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TM 5-9208

WAR DEPARTMENT TECHNICAL MANUAL

U.S. Dept. of Army

SEMI-TRAILER,

LOW BED, WITH DOLLY,

20-TON, JAHN, MODEL LKD-620

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MAINTENANCE INSTRUCTIONS AND PARTS CATALOG

WAR DEPARTMENT • 15 JANUARY 1944

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TM 5-9208

Combined

OPERATOR'S MANUAL
MAINTENANCE MANUAL

and

SPARE PARTS LIST

for

20-TON LOW-BED SEMI-TRAILER, WITH DOLLY

Model LKD-620

Manufactured for

CORPS OF ENGINEERS

by

C. R. JAHN COMPANY

Chicago, Illinois

THIS BOOK COVERS:

War Department Purchase Order Nos.	Serial Nos.	U. S. Registration Nos.
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WAR DEPARTMENT
Washington 25, D. C., 23 February 1944

TM5-9208, Maintenance Manual and Parts Catalog, 20-Ton Low Bed Semi-Trailer, with Dolly, Jahn Model LKD-620, is published for the information and guidance of all concerned.

AG 300.7 (17 Feb. 1944)

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,
Chief of Staff.

OFFICIAL:

J. A. ULIO,
Major General
The Adjutant General

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Maintenance Manual

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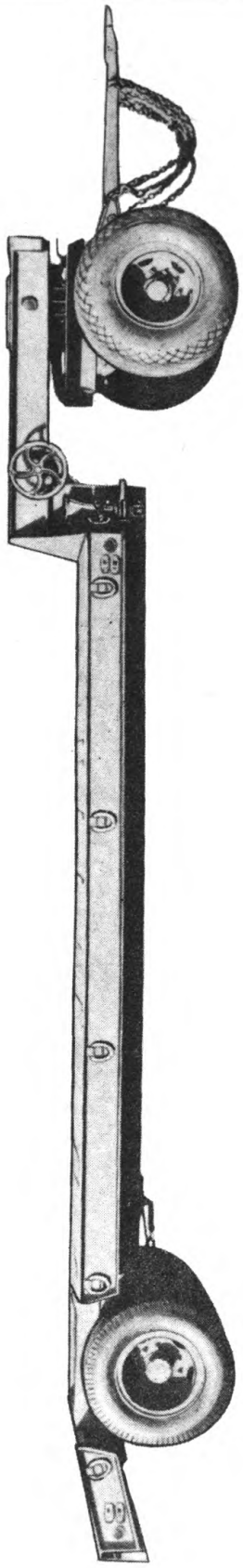

Figure 1—*The Model LKD-620 Trailer*

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Preface

TM5-9208 covers an operator's manual, maintenance manual and parts catalog for a 20-ton low-bed semi-trailer, with dolly, built for the Corps of Engineers by C. R. Jahn Company, Chicago, Ill. The trailer is designed to haul heavy units of machinery.

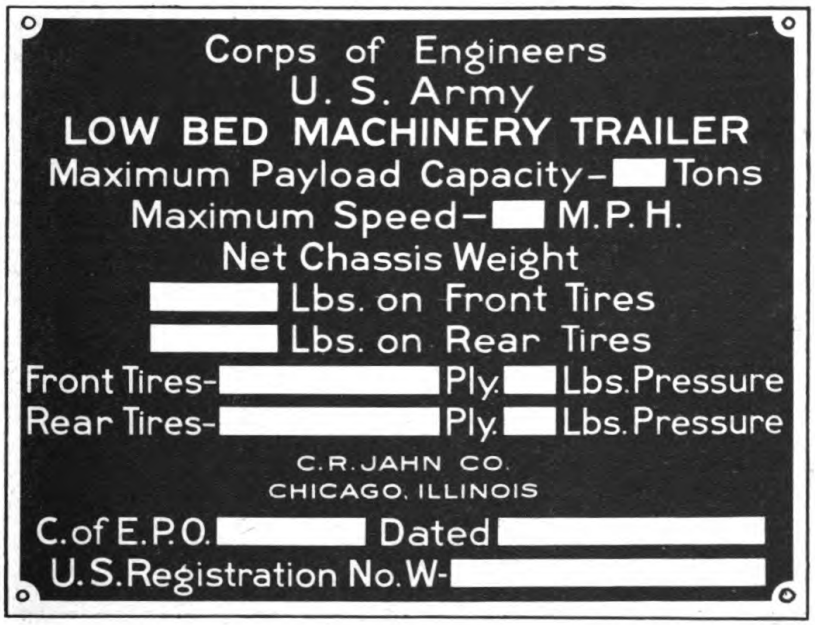

Figure 2—*Main Unit Name Plate*

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OPERATORS MANUAL

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SECTION 1

INTRODUCTION

PURPOSE AND SCOPE

This manual describes a low-bed trailer designed for transporting heavy mobile units of machinery. It contains information for the guidance of the using arms charged with operation, maintenance and repair of this equipment. Descriptions of the major units are given, as well as an explanation of their function in relation to the other components of the trailer. Successive sections cover Description and Characteristics; Operating Instructions and Controls; Inspection, Lubrication and Adjustments; Tools and Accessories, and Preparation for Storage.

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SECTION 2

DESCRIPTION AND CHARACTERISTICS

GENERAL DESCRIPTION

1. This trailer, of 20-ton capacity, may be used as a full trailer (figure 1) and be drawn by a heavy-duty truck, or as a semi-trailer (figure 3) and be drawn by a truck-tractor. Two vehicles comprise the trailer, the main unit or trailer proper and a dolly truck (figure 4) on which the trailer front end may be mounted for use as a full trailer. Two loading ramps are supplied to facilitate loading and unloading of equipment to be hauled.

2. Designed to travel on highways, ability of this trailer to travel cross country depends upon the tractive ability of the towing unit.

3. The trailer model number, LKD-620, as well as the serial number, is stamped on a plate located at the front of the left main frame side rail.

AXLE—Front

1. The front axle is a solid alloy steel bar, with spindles ground to accurate limits.

2. Axle and wheels are equipped with heavy duty tapered roller bearings. Simple adjustments of the bearings are made through an adjusting nut.

AXLES—Rear

Rear axles are trunnion mounted, of the oscillating type. They are equipped with heavy-duty tapered roller bearings, which can be adjusted through an adjusting nut, a hardened tongue washer and a lock nut.

Figure 3—*The Model LKD-620 as a Semi-Trailer*

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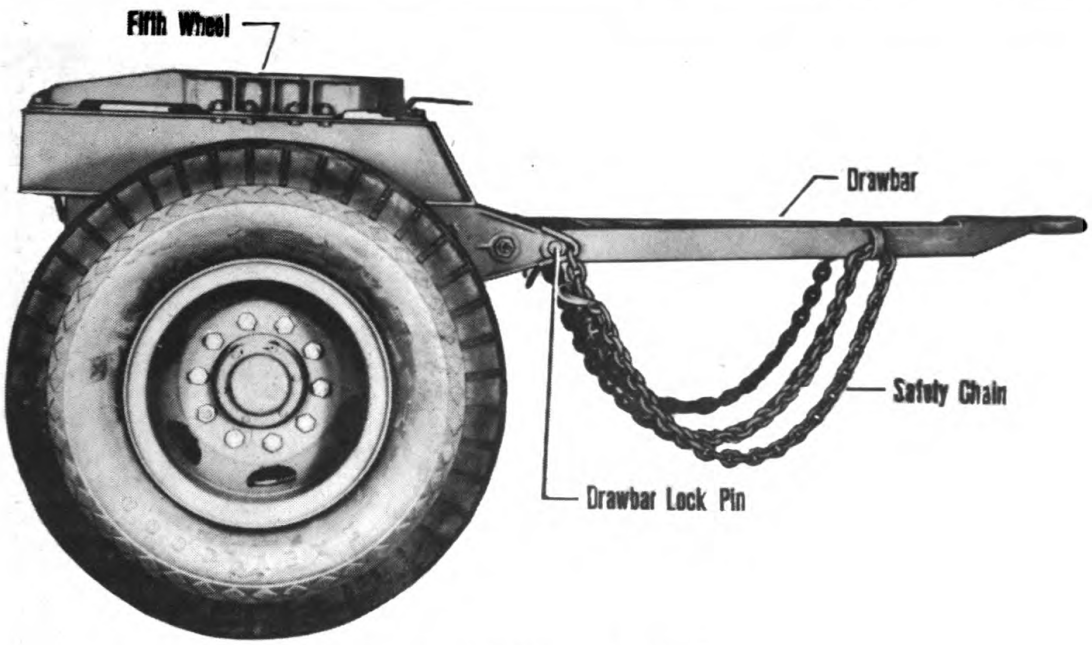

Figure 4—*Side View of the Dolly*

BRAKES

1. The front and rear brakes are of a double-anchor, two-shoe, heavy duty internal expanding type. They have a 16½-inch diameter, and a 6-inch width. Brake lining is a tapered block, thickest at the point of maximum wear.

