustment.*

(1) When using the soap-bubble test for leaks, proceed as follows: Paint the edge of the diaphragm with soapy water, and apply the brakes. A 3-inch bubble in 3 minutes is permissible. If a greater leakage than this is observed, tighten the bolts around the edge of the diaphragm until all excess bubbles disappear. Never tighten the bolts so much that the diaphragm bulges. When the brake is applied, air will escape around the part of the chamber where the rod ends if the diaphragm is defective; in this case the diaphragm must be replaced.

(2) Servicing or replacing the brake diaphragm is done as follows: Remove the brake chamber from the axle by taking out the two bolts that hold it to the brake. Disconnect the hose assembly and remove the clevis pin at the slack adjuster arm. Next, place the chamber in a vise, and mark the two edges for reassembly. Remove the bolts around the edge of the chamber, replace the diaphragm, and tighten the bolts. Do not tighten them so much that the diaphragm buckles.

Any of the working parts of the brake diaphragm may be replaced by following the foregoing procedure. All diaphragms should be replaced once a year.

*i. Emergency Relay Valve.* This valve is an important and very intricate part of the brake system and should be replaced in the field as a unit. If replacement is impossible and field repair is necessary, such

repair should be done with the greatest care. Use the emergency relay valve repair kit for replacement parts. The valve should be held firmly in a vise during servicing and all foreign matter should be cleaned from the interior of the valve assembly before replacing.

### **13 Brake Lines**

If any part of the brake-line tubing becomes kinked or dented, the brake system may fail to operate the trailer brakes. The brake-line tubing should be inspected frequently and replaced at once if kinked.

### **14 Replacement of Hose Coupling Packing Rings**

After attachment the rubber packing rings at the mouth of the hose coupling act as gaskets for sealing the under-coupling. When these packing rings become worn, they may be replaced by prying out the old packing rings and forcing in new ones. *The use of dummy hose couplers is very important because they prevent the entry of any foreign matter into the brake lines. Whenever the hoses are not attached, the couplers must be used.*

### **15 Drawbar Assembly**

The drawbar assembly is constructed as follows: Three lengths of channel steel are welded together end to end, in the form of a triangle. The triangle is laid parallel to the front of the trailer. One end of the channel steel is welded to the lunette eye in one of the hinge castings on the front of the trailer. The other end of the same channel steel bar is welded to the lunette eye in the other hinge casting on the front of the trailer. At the apex of the triangle is welded the heavy cast steel ring into which the clevis is hooked when the trailer is to be moved. (See Fig. 1). If any part is damaged, it can be cut free readily, and a replacement welded into place. In general service, the only replacement likely to be required is the hinge bushing of the shackle bolt and nut which attach the drawbar assembly to the dolly frame. To rebush the hinge castings, force out the worn bushing and replace with new. Be sure that the new bushing is reamed to the exact diameter of the retaining shackle bolt. The safety chains are fastened to the front dolly cross member by eye bolts. (See Fig. 1.) The entire safety-chain assembly can be replaced by cutting the link next to the hook, removing the old hook, and replacing it with a new one. Weld the new link shut, or use a  $\frac{1}{2}$ -inch cold-shut link. Any part of the chain may be spliced in the same manner.

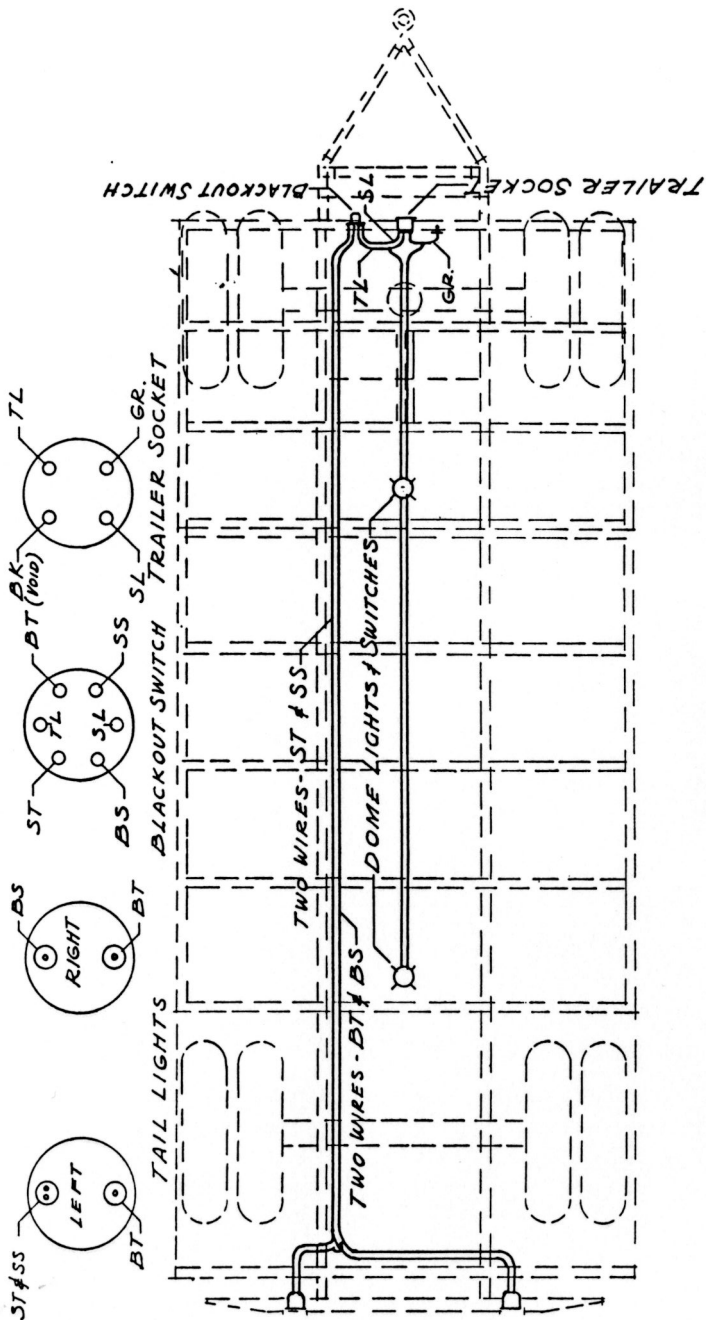


Fig. 7. Wiring diagram

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## 16 Electrical System

a. *Wiring.* The general electrical circuit diagram shown in Fig. 7 is illustrative of all circuits used on this vehicle. With this diagram any of the various circuits may be traced, and necessary wire replacements made. All electrical units are shown in their relative positions.

b. *Lights.* The lighting equipment on Trailer K-34-D includes one blackout stop-and-tail lamp; one service-stop-tail lamp; one blackout tail lamp; and two interior dome lights. The combination service-stop and blackout tail light is mounted at the left rear of the trailer. The combination blackout stop and tail light is mounted at the right rear, or curb side, of the trailer. Replacement bulbs for this unit are furnished in sealed packages, and are easily replaceable. To replace interior dome lights remove the lock ring and the lens, remove the burned-out bulbs and insert new ones.

c. *Blackout Switch.* This is located on the left, or road side of the trailer, on the front bottom cross-rail. It may be operated by a coin or screwdriver. It is always at either service or blackout position; there is no off position.

d. *Failure of Lights.* Insufficient current to operate the lights may be due to poor connections in either the socket of the towing vehicle or in the trailer. Clean out all sockets and tighten all connections and grounds. Check the socket blades for corrosion and dirt. If necessary, the blades may be scraped and sandpapered clean. If lights still fail, and there is sufficient current, check each light unit singly, and check all connections. Inspect the wiring; if broken, splice and tape, or replace completely. (See Figs. 7, 8, and 9.)