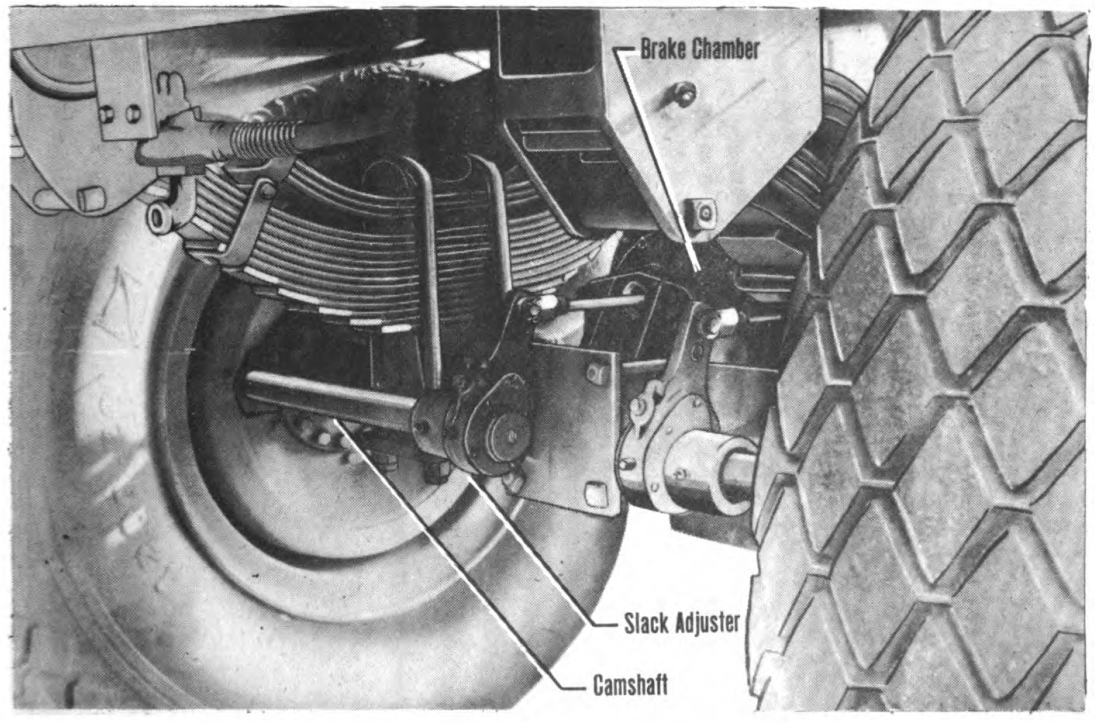

Figure 5—*Rear Underconstruction of the Dolly*

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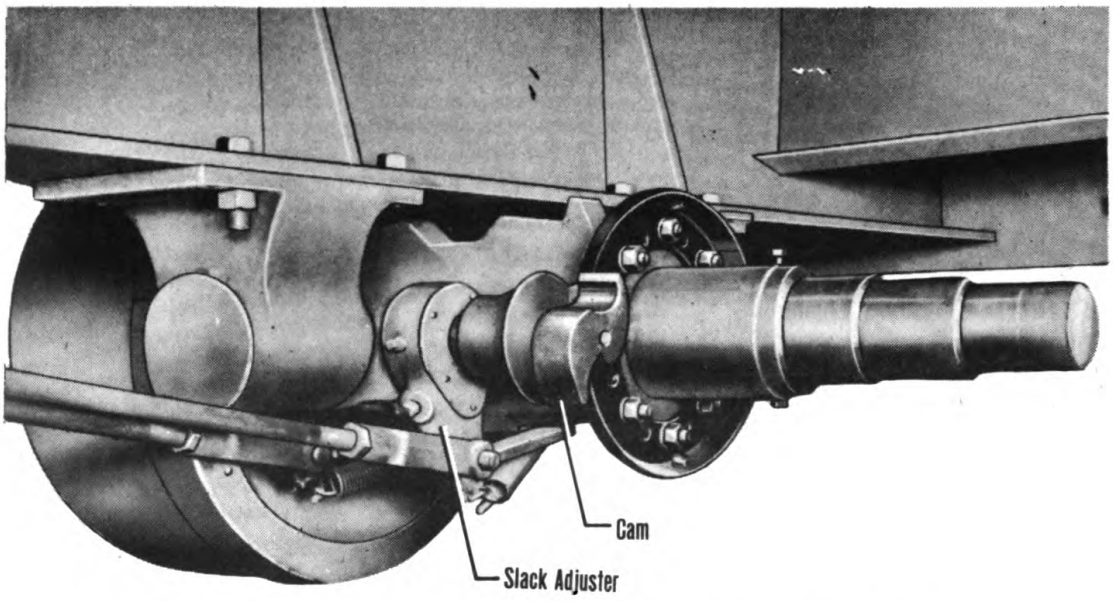

Figure 6—*Trunnion Axle with Hub and Drum Removed from One End.*

2. Brakes are provided with a slack adjuster on the camshaft (figures 5 and 6). The slack adjuster provides for 360-degree adjustment on the camshaft. Actuation of the front axle brakes is by air chambers mounted on the axle (figure 5), while the rear axle brakes are actuated by air chambers (figure 7) mounted in the trailer frame.

BRAKE—Hand

A hand parking brake, with its operating wheel (figure 8) at the right side of the trailer frame, actuates cross shafts and levers connected by rods to the rear axle brake slack adjusters.

SCREW JACKS

Screw jacks (figure 8) are provided at each side of the goose neck to support the main frame without its dolly.

PINTLE HOOK

A pintle hook is provided at the rear of the trailer frame.

FIFTH WHEEL

A fifth wheel (figure 4) is rigidly mounted to the dolly.

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DRAWBAR LOCKING DEVICE

The drawbar is equipped with a pin which, when inserted in a hole in the drawbar mounting bracket, provides a means of locking the drawbar rigid to facilitate backing the dolly. (See figure 4.)

AIR BRAKE EQUIPMENT

1. The air brake equipment provides a means of operating the brakes through the medium of compressed air, and in conjunction with the air brake system on the vehicle towing the trailer. Fundamentally, the trailer air brake system consists of the air devices necessary to direct and control the flow of compressed air, and those necessary to transform the energy of the compressed air into mechanical force and motion to apply the brakes.

2. The trailer air brake system includes air connections at the front so it can be connected to the air brake system of the vehicle towing the trailer.