## 17 Chassis Frame Assembly

It is unlikely that this assembly will require much attention, but in case of a major accident or the failure of a frame member, repair or replacement may be necessary.

a. *Frame Members.* If frame members are warped or bent, they may be straightened by the use of leverage, heat, or both. When heat is used, care must be taken not to permit the member to be heated beyond the dull-red stage. If frame members must be replaced, the damaged section must be cut out, and a new member welded in.

b. *Spring Hangers, Helper Spring-pads, and Axle-stops.* If any of these parts is welded to the frame, the weld must be cut and a replacement welded into position. If the part is riveted to the frame, the old rivets must be burned off and the replacement riveted or welded into place.

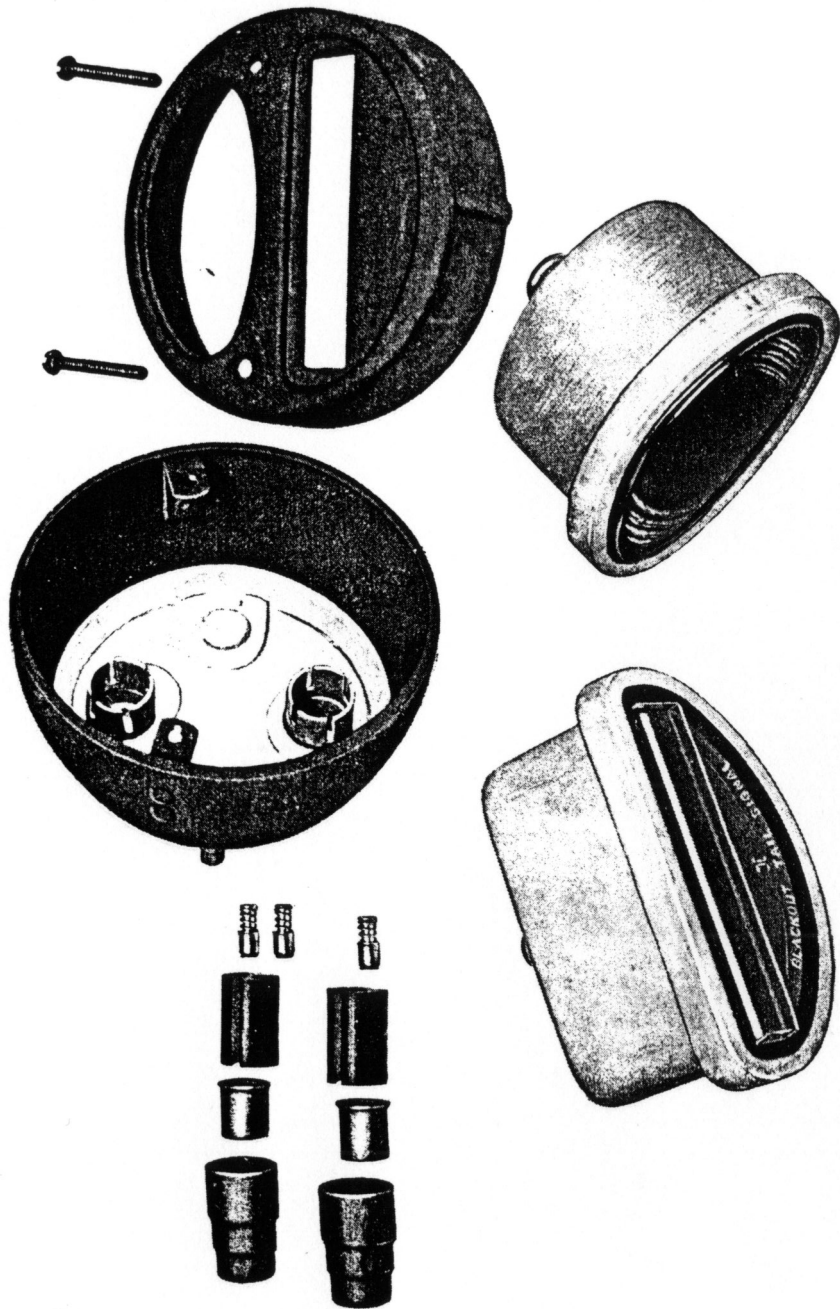
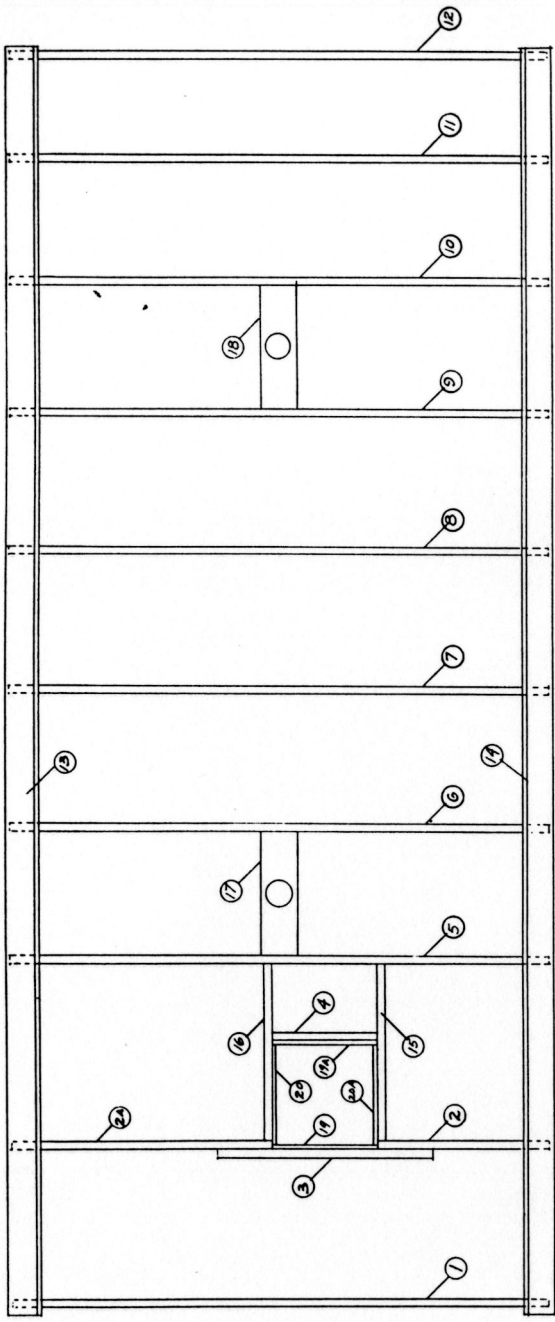


Fig. 8. Service stop and tail light assembly



Fig. 9. Blackout stop and tail light assembly

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**Fig. 10. Body framing, top**

TL—32823



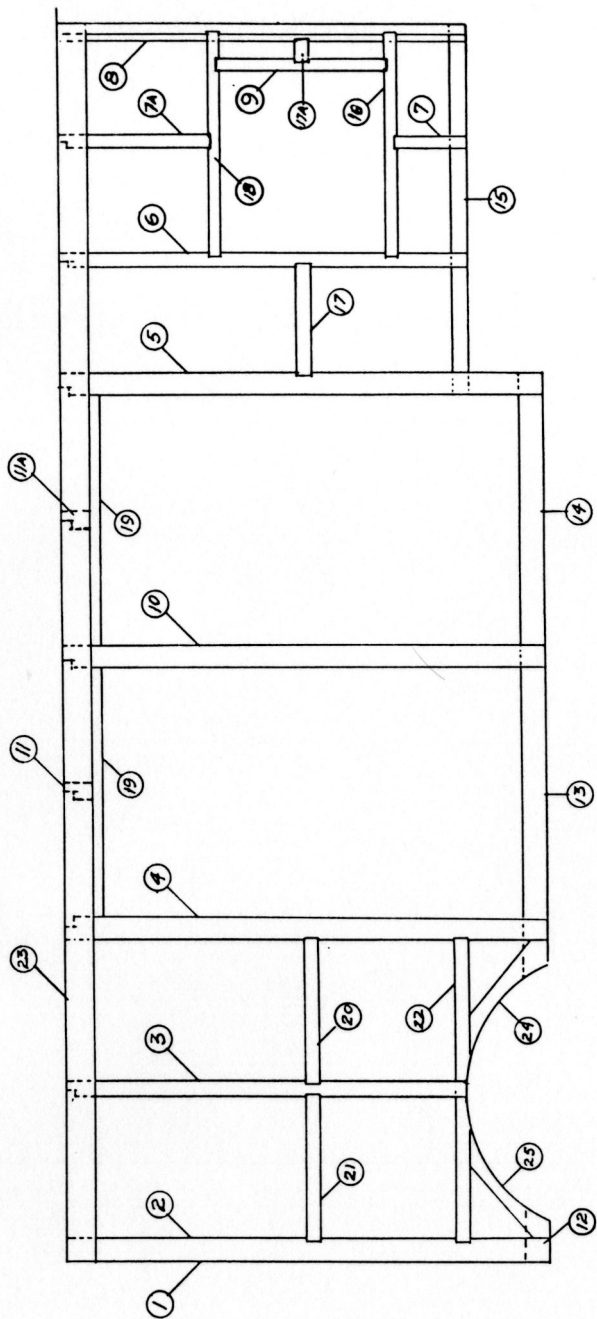


Fig. 11. Body framing, right side

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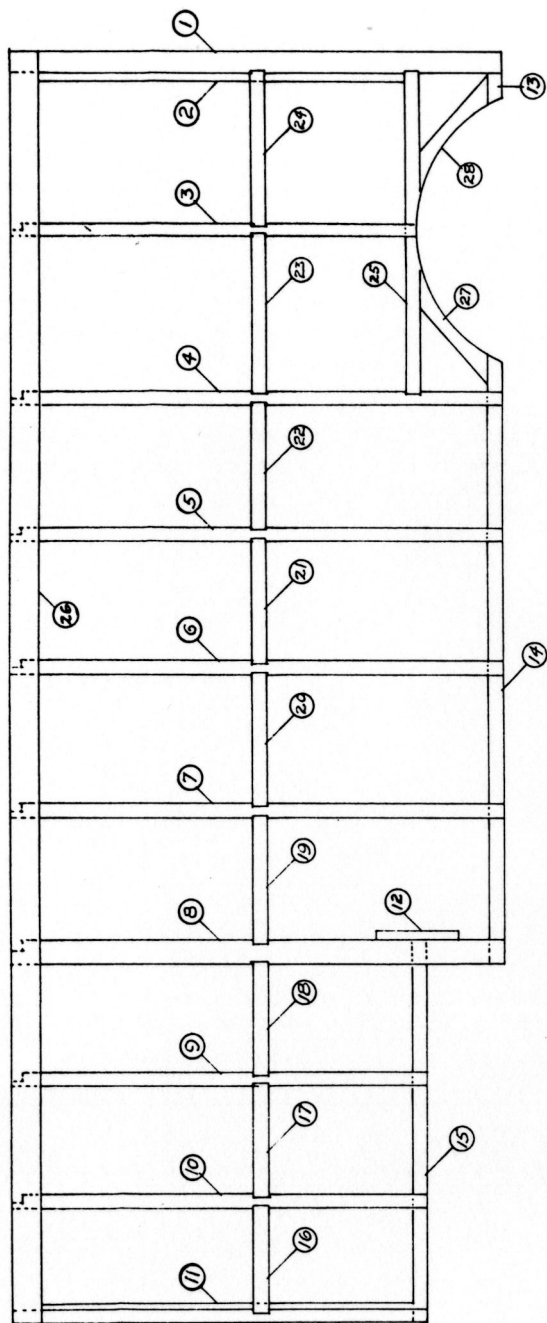


Fig. 12. Body framing, left side

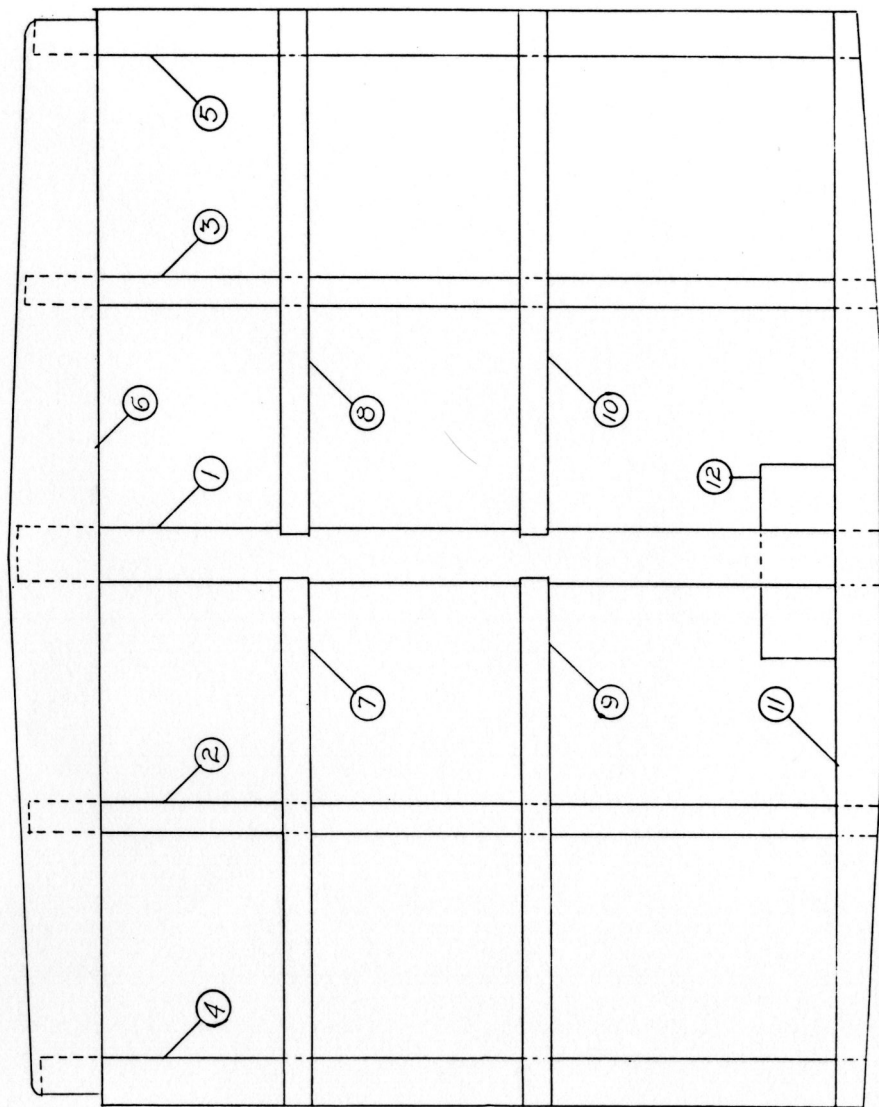


Fig. 13. Body framing, front

c. *Servicing or Replacing Fifth Wheel.* The fifth wheel provided on Trailer K-34-D is rigidly mounted, the only movable parts being included in the locking assembly. These movable parts may be readily replaced or serviced. If necessary to replace the fifth wheel, remove the entire dolly assembly from under the trailer by taking out the mounting bolts. Remove the damaged fifth wheel, mount a new one, and re-set the bolts. For servicing, see the lubrication chart, page 30.

## 18 Replacing Springs

Any of the springs may be removed without disturbing the wheel or hub assembly. Use a jack under the corner of the body frame nearest the spring that is to be removed. Remove the U-bolts and the pin on the rear spring hanger. Lift out and replace the spring assembly; insert the pin on the rear spring hanger, and clamp the U-bolts back in place.