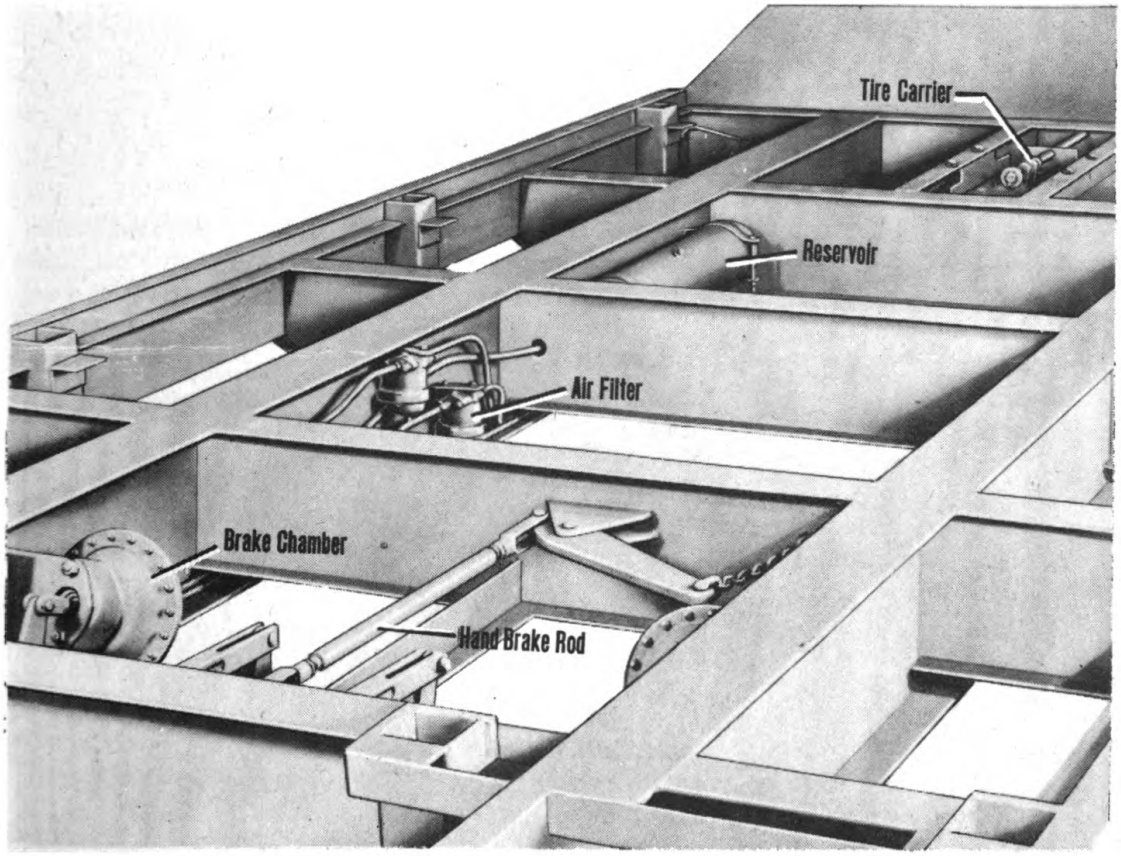

Figure 7—*Looking Down on Full Bed of Trailer, with Platform Removed.*

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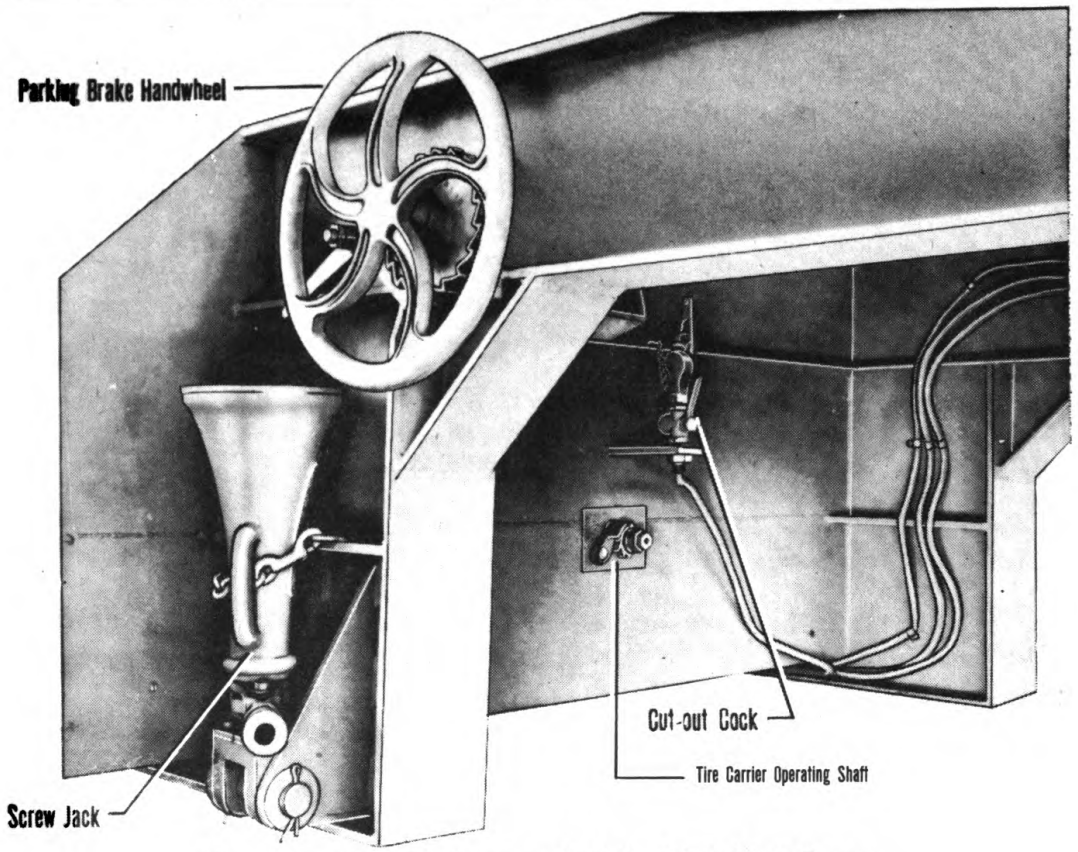

Figure 8—*Below the Gooseneck of the Main Unit Frame*

Air Brake Components

1. A relay-emergency valve relays the braking action from the towing vehicle and provides an automatic brake application on the trailer in the event the trailer breaks away from the towing vehicle.

2. Brake chambers (figures 5 and 7) transform the energy of compressed air into the mechanical force and motion necessary to operate the brakes on each wheel.

3. Slack adjusters (figures 5 and 6), mounted on the brake camshafts, provide an easy means of adjusting the brakes to compensate for brake lining wear.

4. A reservoir (figure 7) is used to store the compressed air for brake operation.

5. A drain cock is mounted at the bottom of the reservoir to facilitate draining of the condensation which normally collects there. The reservoir should be drained at least once a week.

6. An exhaust check valve is mounted in the exhaust port of the relay-emergency valve to protect the relay-emergency valve against the entrance of dirt or water.

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7. Air filters (figure 7) are connected in the service line and in the emergency line leading from the air brake system on the towing vehicle.

8. Hose couplings (figure 9) are mounted at the service line and emergency line outlets at the front of the trailer to provide a simple means of attaching hose connections from the towing vehicle.

9. Dummy couplings (figure 9), located near the hose couplings at the front of the main trailer frame, are designed for attachment to the hose couplings to prevent entrance of dirt when the hose couplings are not being used.

10. Hose assemblies are used where it is necessary to connect an air line between two points of the trailer which change their position in relation to each other. All hose assemblies include detachable type hose connectors.

11. Tubing and tubing fittings are used to connect the air brake devices in the air brake system where the use of hose is not necessary.

12. A quick release valve is used to provide a quick release of the front wheel brakes.

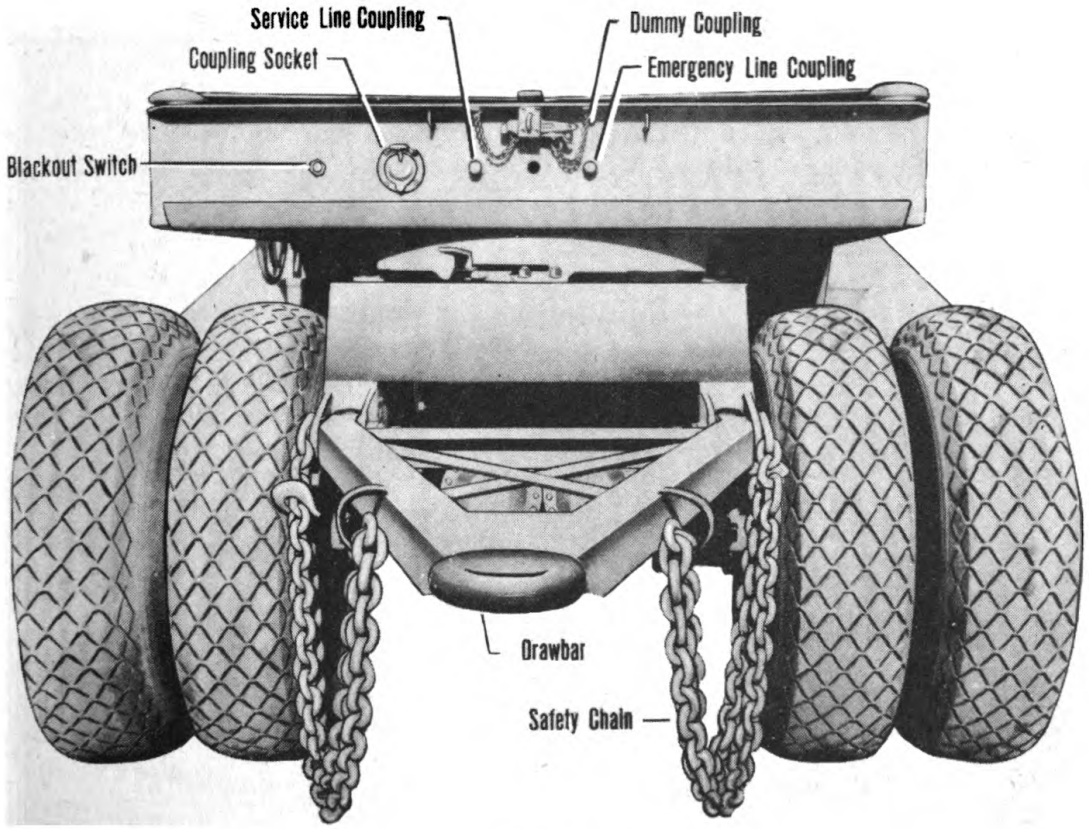

Figure 9—*Front of Trailer.*

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13. A cut-out cock (figure 8), located under the main unit gooseneck, is provided in the hose line connecting the dolly air brake equipment to the trailer air brake system so that the line may be closed when the dolly is not being used.