## 19 Replacing Radius Rods

Radius rods require replacement only in rare instances. All radius rods are adjustable. When necessary, replace as follows: Remove the pin that holds the radius rod to the spring seat and the pin that holds the rod to the front spring hanger. Remove the radius rod and insert a complete new assembly. If it is necessary to rebush the front swivel of the radius rod, take out the pin that holds the radius rod to the front spring hanger; back off the two nuts on the front end of the radius rod; remove the swivel. Rebushing is standard. Care must be exercised to be sure that the new bushing has been reamed to the correct size.

## 20 Maintenance of Wheel Assemblies

The wheels on Trailer K-34-D require no servicing, except in case of major damage due to collision or equally serious accident. In such cases, replacement rather than repair is recommended.

a. *Replacement of Worn or Broken Studs.* Remove the inner and outer wheels. Take the hub from the axle, and place it on the floor or ground with the inside of the drum upward. Remove the nut from the stud which is to be replaced. Using a  $\frac{5}{8}$ -inch punch, drive out the worn or broken stud. Turn over the hub and drum, and place the new stud in position. Be sure the shoulder on the stud is placed so that it will fit into the groove in the hub after the stud is driven into position. With a copper hammer drive the stud into place. Turn the wheel over with the drum up, replace and tighten the nut. Clean all foreign matter from the drum and replace the wheel.

b. *Tire Repairs.* All studs and nuts are marked with the letters L or R, which indicate left and right, and refer to the threading. Because of this, the nuts are not interchangeable, though the wheels themselves may be used as left or right, inner or outer. *Since the entire load is carried on the wheels through the studs, the utmost care should be observed to tighten the wheel nuts with equal pressure at all studs.*

c. *Wheel Fit.* To insure a perfect wheel fit, proceed as follows: Be sure that all countersunk holes in the wheels are clean and free from dirt or piled-up paint. Tighten the sleeve-shaped nuts that hold the inner wheel in place; draw up all nuts a little at a time, tightening opposite nuts progressively around the circle, until all are as tight as it is possible to make them without stripping the threads. Mount the outer wheel and tighten the outer stud nuts as on the inner wheel. When mounting double wheels, place the valve stems opposite each other for convenience in inflating the tires.

d. *Removing Tire from Wheel.* Permit the air to escape from the tire by removing the core from the valve stem. Insert a tire tool in the slot on the rim provided for the purpose and pry down. At the same time tap the opposite side of the rim with a hammer. Before reinstalling the tire and wheel on the hub, be sure that the lock rim is seated properly in the groove, then inflate the tire.

e. *Care and Inspection of Tires and Tubes.* All tires on Trailer K-34-D are built to sustain the weight of the fully loaded trailer. However, unless the recommended pressure is maintained, the tires will not function as they should, and in consequence safe, economical operation of the trailer will be affected. Tires should be checked every 500 miles or every six days. Correct air pressure is 55 pounds. The wheels should be checked to be sure they are free-running.

f. *Removing Hub Assembly.* Remove the dual wheel and the entire hub assembly. Remove the hub cap, cotter key, and axle nut. Pull the hub off the axle, taking off the D-washer and the outer bearing at the same time. If the hub will not slide off freely, it is probably because the brake shoes are in contact with the drum. This can be remedied by backing off the adjustment nut of the slack adjuster. (See Fig. 6.)

g. *Installing Hub Assembly.* Wash all bearings in gasoline, and remove any foreign matter. If any bearings are as much as slightly worn, they must be replaced. Repack the hub between the two bearing cups with new grease, leaving a  $\frac{1}{8}$ -inch layer of grease on the bearing cups. In the same manner repack inner and outer bearings. Place the

inner bearing in the hub; insert the grease retainer on the inside of the hub. Use a greased skid-plate, and slide the hub on the spindle; replace the outer bearing in the hub, and install the D-washer. Replace and tighten the axle nut; when this nut has been drawn as tight as possible, back it off about one-third of a turn, and test for excessive play. After the bearings have been properly adjusted, insert the cotter key into the axle, and replace the hub cap.

## 21 Shock Absorber Assembly (Fig. 14)

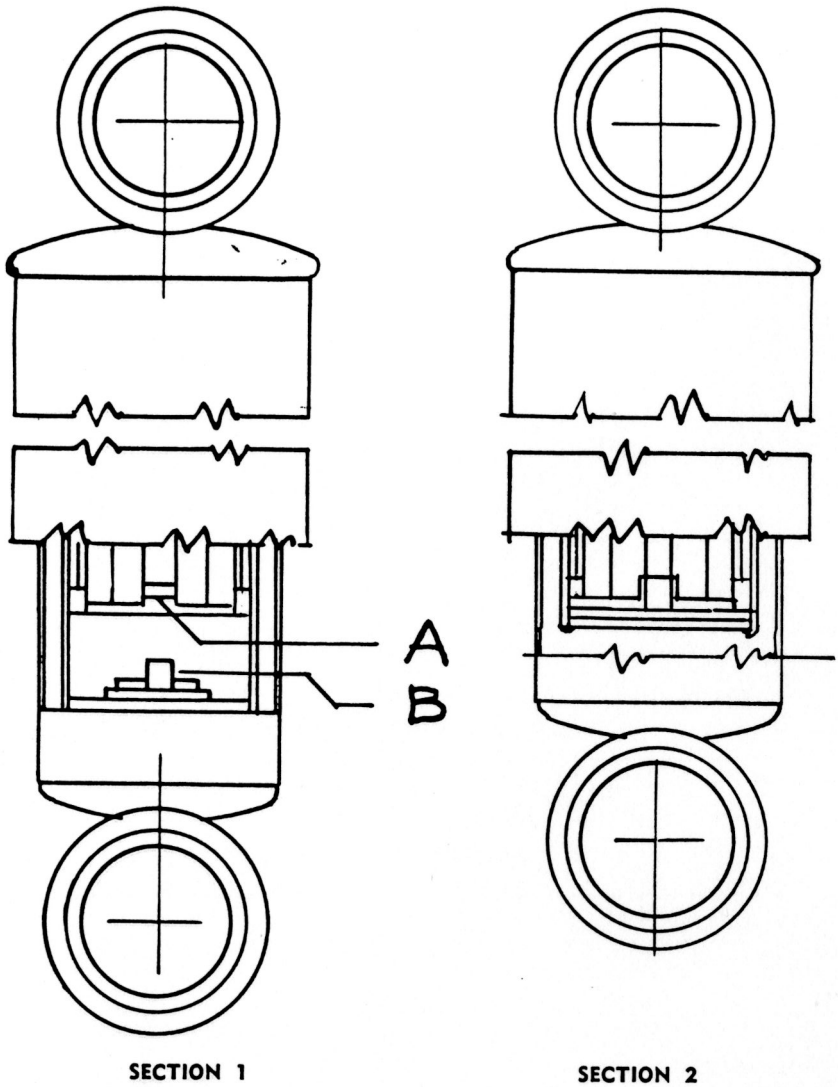
The shock absorbers are attached at the top to the side chassis rail, and at the bottom to a special bracket welded to the axle. If a complete replacement is necessary, proceed as follows: Remove the two bolts connecting the top and bottom halves of the axle bracket. Remove the nut that holds the top stud to the chassis frame. This will allow the removal of the entire shock absorber assembly. Remove the nut from the top stud, and the two rubber bushings from the top mounting section of the shock absorber. Remove the nut from the lower stud, disassembling as was done with the upper part. To install a new shock absorber, reverse the procedure. Be particularly careful to compress the rubber bushings to the maximum degree with the aid of the outer cup washer and the stud nut. If the shock absorbers are out of adjustment, either "riding hard," or not carrying sufficient load, the following instructions should be carried out: When the shock absorber is installed originally, it is adjusted to normal riding requirements with the adjustment valve open one turn. (See Fig. 14.) In case a new adjustment should be necessary, be sure that the tires are inflated to the proper pressure, and that the springs and radius rods are correctly adjusted. Disconnect the lower stud mounting of the shock absorber. Using only the hands, press the upper and lower cylinders together as closely as possible. While the cylinders are pressed tightly together, turn clockwise, very slowly, by hand until the adjustment key drops into and engages the valve slot. Continue turning slowly clockwise until a stop is felt. This will be one turn, never more than two turns, beyond the point at which the key dropped into place. This closes the adjustment valve. To keep the adjustment key engaged, press upward. Turn the lower cylinder counterclockwise to open the adjustment valve. Adjust as follows:

- (1) For very firm to firm control, rotate the lower cylinder one-fourth to one turn from the closed position.
- (2) For standard, or average control, rotate the lower cylinder one to one and one-half turns from the closed position.

(3) For low pressure control, rotate the lower cylinder one and one-half to two turns from the closed position.

*CAUTION: Use hands only. Do not force beyond the closed position. Adjustment valve must be left at least one-fourth turn open. The full range of adjustment is not more than two full turns counterclockwise from closed position.*

After making adjustment, reverse the dismounting procedure, and re-install the shock absorber. Be sure that the stone shield is toward the front of Trailer K-34-D.



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Fig. 14. Shock absorber diagram



## 22. AXLE TROUBLE-SHOOTING CHART

<i>Trouble</i>	<i>Probable Cause</i>	<i>Probable Remedy</i>
Slow brake application	Low brake line pressure	Check air pressure at tractor coupling ends. Air supply should not be less than 60 pounds for proper application. (See tractor maintenance manual for service procedure.)
	Bent rod in chamber	Straighten or replace.
	Excessive travel in chamber push rod	Give brakes minor adjustment.
	Restriction in line	Clean or replace tubing or hose.
	Leaking diaphragm in application chamber	Tighten chamber bolts or replace diaphragm.
	Dirt under relay exhaust valve or diaphragm	Clean relay valve diaphragm.
Slow brake release	Low brake line pressure results from slow brake application	See tractor maintenance manual.
	Brake valve lever on tractor not returning fully to stop	Adjust operating rod. See tractor maintenance manual.
	Binding cam, or binding slack adjuster	Lubricate and align.
	Brake chamber rod travel	Give brakes a minor adjustment.
	Restriction in tubing or hose	Clean or replace.
	Improper seating of valves in relay emergency valve	Clean or replace valve with a reconditioned unit.
Emergency brakes failing to hold	Dirt under emergency valve, diaphragm, and emergency valve stem	Clean or replace emergency valve, valve diaphragm, or valve stem.
Noisy silencer	Worn rubber washer	Replace washer.

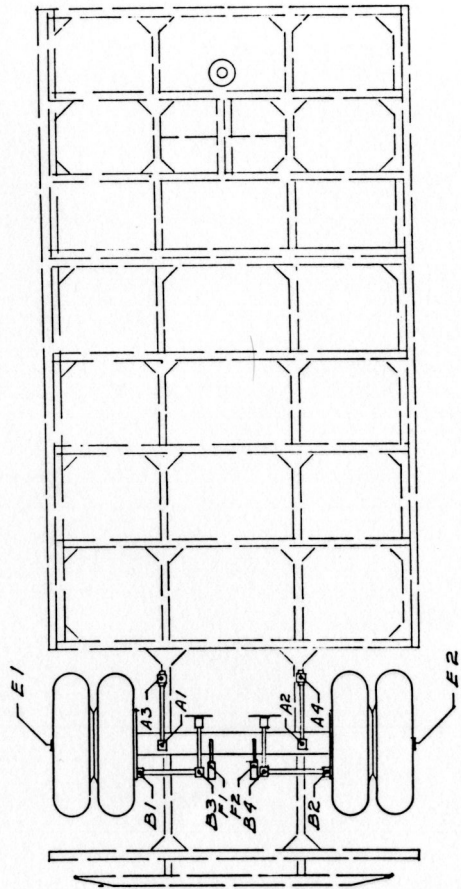
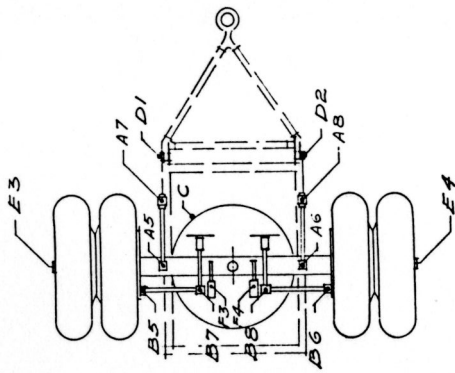
## 22. AXLE TROUBLE-SHOOTING CHART—(Contd)

<i>Trouble</i>	<i>Probable Cause</i>	<i>Probable Remedy</i>
Hard pulling "wandering"	Out of line	Realign axle by adjustable radius rod.
	Bent axle	Replace axle.
	Out of camber	Replace axle.
Inside tire wear	Out of camber	Replace axle.
Scuffed tires (both sides)	Out of line	Realign axle.
	Bent axle	Replace axle.
Scuffed tires (one side)	Bent axle	Replace axle.
	Loose wheel	Tighten wheels and adjust bearings.

## 23. LUBRICATION CHART

<i>Location (See Fig. 15)</i>	<i>Type of lubricant</i>	<i>Method of application</i>	<i>When to lubricate</i>
A 1, 2, 3, 4, 5, 6, 7, 8 Radius rods	Shell 2W Alemite grease or equivalent	Hand or power grease gun	Every 1000 miles
B 1, 2, 3, 4, 5, 6, 7, 8 Cam shafts	Shell 2W Alemite grease or equivalent	Hand or power grease gun	Every 1000 miles
C Fifth wheel	Shell 2W Alemite grease or equivalent	Hand or power grease gun	Every 1000 miles
D Drawbar hinge	Shell 2W Alemite grease or equivalent	Hand or power grease gun	Every 1000 miles
E 1, 2, 3, 4 Wheel bearings	Shell bearing grease (asbestos fibre) or equivalent	Hand paddle	Every 5000 miles
F 1, 2, 3, 4 Slack adjusters	Shell 2W Alemite grease or equivalent	Hand or power grease gun	Every 1000 miles

**SPECIAL NOTE:** The face of the fifth wheel should be coated with a heavy, water-repellent grease, any good commercial grade, while the dolly is detached from the trailer. This should be done at least every 5000 miles.