DRAWBAR

The drawbar (figure 4) is of fabricated steel construction, with a drop-forged eye welded to it. It is attached at the front of the dolly by bolts passing through brackets on the dolly frame and bushings pressed into drawbar hinges. A locking device is provided, to be used only when backing the dolly to the main frame. Two safety chains (figure 4) welded to the dolly frame, pass through loops on the drawbar for connection to the prime mover.

ELECTRICAL SYSTEM

1. The wiring system is the 6-8-volt type. The lighting system includes two amber and two red clearance lamps, two red and two blue blackout lamps, one combination blackout stop and tail light at the right-hand rear, and one combination service stop and tail light and blackout tail lamp located on the left-hand rear of the trailer.

2. The blackout switch (figure 9) is located at the front of the main unit frame.

3. A jumper cable (figure 10) supplies current to the trailer through a socket (figure 9) on the front of the main unit frame.

SPRINGS

1. The front dolly is provided with two main springs and two helper springs of the flat-end type. All leaves are bolted in the center with a nickel-steel center bolt. Spring leaves are held in alignment to each other by two clips riveted to the leaves. The springs are secured to the dolly axle by heat-treated U-bolts.

2. Radius rods, attached to the front axle and the dolly

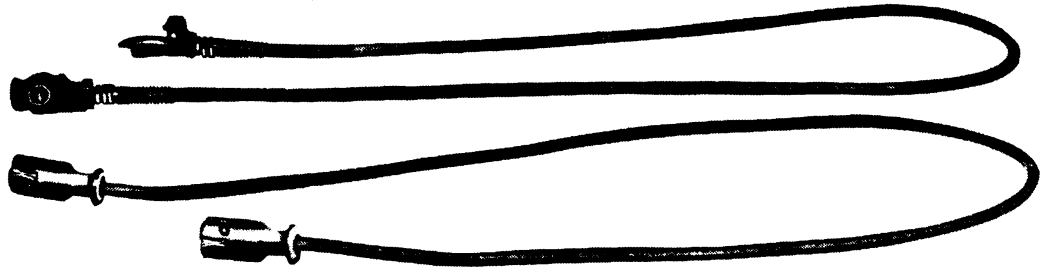

Figure 10—*Hose Assembly (top) and Jumper Cord.*

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frame, are adjustable to maintain front axle alignment.

FRONT WHEELS AND TIRES

Front wheels are of the steel disc type. Tires are 12.00x20, 14-ply, dual pneumatics.

REAR WHEELS AND TIRES

Rear wheels are of the steel disc type. Tires are 9.00x20, 10-ply, dual pneumatics.

TIRE CARRIER

The tire carrier (figure 7) is of the cable type. The tire is pulled up to the frame, where it is fixed into position by means of studs and stud nuts.

SPECIFICATIONS

Specifications of the trailer are tabulated below:

Capacity	20 ton
Overall length, less drawbar	30'1-3/4"
Wheel base	24'1"
Loading platform length	17'
Loading platform width	9'4"
Loading platform height (loaded)	39-1/2"
Ground clearance (loaded)	23-1/4"
Tires - Rear	8
Tire size - Rear	9.00x20
Tires - Front	4
Tire size - Front	12.00x20
Wheel size - Rear (Budd)	20x8
Wheel size - Front (Budd)	20x9-10
Brake size - Front (Timken)	16-1/2x6
Brake size - Rear (Timken)	16-1/2x6
Total brake lining area	1368 sq.in.
Tire capacity at 55 lbs. inflation pressure, 25 mph	
Front	25,600 lbs.
Rear	36,160 lbs.
Tire pressure	55 lbs.
Approximate weight, including ramps and tools	15,000 lbs.
Light system (electrical)	6 - 8 volt
Power brake system (Bendix-Westinghouse)	Air

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SECTION 3

OPERATING INSTRUCTIONS AND CONTROLS

Controls are employed according to the usual trailer-truck combination practice. The driver must become thoroughly familiar with the location and use of all control devices before attempting to operate the vehicles.

HAND BRAKE

The parking brake handwheel is located on the right side of the trailer at the drop in the frame. Turning the wheel applies the brakes. The hand brake can be used as a parking brake, or as a supplement to the truck brakes when descending extremely steep grades with a heavy load. (See figure 8.)

LIGHT CONNECTION

The trailer is equipped with a coupling socket (figure 9) in the center of the front cross member of the frame. A jumper cable (figure 10) for connection to the towing vehicle is a trailer accessory.

BLACKOUT SWITCH

1. The blackout switch (figure 9) is located on the front cross member of the main frame. It has no "OFF" position. It is either at a blackout position or at a standard light position.

2. The switch is operated by means of a coin or a screwdriver, while the flow of current is controlled at the towing vehicle.

TIRE CARRIER

The tire carrier (figure 49) is located behind the front cross member of the lower deck, while the carrier operating shaft protrudes through that cross member.(figure 8). By removing the stud nuts on the spare tire, and releasing the catch on the operating shaft ratchet, the tire will fall to the ground. The tire is raised to the carrier by means of cables operated by turning the operating shaft with the socket tire wrench on the shaft nut.

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AIR BRAKE OPERATION

1. The trailer air brake system is kept charged to the same pressure as the air brake system of the towing vehicle because air pressure can always flow from the reservoir on the towing vehicle through the emergency line, through the relay-emergency valve, to the reservoir on the trailer.

2. When the driver applies the brakes, air pressure, controlled by the brake valve on the towing vehicle, flows through the service line to the relay-emergency valve. This causes the relay-emergency valve to react and permit the same air pressure to flow from the trailer reservoir to the trailer brake chambers applying the brakes. The relay-emergency valve always reacts in this manner, and permits the same air pressure to be delivered to the trailer brake chambers as the brake valve on the towing vehicle delivers to the relay-emergency valve. It is, therefore, possible for the driver to control the air pressure in the trailer brake chambers, and in this way control the trailer brakes. The farther the brake valve on the towing vehicle is moved toward fully applied position, the higher the air pressure delivered to the trailer brake chambers and the more severe the brake application.

3. In the event the trailer breaks away from the towing vehicle, the relay-emergency valve reacts to prevent air pressure in the trailer reservoir from escaping out the broken hose line, and, at the same time, it opens communication between the trailer reservoir and the trailer brake chambers. Under these conditions, the brakes on the trailer are applied automatically.

COUPLING THE TRAILER TO ITS DOLLY

1. Securely block the rear wheels of the trailer to prevent its shifting.

2. Set the hand brake.

3. Adjust the screw jacks so that the trailer's fifth wheel plate is two or three inches lower than the dolly fifth wheel.

4. Set the dolly drawbar in its locked position and connect to a truck or other prime mover.

5. Back the dolly carefully under the trailer gooseneck until the trailer king pin is in position in the dolly fifth wheel.

6. Disconnect the drawbar lock.

7. With the dolly still connected to the prime mover, back the dolly until the trailer king pin is firmly engaged in the fifth wheel.

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8. Raise the screw jacks, fastening them in position with chains provided for that purpose.

9. Remove the dolly air hose connection from its hanger at the rear of the dolly frame and connect it to the air hose coupling below the gooseneck on the main unit frame (figure 8); open the cut-out cock.

COUPLING FULL TRAILER TO TOWING VEHICLE

1. Place the lunette eye of the drawbar in a pintle hook on the towing vehicle and lock it in position by means of the pin provided for that purpose.

2. Attach the hook ends of the drawbar safety chains to eyes or other means provided on the rear of the towing vehicle.

3. Connect the jumper cable between the trailer and towing vehicle, placing one end in the socket at the front of the trailer main frame and the other in the socket provided at the rear of the towing vehicle.

4. Remove the dummy couplings from the hose couplings on the trailer, and connect hose lines between the towing vehicle and the trailer, being careful to see that the service line on the towing vehicle is connected to the service line on the trailer, and that the emergency line on the towing vehicle is connected to the emergency line on the trailer. Identification tags are mounted on all vehicles so the connections can be easily identified.

5. Open the cut-out cocks in the outlets on the towing vehicle. Cut-out cocks are open when the handle is at a right angle to the line. Open cut-out cocks permit the air brake system on the trailer to be charged, making the trailer brakes ready to operate.