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Fig. 15, Lubrication Diagram

## SECTION IV. SUPPLEMENTARY DATA

### 24. TABLE OF ASSEMBLY GROUPS

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51 to 100	Chassis frame.....	34-35
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651 to 700	Body .....	41-42-43
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751 to 800	Body hardware.....	43-44
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**25. TABLE OF REPLACEABLE PARTS**  
**Group 1 to 50, Electrical**

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
1	1		Switch, blackout	DG	5928
1	2		Light, service stop and tail	KD	950-I
1	3		Light, blackout stop and tail	KD	951-I
2	4		Lights, dome	KD	528
4	5		Reflectors, red	KD	333
4	6		Reflectors, amber	KD	333
1	7		Cable, coupling	WE	3708
1	8		Socket, coupling	WE	3589
1	9		Cover, socket	WE	11935B
2	10		Brackets, tail light	AC	34-AC-11

**Group 51 to 100, Chassis Frame**

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
2	51		Covers, hand hole	AC	34-AC-12
1	52		Z-Plate, inside	WA	WA-1
2	53		Z-Bars, long	BL	mg
1	54		Z-Bar, short right-hand	BL	mnR
1	55		Z-Bar, short left-hand	BL	mnL
3	56		Cross members	BL	mbxl, 2, 3
8	57		Cross members	BL	mc 4, 5, 6
8	58		Cross members	BL	mb 7, 8, 9
1	59		Cross member, rear	BL	md10
1	60		Bumper	BL	mf11
8	61		Outriggers, right-hand	BL	maR
8	62		Outriggers, left-hand	BL	maL
2	63		Member, reinforcing	BL	mc12
18	64		Gussets, 8/16 by 6 by 11	BL	pa

25. TABLE OF REPLACEABLE PARTS—(Contd)  
Group 51 to 100, Chassis Frame—(Contd)

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
24	65		Gussets, 8/16 by 6 by 6	BL	pc
2	66		Gussets, 8/16 by 4 by 4	BL	pd
8	67		Pads, motor bracket	BL	bax
2	68		Angles	BL	mglx
2	69		Brackets, bumper	BL	mh
8	70		Brackets, Gusset and Filter	BL	EA
2	71		Rails, side	YS	84-ACY-1
1	72		Angle, 84-inch, 2 by 2 by 8/16	AC	84-AC-18
2	73		Angle, 20-inch, 2 by 2 by 8/16	AC	84-AC-14
2	74		Angle, 12-inch, 2 by 2 by 8/16	AC	84-AC-15
4	75		Angle, 8-inch, 2 by 2 by 8/16	AC	84-AC-16
4	76		Angle, 6-inch, 2 by 2 by 8/16	AC	84-AC-17
1	77		Step, rear	AC	84-AC-18

Group 101 to 150, Dolly

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	101		Stop, dolly, 5-inch	AC	84-AC-19
2	102		Stop, dolly, 8-inch	AC	84-AC-20
2	103		Members, dolly, side	BL	mm R&L
1	104		Cross member, dolly, rear	BL	mk
1	105		Cross member, dolly, front	BL	mo
2	106		Plate, dolly, at pivot casting	BL	mmpx
2	107		Brackets at pivot casting	BL	mmbx

**Group 151 to 200, Fifth Wheel Dolly**

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	151		Fifth wheel	HH	1240
1	152		Fifth wheel lock assembly	AD	D84-1
1	153		Adjuster, fifth wheel lock	AC	84-AC-21
1	154		King pin, fifth wheel	LG	SD-1011
1	155		Plate, upper fifth wheel mounting	BL	pw

**Group 201 to 250, Drawbar Assembly**

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	201		Drawbar, dolly	AC	84-AC-22
1	202		Lunette, drawbar	CC	F-40-5518
2	203		Castings, drawbar pivot	CC	F-40-5519
2	204		Bushings, bronze	LB	84-L-11
2	205		Assemblies, safety chain	AM	84-A-11
2	206		Shackle Bolt, 1-inch with castle nuts	LG	84-C-12
18	207		Alemite fittings (also in groups 251-800 and 851-400)	AL	

**Group 251 to 300, Axle Assembly**

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
2	251		Axles	KT	4500
2	252		Bearings, inner cup	KT	SFP2019
2	253		Bearings, outer cup	KT	SFP2021
2	254		Bearings, inner cone	KT	SFP2018
2	255		Bearings, outer cone	KT	SFP2020
2	256		Hubs, 6 stud, right	KT	SFP4074R

25. TABLE OF REPLACEABLE PARTS—(Contd)  
Group 251 to 300, Axle Assembly—(Contd)

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
2	257		Hubs, 6 stud, left	KT	SFP4074L
4	258		Shields, dust	KT	20098
-	259		Alumite fittings (also in groups 201-250 and 851-400)		

Group 301 to 350, Wheel, Tire

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
9	801		Wheels, 7.50 by 20	MW	SFP-155
12	802		Studs, right-hand, 3/4-inch	KT	SFP-156
12	803		Studs, left-hand, 3/4-inch	KT	SFP-159
12	804		Nuts, cap, inner right-hand	KT	SFP-160
12	805		Nuts, cap, inner left-hand	KT	SFP-157
12	806		Nuts, cap, right-hand	KT	SFP-158
12	807		Nuts, cap, left-hand	FS	
9	808		Tires, 7.50 by 20 high-speed transport	FS	
9	809		Tires, 7.50 by 20	FS	
9	810		Flaps, rim	FS	

Group 351 to 400, Spring Assembly

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
2	351		Springs, front	MS	MK-84-F
2	352		Springs, rear	MS	MK-84-R
4	353		Seats, spring	KT	H-4-GW
4	354		Caps, spring	KT	SFP540
4	355		U-Bolts, 3/4-inch dia., 12-inch length	UF	UF-84U



**Group 351 to 400, Spring Assembly—(Contd)**

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
4	356		U-Bolts, 3/4-inch dia., 18-inch length	UF	UF-84UL
4	357		Hangers, front spring	FM	FM-1
4	358		Hangers, rear spring	FM	FM-2
4	359		Pads, helper spring	FM	FM-3
4	360		Pins, rear spring hanger	KT	SFP644A
4	361		Rods, radius, with bushings	KT	K-8-A
4	362		Pins, radius rod, with cap screws	KT	SFP639A
4	363		Pins, radius rod, with cotter	KT	SFP637A
-	364		Alemite fittings (also in Groups 201-250 and 251-300)	AL	
4	365		Stops, Axle	FM	FM-7

**Group 401 to 450, Brake Assembly**

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
1	401		Valve, relay emergency	BW	220358
1	402		Reservoir (??)-inch by 26-inch	BW	215780
1	403		Cock, drain	BW	215810
10	404		Connectors, hose, 1/4-inch	BW	215536
1	405		Tag, emergency	BW	201499
1	406		Tag, service	BW	201500
2	407		Studs, clamping	BW	205780
2	408		Couplings, hose	BW	220165
10	409		Connectors, tubing, 3/8-inch by 1/4-inch	BW	20503
1	410		Elbow, tubing, 3/8-inch by 1/4-inch	BW	205102
2	411		Plugs, pipe, 3/8-inch	BW	208098
16'	412		Tubing, copper	BW	
42'	418		Loom, 7/16-inch	BW	

25. TABLE OF REPLACEABLE PARTS—(Contd)  
Group 401 to 450, Brake Assembly—(Contd)

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
2	414		Clamps, tubing, 1/2-inch	BW	200406
12	415		Clamps, tubing, 3/8-inch	BW	202689
2	416		Connectors, tubing, 1/2-inch by 3/8-inch	BW	217525
30"	417		Tubing, 1/2-inch O.D., copper	BW	
30"	418		Loom, 1/16-inch I.D.	BW	
2	419		Hose assemblies	BW	201010
1	420		Frame fitting	BW	201988
1	421		Frame fitting	BW	205000
1	422		Valve, quick release	BW	208479
1	423		Bushing, 3/8-inch to 1/4-inch	BW	205098
2	424		Brackets, reservoir	BW	205824
1	425		Connector, tubing, 3/8-inch by 3/8-inch	BW	214258
2	426		Elbows, brass street, 3/8-inch	BW	
8	427		Elbows, brass street, 1/4-inch	BW	
2	428		Filters, type "E"	BW	221022
1	429		Valves, exhaust check	BW	221087
24	480		Tubing, 1/2-inch by 3/8-inch O.D. steel	BW	
2	481		Nipples, 1/2-inch close	BW	
2	482		Couplings, 1/2-inch by 1 1/4-inch	BW	
4	483		Adjusters, slack	BW	220269
2	484		Brackets, filter	AC	84-AC-28
4	485		Chambers, air	BW	

Group 451 to 500, Emergency Brake Assembly

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	451		Lever, hand brake assembly	EB	A-1004
8	452		Clevis with pin and cotter	EB	9419D

**Group 451 to 500, Emergency Brake Assembly—(Contd)**

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	453		Equalizer, brake	KT	SFP307
2	454		Brackets, cam, rear frame member	AC	34-AC-24
1	455		Lever, brake cam	AC	34-AC-25
1	456		Rod, brake	AC	34-AC-26
1	457		Clevis pin with cotter	EB	
10'	458		Cable, brake	KW	

**Group 501 to 550, Shock Absorber Assembly**

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
4	501		Absorbers, shock	GB	F-65-B-600
4	502		Studs, top	GB	F-1504
4	503		Studs, bottom	GB	F-1508
16	504		Bushings, rubber	GB	F-859
8	505		Washers, inner	GB	F-858
8	506		Washers, outer	GB	F-849
8	507		Nuts, hexagonal	GB	F-1505
8	508		Washers, lock	GB	F-1506
4	509		Washers, lock	GB	F-1508
4	510		Nuts, hexagonal	GB	F-1508
4	511		Castings, shock absorber axle bracket	FM	FM-4
2	512		Plates, front mounting	AC	84-AC-27
2	513		Plates, rear mounting	AC	84-AC-28
4	514		Spacers	AC	84-AC-29

**25. TABLE OF REPLACEABLE PARTS—(Contd)**  
**Group 551 to 600, Chock Block Assembly**

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
8	551		Blocks, chock	JP	84-AC-80
4	552		Anchors, chock blocks	AC	
30	558		Chain, 1/4-inch	AM	
16	554		Bolts, 1/4-inch by 8 1/2-inch carriage	KW	

**Group 601 to 650, Lifting Eye Assembly**

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
4	601		Eyes, lifting	FM	84-H-11
4	602		Brackets, lifting eye	AC	84-AC-81
4	603		Plates, lifting eye, frame reinforcement	AC	84-AC-82
4	604		Hooks, 3/16-inch, wire	AC	84-AC-83
4	605		Springs, wire	KW	

**Group 651 to 700, Body Assembly**

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
3	651		Hook, door, long	AC	84-AC-84
1	652		Hook, door, short	AC	84-AC-85
6	653		Brackets, door hook with hole	AC	84-AC-86
1	654		Angle, door hook, long	AC	84-AC-87
2	655		Angles, door hook, medium	AC	84-AC-88
1	656		Angle, door hook, short	AC	84-AC-89
2	657		Supports, side door hook	AC	84-AC-40
1	658		Angle, side door, (in two sections)	AC	84-AC-41

Group 651 to 700, Body Assembly—(Contd)

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	659		Angle, side door header (in two sections)	AC	84-AC-42
1	660		Jamb, side door, strap iron	AC	84-AC-44
1	661		Angle, floor (in sections)	AC	84-AC-44
1	662		Angle, back door	AC	84-AC-45
1	663		Angle, drip (in sections)	AC	84-AC-46
1	664		Angle, drip side door	AC	84-AC-47
6	665		Angles, front center post	AC	84-AC-48
2	666		Straps, reinforcing, front center post	AC	84-AC-49
1	667		Rail, belt (in sections)	AC	84-AC-50
1	668		Rail, rub (in sections)	AC	84-AC-51
2	669		Saddles, roof	AC	84-AC-52
2	670		Straps, top, rood saddles	AC	84-AC-53
2	671		Strikes, lock, side door	AC	84-AC-54
2	672		Straps, top and metal	AC	84-AC-55
2	673		Gussets, 6 by 6 by 3/16, side door frame	BL	P1
2	674		Gussets, 6 by 6 by 3/16, rear door frame	BL	P2
2	675		Gussets, 1/4 by 4 1/2 by 8	MR	MR-11
2	676		Plate, 1/4 by 1 3/4 by 5 3/4	MR	MR-12
2	677		Strap, 3/8 by 1 1/2 by 10	MR	MR-18
5	678		Braces, 1/4 by 1 by 6 1/2 by 8	MR	MR-14
11	679		Braces, 1/4 by 1 by 8 by 8	MR	MR-15
1	680		Cover, scuttle	TS	TS-1
2	681		Angles, front corner	TS	TS-2
1	682		Gasket, retaining strip rear doors	TS	TS-8
1	683		Door-post, center	WA	WA-1
1	684		Scuff-plate, rear	WA	WA-2
1	685		Angle No. 8, center door to floor	WA	WA-3
2	686		Rail, rub, over wheel housing	WA	WA-4
2	687		Wheelhousing	WA	WA-5

25. TABLE OF REPLACEABLE PARTS—(Contd)  
Group 651 to 700, Body Assembly—(Contd)

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	688		Gusset, side door center post	WA	WA-6
2	689		Angle, rear outside corner	WA	WA-7
1	690		Case, parts list	AC	84-AC-56

Group 701 to 750, Spare Tire Carrier

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	701		Plate, spare wheel mounting	BL	P6
3	702		Nuts, stud, right-hand	MW	82106
1	703		Padlock	YT	PD497

Group 751 to 800, Body Hardware

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	751		Lock, side door, refrigerator type	EB	5361 1/2
1	752		Lock, with inside handle, side door	EB	5637
1	753		Lock, with center bearing, rear door	EB	5629
1	754		Lock, rectifier door	EB	5611
1	755		Padlock, rear door	YT	PD497
2	756		Bolts, single hook catch, rear door	EB	5608
1	757		Handle, lock type, recessed	EB	4874
4	758		Hinges, continuous, 11 gauge, rear door and side door	HF	
1	759		Hinge, piano, 14 gauge, rectifier door	HF	
1	760		Hinge, piano, 16 gauge, scuttle cover	HF	
3	761		Pulls, door, louver and scuttle covers	SP	175
4	762		Catches, friction, louver covers	NL	8320

**Group 751 to 800, Body Hardware—(Contd)**

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
4	768		Strikes for above	NL	8420
1	764		Catch, elbow, scuttle cover	NL	8348
1	765		Strike for above	NL	8448
1	766		Support, table, rectifier door	SW	446-K
1	767		Bracket for table support	AC	84-AC-57

**Group 801 to 850, Body Panels**

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
7	801		Steel, 22 gauge sheet, 86 by 120		
3	802		Steel, 20 gauge sheet, 48 by 96		
2	803		Steel, 20 gauge sheet, 86 by 72		
2	804		Steel, 20 gauge sheet, 86 by 96		
6	805		Steel, 20 gauge sheet, 48 by 72		
4	806		Steel, 20 gauge sheet, 48 by 84		
1/8	807		Steel, 24 gauge sheet, 27 1/2 by 120		
1/5	808		Steel, 26 gauge sheet, 27 by 120		

**Group 851 to 950, Body Framing**  
Front, Fig. 13

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	851		Post, No. 1 center	AC	
1	852		Post, No. 2	AC	
1	853		Post, No. 3	AC	
1	854		Post, No. 4 corner	AC	
1	855		Post, No. 5 corner	AC	

25. TABLE OF REPLACEABLE PARTS—(Contd)  
Group 851 to 950, Body Framing—(Contd)

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	856		Rail, No. 6 top	AC	
1	857		Rail, No. 7	AC	
1	858		Rail, No. 8	AC	
1	859		Rail, No. 9	AC	
1	860		Rail, No. 10	AC	
1	861		Rail, No. 11 bottom	AC	
1	862		Blocks, No. 12 filler	AC	

Top, Fig. 10

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	863		Rib, No. 1 roof	AC	
1	864		Rib, No. 2 roof	AC	
1	865		Rib, No. 2a roof	AC	
1	866		Backing, No. 3 rib	AC	
1	867		Frame, No. 4 scuttle	AC	
1	868		Rib, No. 5	AC	
1	869		Rib, No. 6	AC	
1	870		Rib, No. 7	AC	
1	871		Rib, No. 8	AC	
1	872		Rib, No. 9	AC	
1	873		Rib, No. 10	AC	
1	874		Rib, No. 11	AC	
1	875		Rib, No. 12	AC	
1	876		Rail, No. 13 top side	AC	
1	877		Rail, No. 14 top side	AC	
1	878		Frame, No. 15 scuttle	AC	
1	879		Frame, No. 16 scuttle	AC	