6. Check the operation of the brakes, before the vehicles are moved, by making a brake application and observing that the trailer brakes apply and release properly.

7. Release the parking brake by releasing its ratchet catch and turning the wheel.

8. Remove the blocking from the trailer rear wheels.

COUPLING SEMI-TRAILER TO TRUCK-TRACTOR

1. Securely block the rear wheels of the trailer to prevent its shifting.

2. Set the hand brake.

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3. Adjust the screw jacks so that the trailer's fifth wheel plate is two or three inches lower than the truck-tractor's fifth wheel.

4. Back the truck-tractor carefully under the trailer goose-neck until the trailer king pin is engaged in the tractor's fifth wheel.

5. Raise the screw jacks, fastening them in idle position with the chains provided for that purpose.

6. Connect the jumper cable and the air system hose lines and follow the general procedure outlined in paragraphs three through eight under "Coupling Full Trailer to Towing Vehicle," page 20.

DRIVING TOWING VEHICLE AND TRAILER

1. The truck and trailer combination is driven in much the same manner as the straight truck. When turning corners, it should be remembered that the rear wheels turn "inside" the turning radius of the truck.

2. Test the operation of the trailer brakes before traveling at full speed. Air supply on the dash gauge should not be less than 60 pounds for proper brake application.

3. Test the operation of the trailer lights.

BRAKING TOWING VEHICLE AND TRAILER

1. The trailer and towing vehicle brakes should be applied in coordination. The trailer brakes should not be expected to carry the entire load of the trailer and towing vehicle, or rapid lining wear and reduced life of the trailer brakes will occur.

2. Trailer brakes should be applied easily and released when they grab. A grabbing brake is not operating with maximum efficiency. For maximum efficiency, keep the tires just short of the skidding point.

3. When the trailer is parked for a considerable period, set the hand brake.

UNCOUPLING FULL TRAILER FROM ITS DOLLY

1. Set the trailer hand or parking brake.

2. Block the rear wheels of the trailer.

3. Place the screw jacks in position to support the main unit frame, and raise the jacks sufficiently to take some of the weight off the dolly.

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4. Close the cut-out cock below the gooseneck of the main unit frame and disconnect the dolly air hose connection from it; place the air hose coupling on the hanger provided at the rear of the dolly frame.

5. Disconnect the jumper cable from the towing vehicle.

6. Shut off both cut-out cocks - Service and Emergency - at the towing vehicle.

7. Uncouple the two air lines at the front of the trailer. Take care to prevent hose couplings from dragging in the dirt.

8. Couple the dummy hose couplers to the emergency and service lines on the trailer. These dummy couplers should be in place at all times the trailer is not in use to prevent entrance of foreign matter into the braking system.

> NOTE: Disconnecting the trailer should automatically apply the brakes on the trailer, but the trailer should never be parked when there is danger of it moving should the air pressure leak off and the brakes release. The parking brake should be set or the wheels blocked to prevent the trailer from moving.

9. Open the fifth wheel lock holding the main unit king pin.

10. With the prime mover, carefully pull the dolly from under the main unit.

UNCOUPLING DOLLY FROM TOWING VEHICLE

1. Block the dolly so that it does not move over the ground and so that it does not pivot on its axle.

2. Disconnect the dolly safety chains from the towing vehicle.

3. Disconnect the drawbar eye from the pintle hook on the towing vehicle.

4. Pull the towing vehicle ahead until the two units are separated.

UNCOUPLING SEMI-TRAILER FROM TRUCK-TRACTOR

1. Set the trailer hand or parking brake.

2. Block the trailer rear wheels.

3. Place the screw jacks in position to support the main unit

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frame, and raise the jacks sufficiently to take some of the weight off the truck-tractor.

4. Disconnect the jumper cable and the air lines as instructed in paragraphs five through eight under "Uncoupling Full Trailer From Its Dolly."

5. Open the tractor's fifth wheel lock holding the trailer king pin.

6. Pull the tractor ahead until the two units are separated.

RELEASING BRAKES AFTER AUTOMATIC OPERATION

If the trailer brakes have been automatically applied by disconnecting the trailer from the towing vehicle, and it is necessary to release the brakes without again connecting the trailer to the towing vehicle, release all air pressure from the trailer air brake system through the reservoir drain cock.

ABNORMAL OPERATING CONDITIONS

Mud, Water, Sand, and Dust

After operating the trailer through mud, water, sand, and dust, it is recommended that the wheel bearings, brakes, and air brake equipment be inspected. Refer to section 4, page 24, for routine inspection.

Extreme Heat and Cold Weather

When operating the trailer in extreme heat or cold weather trailer should be inspected as outlined in section 4, page 24.

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SECTION 4

INSPECTION, LUBRICATION AND ADJUSTMENT

INSPECTION

Trailers should be systematically inspected at regular intervals to insure mechanical efficiency.

Before Starting

1. Make sure the parking brake is released, and that the service and emergency air hoses are properly connected.

2. Check the inflation of tires, and examine for casing injuries.

3. Make sure the jumper cable is connected to the sockets on both the trailer and the towing vehicle; check operation of lights in both standard and blackout positions.

4. Check to see if tools and equipment are in good order.

5. Make sure the lunette eye on the drawbar is properly hooked in the pintle hook of the towing vehicle.

6. Check to be sure safety chains are hooked to the towing vehicle.

7. Be sure the trailer king pin is properly engaged in the dolly fifth wheel or tractor fifth wheel.

8. If a full trailer is being used, be sure the air brake system cut-out cock under the gooseneck of the main frame is open.

During Operation

1. The operator should be alert to detect unusual sounds, noises or driving characteristics that indicate abnormal functioning of the unit.

2. Only under exceptional circumstances should a trailer be operated after indications of trouble have been observed. When in doubt, the vehicle should be stopped and the trouble remedied.

After Operation

1. Carefully inspect the trailer to determine its general

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mechanical condition. Inspection should be followed by preventive maintenance.

2. Check springs and spring hangers to make sure no failure has occurred.

3. Check the axle and axle U-bolts.

4. Check the wheel studs; tighten any loose stud nuts.

5. Inspect the frame for any cracks; weld if necessary.

6. Check the condition of the spare wheel and tire; secure a replacement if necessary.

7. Drain the moisture from the reserve air tank, opening the pet cock at the bottom of the tank.

LUBRICATION

1 The lubrication chart (figures 11-11A-11B) gives information on the points of lubrication, the period, and the type of lubricant. The same information, together with the method of lubrication, is given pictorially on pages 26 - 31.

Wheel Bearing Lubrication

1. Tires and wheels must be removed for lubrication of wheel bearings. The procedure for wheel disassembly is discussed on page 46.

2. When wheels are removed, clean the hubs, axle spindles and bearings with solvent, dry cleaning or oil, fuel, Diesel. Pack grease (WB No. 2) into bearings with a paddle or the hands, and coat spindle lightly to prevent rust. Wheel bearings should be repacked every 5,000 miles under ordinary conditions, and more often under extreme conditions of mud, sand or dust.

> CAUTION: When reassembling the wheel, do not fill hubs with grease; excess grease will work against the grease retainers and enter the brake area, seriously affecting brake action and spoiling the brake linings. Take care not to make the bearing adjusting nut too tight, or bearings will heat and burn out. Tighten the adjusting nut until the wheel binds, then reverse it until the wheel turns freely. Ordinarily a quarter- or half-turn backward will be enough. Be sure the adjusting nut is locked securely.

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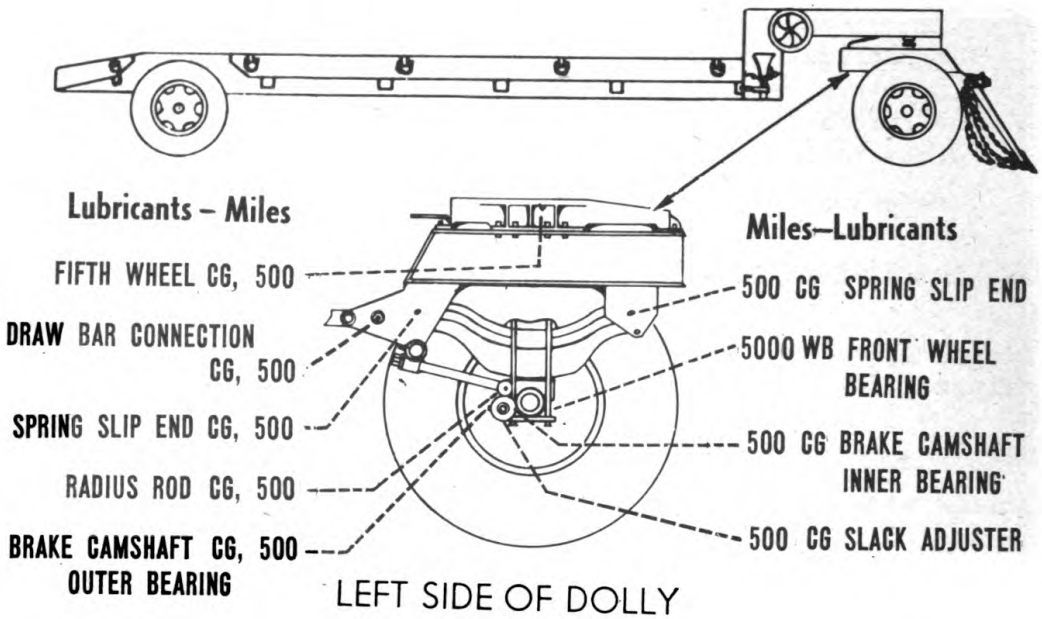
LUBRICATION GUIDE

TRAILER, SEMI, LOW BED, WITH DOLLY, 20-TON

CAUTION Lubricate Dotted Arrow Points on BOTH SIDES



LEFT SIDE OF DOLLY
(Illustrated with left wheel removed)

—KEY—

Lubricants	
CG	GREASE, general purpose No. 1 (above +32° F.) No. 0 (below +32°F.)
WB	GREASE, general purpose No. 2

TIRE PRESSURES

FRONT	55 lb.
REAR	55 lb.

Figure 11—*Lubrication Diagram*

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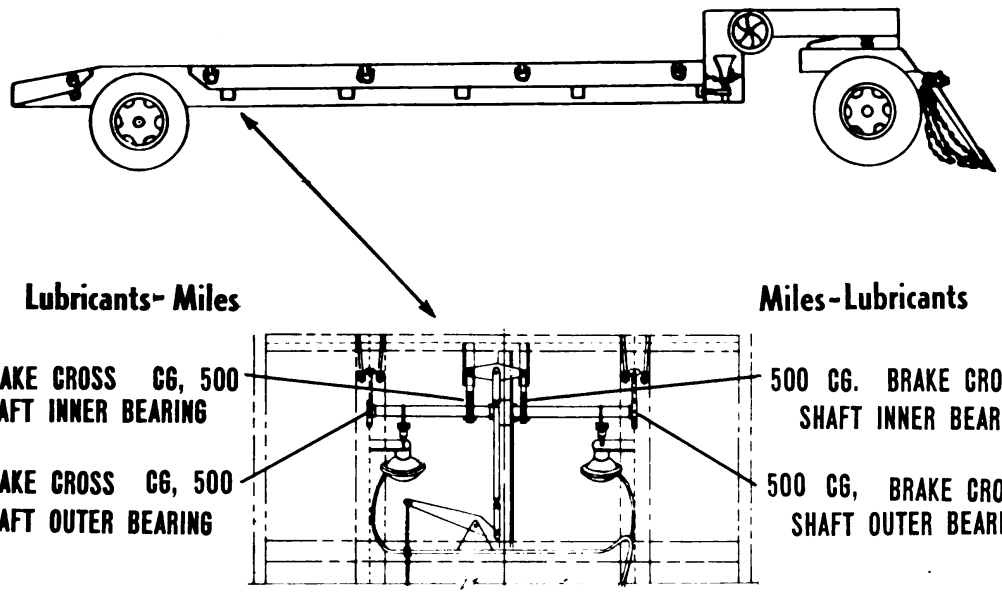
LUBRICATION GUIDE

TRAILER, SEMI, LOW BED, WITH DOLLY, 20-TON



BRAKE CROSS SHAFT BEARING

BOTTOM VIEW

—KEY—

Lubricants
CG - GREASE, general purpose
No. 1 (above + 32° F.)
No. 0 (below + 32° F.)

Figure 11A—*Lubrication Diagram,*

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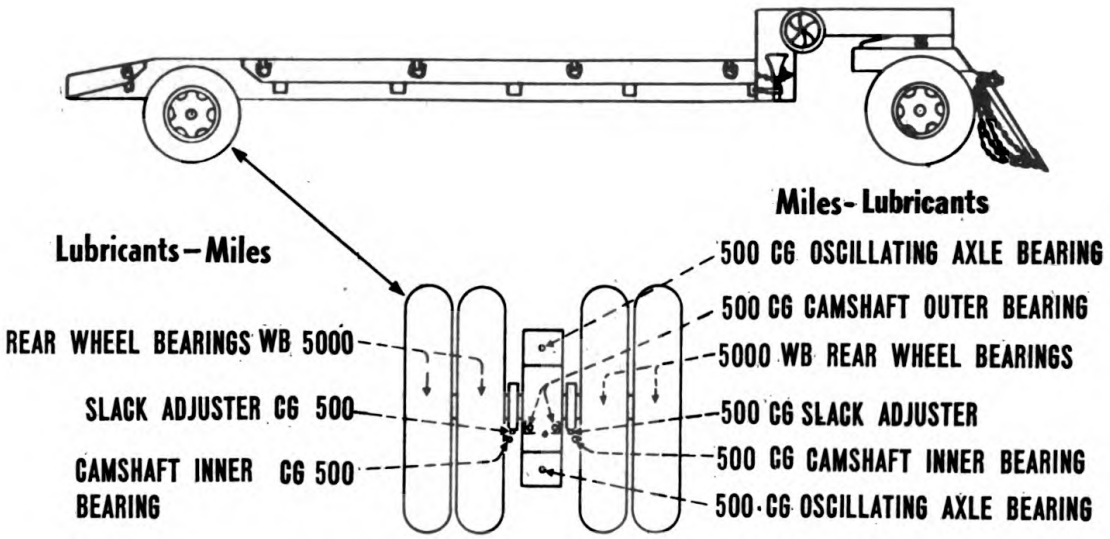
LUBRICATION GUIDE

TRAILER, SEMI, LOW BED, WITH DOLLY, 20-TON

CAUTION Lubricate Dotted Arrow Points on BOTH SIDES



BOTTOM VIEW OF REAR AXLES

–KEY–

Lubricants

CG – GREASE, general purpose
No. 1 (above + 32° F.)
No. 0 (below + 32° F.)

WB – GREASE, general purpose

TIRE PRESSURES

FRONT
55 lb.

REAR
55 lb.

Figure 11B—Lubrication Diagram

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NOTES

1. FITTINGS—Clean before applying the lubricant gun.
2. CLEANING—A solvent, dry cleaning, or oil, fuel or diesel, will be used to clean or wash all parts. Use of gasoline for this purpose is prohibited. All parts will be thoroughly dry before relubrication.
3. MILES—Lubricate chassis parts 500 miles or monthly, and wheel bearings every 5,000 miles or 5 months, whichever occurs first. The miles indicated are for normal service. For extreme conditions of speed, heat, water, mud, snow, rough roads and dust, lubricate more frequently.
4. AIR BRAKE FILTERS—(Located on left side of main frame) Every 500 miles remove filter element and wash.
5. AIR RESERVOIR—(Located under main frame, left side) Every day before operating vehicle open petcock and drain condensate.
6. OIL CAN POINTS — Every 500 miles lubricate clevises and pins with OE.
7. POINTS REQUIRING NO LUBRICATION — Hand Brake and Radius Rod End Joint.