**Group 851 to 950, Body Framing—(Contd)**  
 Top, Fig. 10

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
1	880		Frame, No. 17 dome light	AC	
1	881		Frame, No. 18 dome light	AC	
1	882		Frame, No. 19 plywood scuttle	AC	
1	883		Frame, No. 19a plywood scuttle	AC	
1	884		Frame, No. 20 plywood scuttle	AC	
1	885		Frame, No. 20a plywood scuttle	AC	

**Right side, Fig. 11**

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
1	886		Post, No. 1 rear	AC	
1	887		Filler, No. 2	AC	
1	888		Post, No. 3	AC	
1	889		Post, No. 4	AC	
1	890		Post, No. 5	AC	
1	891		Post, No. 6	AC	
1	892		Post, No. 7	AC	
1	893		Post, No. 7a	AC	
1	894		Filler, No. 8	AC	
1	895		Framing, No. 9 door	AC	
1	896		Filler, No. 10 center post wood	AC	
1	897		Post, No. 11	AC	
1	898		Post, No. 11a	AC	
1	899		Filler, No. 12 wood	AC	
1	900		Filler, No. 18	AC	
1	901		Filler, No. 18	AC	
1	902		Filler, No. 15	AC	
1	908		Rail, No. 16	AC	

**25. TABLE OF REPLACEABLE PARTS—(Contd)**  
**Group 851 to 950, Body Framing—(Contd)**

Right side, Fig. 11

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
1	904		Rail, No. 17	AC	
1	905		Rail, No. 17a	AC	
1	906		Rail, No. 18	AC	
1	907		Rail, No. 19	AC	
1	908		Rail, No. 20	AC	
1	909		Rail, No. 21	AC	
1	910		Rail, No. 22	AC	
1	911		Rail, No. 28 top	AC	
1	912		Brace, No. 24 forward	AC	
1	913		Brace, No. 25 rear	AC	

Left side, Fig. 12

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
1	914		Post, No. 1	AC	
1	915		Filler, No. 2	AC	
1	916		Post, No. 3	AC	
1	917		Post, No. 4	AC	
1	918		Post, No. 5	AC	
1	919		Post, No. 6	AC	
1	920		Post, No. 7	AC	
1	921		Post, No. 8	AC	
1	922		Post, No. 9	AC	
1	923		Post, No. 10	AC	
1	924		Filler, No. 12	AC	
1	925		Filler, No. 12	AC	
1	926		Filler, No. 18	AC	
1	927		Filler, No. 14	AC	

**Group 851 to 950, Body Framing—(Contd)**  
 Left side, Fig. 12

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
1	928		Filler, No. 15	AC	
1	929		Rail, No. 16	AC	
1	930		Rail, No. 17	AC	
1	931		Rail, No. 18	AC	
1	932		Rail, No. 19	AC	
1	933		Rail, No. 20	AC	
1	934		Rail, No. 21	AC	
1	935		Rail, No. 22	AC	
1	936		Rail, No. 23	AC	
1	937		Rail, No. 24	AC	
1	938		Rail, No. 25	AC	
1	939		Rail, No. 26 top	AC	
1	940		Brace, No. 27 forward	AC	
1	941		Brace, No. 28 rear	AC	

Miscellaneous, Fig. 16

<i>Quantity</i>	<i>Ref. No.</i>	<i>Stock No.</i>	<i>Name and Description</i>	<i>Mfr.</i>	<i>Part No.</i>
1	942		Rail, No. 1 rub	AC	
2	943		Backing, No. 2 radius (in sections)	AC	
2	944		Wall, No. 8 wheelhouse	AC	
1	945		Saddle, No. 4 roof, front	AC	
1	946		Saddle, No. 5 roof, rear	AC	
1	947		Rail, No. 6 rear top	AC	
1	948		Sill, No. 7 rear door	AC	
1	949		Filler, No. 8 door sill, right	AC	
1	950		Filler, No. 9 door sill, left	AC	

25. TABLE OF REPLACEABLE PARTS—(Contd)  
Group 951 to 1,000, Tool Kit

Quantity	Ref. No.	Stock No.	Name and Description	Mfr.	Part No.
1	951		Bag, tool	SB	
1	952		Wrench, wheel stud and nut		
1	953		Hammer, ball peen, 12 oz.		
1	954		Screwdriver, 10-inch		
1	955		Grease, 5-pound can		
1	956		Gun, lubricating	AL	
1	957		Hinges, 8-inch strap	KW	
1	958		Hasp, 8½-inch	KW	
1	959		Studs, right-hand, with nuts	MW	
1	960		Studs, left-hand, with nuts	MW	
8	960		Light, blackout tail, unit	KD	CB225
2	961		Lamp, service stop tail, units	KD	CB9218
2	962		Lamp, blackout stop, units	KD	CB9284
2	963				

## 26. LIST OF MANUFACTURERS

<i>Symbol</i>	<i>Name and Address</i>
A.L.	The Alemite Corporation, 1826 W. Diversey Parkway, Chicago, Ill.
A.M.	American Chain & Cable Co., E. Princess and Charles St., York, Penna.
W.A.	W. R. Ames Co., Tampa, Fla.
B.W.	Bendix Westinghouse, Elyria, Ohio.
B.L.	Bushnell-Lyons Co., Tampa, Fla.
C.C.	The Corbitt Co., 3200 Payne St., Henderson, N. C.
A.D.	A. E. Deane Machine Shop, Bradenton, Fla.
D.G.	H. A. Douglas Manufacturing Co., Bronson, Mich.
E.B.	Eberhard Manufacturing Co., 2800 Tennyson Road, Cleveland, Ohio.
F.S.	Firestone Stores, 1600 Firestone Blvd., Akron, Ohio.
F.M.	Florida Machine & Foundry Co., Jacksonville, Fla.
G.B.	The Gabriel Co., 1407 E. 40th St., Cleveland, Ohio.
H.H.	Holland Hitch Co., Holland, Mich.
H.F.	C. M. Hoof Co., 6543 S. Laramie Ave., Chicago, Ill.
K.D.	K. D. Lamp Co., Inc., 610 W. Court, Cincinnati, Ohio.
K.T.	Kingham Trailer Co., 15th and Hill, Louisville, Ky.
K.W.	Knight & Wall, Tampa, Fla.
L.B.	Lee Brothers Foundry, Lee Building, Anniston, Ala.
L.G.	Liggett Spring & Axle Co., Monongahela, Penna.
M.S.	E. R. Merrill Spring Co., 530 W 28th St., New York City.
A.C.	A. J. Miller Auto Cruiser Trailer Co., Bradenton, Fla.
M.W.	Motor Wheel Corporation, 712 E. Saginaw St., Lansing, Mich.
N.L.	National Lock Washer Co., 65 Johnson St., Newark, N. J.
J.P.	J. M. Perry, Bradenton, Fla.
M.R.	Matt G. Reeves, Tampa, Fla.
S.P.	Safe Padlock & Hardware Co., Lancaster, Penna.
S.W.	The Stanley Works, 89 Elm Street, New Britain, Conn.
T.S.	Tampa Sheet Metal Co., Tampa, Fla.
U.F.	Union Forging Co., North and Thomas, Endicott, N. Y.
W.E.	Warner Electric Brake Manufacturing Co., Beloit, Wis.
Y.T.	Yale and Towne Manufacturing Co., 200 Henry Street, Stamford, Conn.
Y.S.	Youngstown Steel, Youngstown, Ohio.