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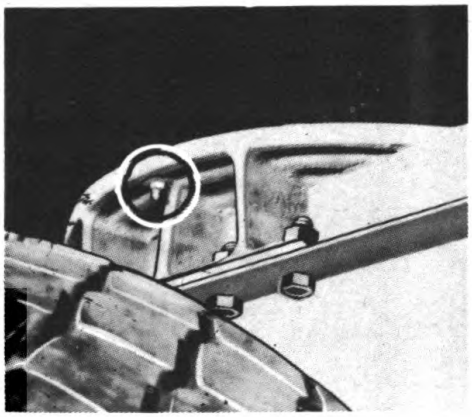
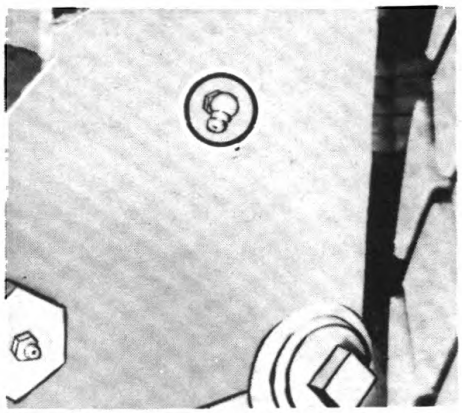
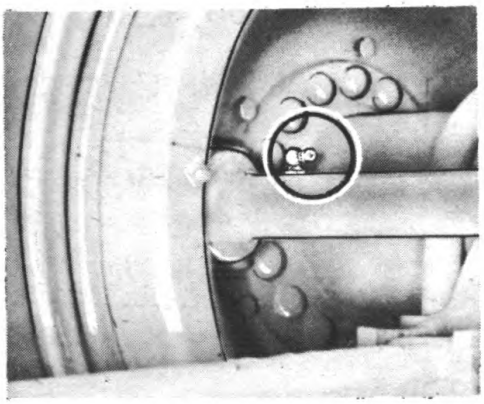


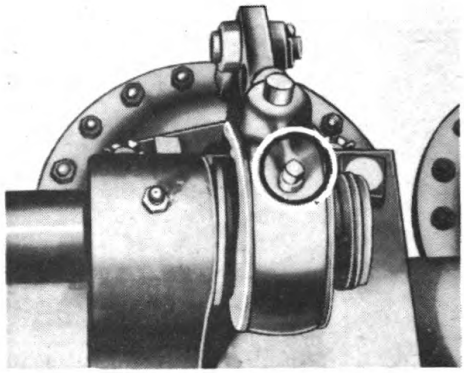
FIFTH WHEEL
CG, 500 Miles
Grease Gun



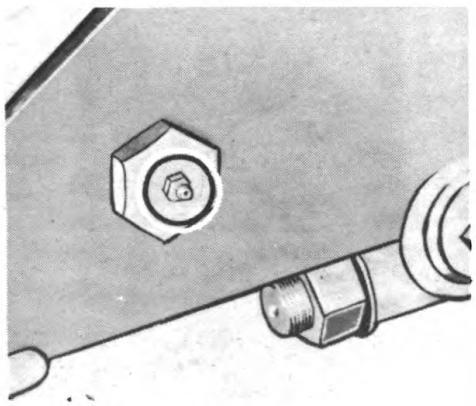
SPRING SLIP END, FRONT
CG, 500 Miles
Grease Gun



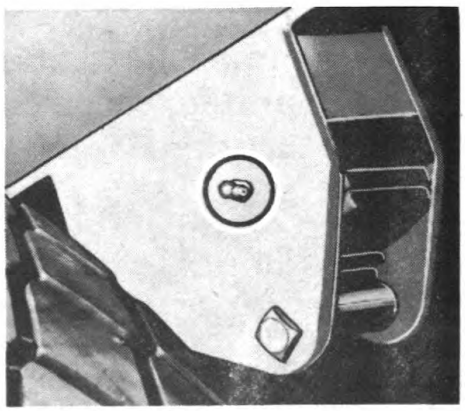
BRAKE CAMSHAFT INNER BEARING, FRONT
CG, 500 Miles
Grease Gun—Use Sparingly



SLACK ADJUSTER
CG, 500 Miles
Remove Plug, Insert Grease Gun Fitting



DRAW BAR CONNECTION
CG, 500 Miles
Grease Gun



SPRING SLIP END, REAR
CG, 500 Miles
Grease Gun

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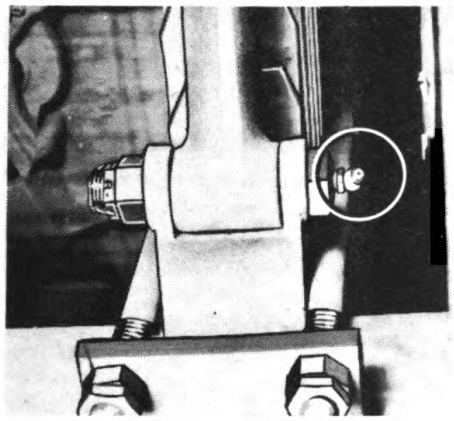
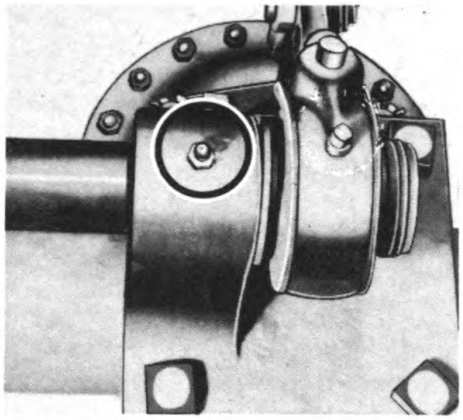
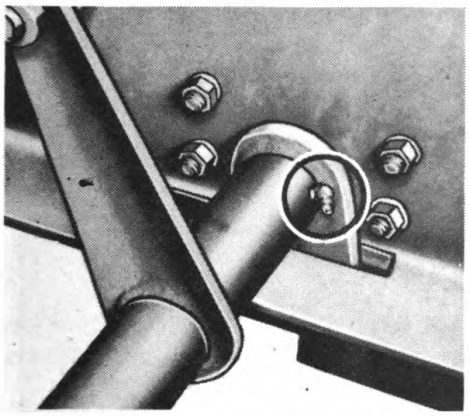


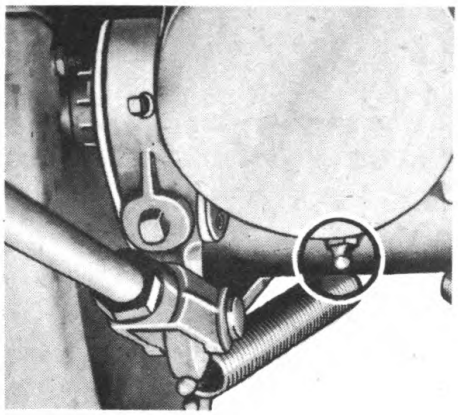
RADIUS ROD
CG, 500 Miles
Grease Gun



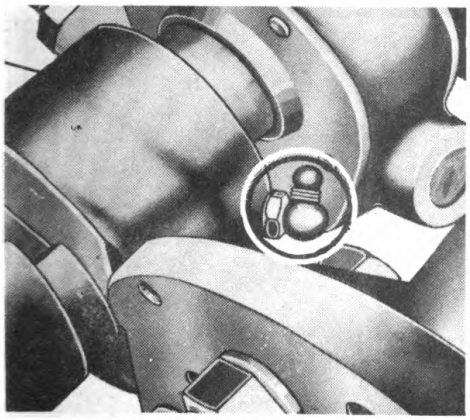
BRAKE CAMSHAFT OUTER BEARING, FRONT
CG, 500 Miles
Grease Gun—Use Sparingly



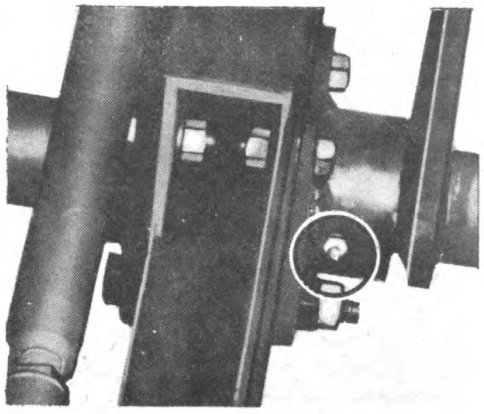
BRAKE CROSS SHAFT OUTER BEARING
CG, 500 Miles
Grease Gun



CG, 500 Miles **OSCILLATING AXLE BEARING**
Grease Gun



BRAKE CAMSHAFT INNER BEARING, REAR
CG, 500 Miles
Grease Gun—Use Sparingly



BRAKE CROSS SHAFT INNER BEARING
CG, 500 Miles
Grease Gun

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Fifth Wheel Lubrication

1. The trailer main frame fifth wheel plate and the dolly fifth wheel should be cleaned and lubricated every 5,000 miles or every month.

2. For instructions on disconnecting the dolly from the main unit, see page 21.

3. Wash the fifth wheel plate on the main unit and the top plate of the dolly fifth wheel with approved solvent, and then cover with a heavy grease.

4. Replace the dolly, following the procedure outlined on page 19.

MECHANICAL INSPECTION AND ADJUSTMENT

Drawbar

A wobbly drawbar indicates loose drawbar bushings. Check the drawbar for excess play and rebush if necessary. See page 81.

Lights

Check operation of all trailer lights. Replace any bulbs that may have burned out, and repair any wiring that may have become torn from the frame or loose from connections. See page 74.

Fifth Wheel

Check the dolly fifth wheel to make sure excessive wear is not taking place and that locking springs have not broken.

Underconstruction

1. Check the alignment of the front axle. See page 38.

2. Examine springs and spring clips. Replace springs in which leaves or clips are broken. See page 78.

3. Check linkage and operation of brakes on the front and rear axles. Adjust brakes for equalization at slack adjusters, if necessary. See page 51.

4. Examine brake lining and drums every four months, or every 5,000 miles.

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5. Examine all air hose line connections and tighten any that may have worked loose.

6. Drain the moisture from the air filter and remove the filter cartridge every 500 miles and wash in solvent, dry cleaning, or other approved solvent.

7. Check the radius rods for worn bushings. Rebush if necessary. See page 81 .

Wheels

1. Check wheel nuts and tighten if necessary.

2. Remove the hub cap and check bearing adjustment; adjust if necessary.

3. Remove, wash, repack and adjust the wheel bearings every five months, or every 5,000 miles. See page 25.

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SECTION 5

TOOLS AND ACCESSORIES

TOOLS

Tools regularly supplied with the trailer are shown in figure 12. They are carried in the tool compartment in the gooseneck of the main frame.

ACCESSORIES

Loading Ramps

Two loading ramps are supplied with the trailer. There is an angle ramp support at the rear of the trailer (figure 13) into which the ramps are rested when loading or unloading.

Load Binders and Chains

Three load binders and binding chains (figure 14) are sup-

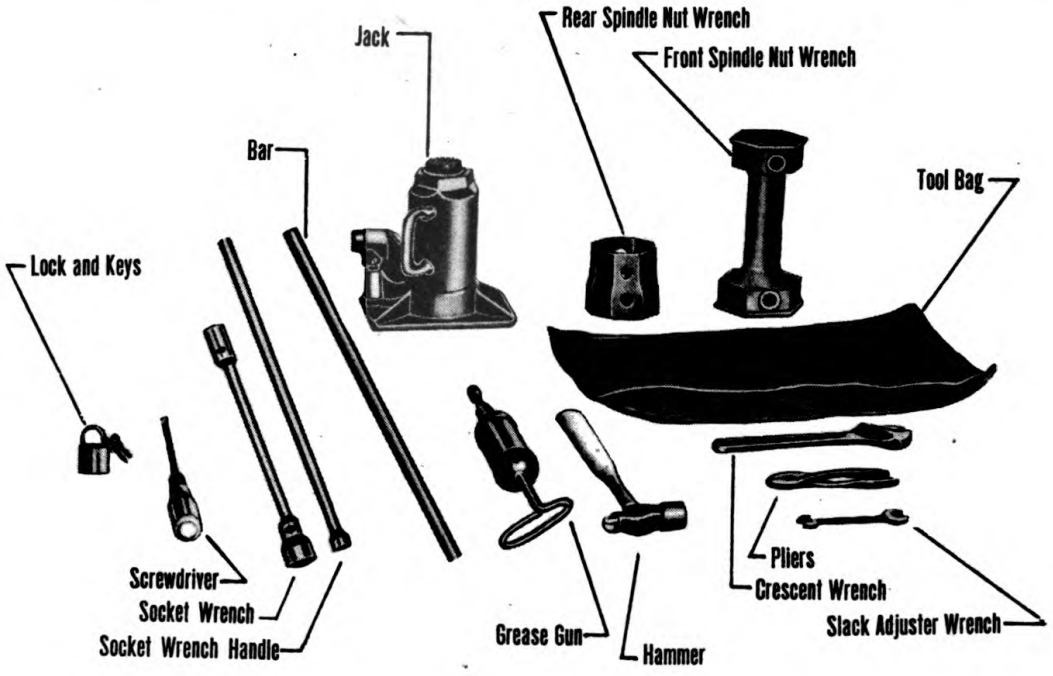

Figure 12—*Tools*

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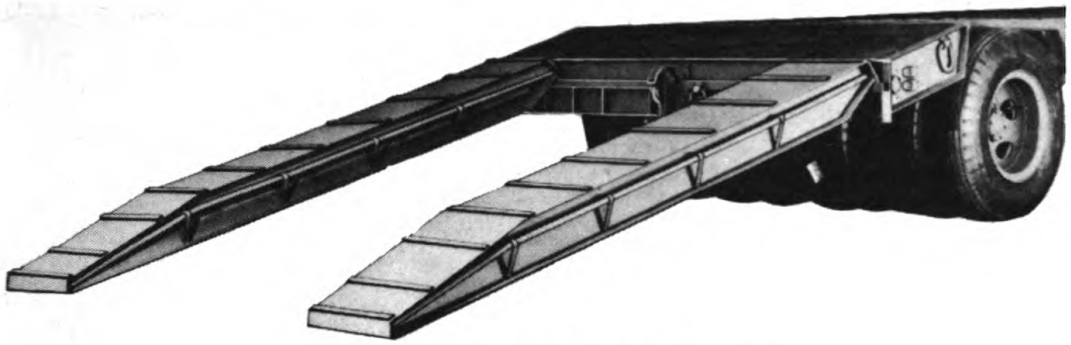

Figure 13—*Loading Ramps in Position.*

plied, and are to be carried in the tool compartment when not in use.

Jumper Cable

A jumper cable with plugs on both ends (figure 10) is supplied to connect the trailer light circuit to the towing vehicle. It plugs into coupling sockets on the front of the trailer and the rear of the towing vehicle.

Air Brake Hose Assemblies

Two hose assemblies (figure 10) are supplied to connect the trailer brakes to the towing vehicle.

Spare Tire

A spare tire for a rear wheel is mounted in the tire carrier (figure 49)

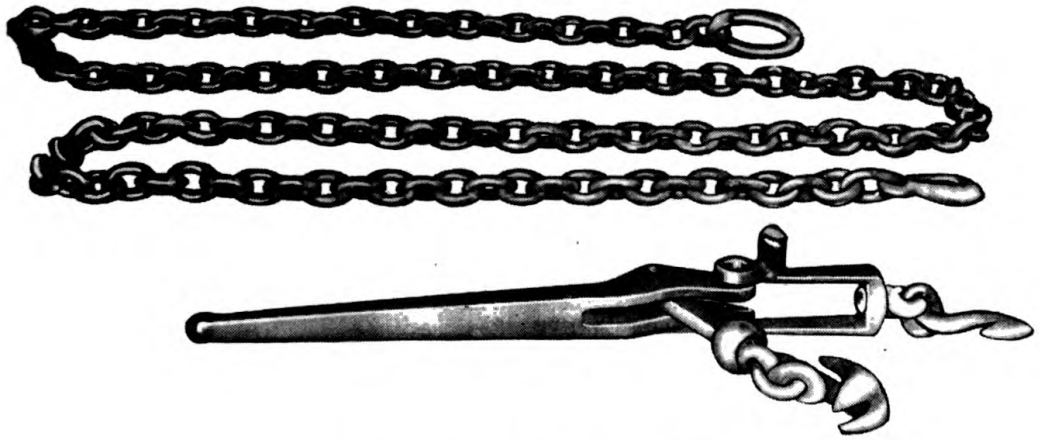

Figure 14–*Load Binder and Chain.*

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SECTION 6

SHIPMENT AND STORAGE

RAIL SHIPMENT

Instructions given in Tentative Technical Manual TM5-9711, "Instructions for Preparation of Corps of Engineers Equipment for Export," issued by the Engineer Field Maintenance Office, P. O. Box 1679, Columbus, Ohio, should be followed in preparing trailers for rail shipment.

STORAGE

Specifications outlined in Tentative Technical Manual TM5-9715, "Preparation of Corps of Engineers Equipment for Storage," issued by the Engineering Field Maintenance Office, P. O. Box 1679, Columbus, Ohio, should be followed in preparing trailers for storage.

EXPORT SHIPMENT

Instructions contained in Tentative Supplement TM5-9004, "Instructions for Preparation of Corps of Engineers Equipment for Export," issued by the Engineer Field Maintenance Office, P. O. Box 1679, Columbus, Ohio, should be followed in preparing trailers for export shipment.

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MAINTENANCE MANUAL

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SECTION 1

INTRODUCTION

PURPOSE AND SCOPE

This Maintenance Manual has been prepared to instruct repair mechanics in the essentials of disassembly, repair and reassembly of components of the trailer. Sections deal with various components in the order that repairs are most likely to be needed, and cover Axles; Wheels, Tires and Hubs; Brake Adjustment and Relining; Air Brake System; Electrical System and Lights, and Trailer Frame.

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SECTION 2
AXLES

AXLE ALIGNMENT

Front

1. The dolly or front axle must be at a right angle to the trailer's line of draft at all times. Axle misalignment is indicated by uneven tire wear. Adjustable radius rods have been provided for axle alignment.

2. To check front axle alignment, remove the inner and outer tires and wheels as assemblies. (See page 46.)

3. Remove the six capscrews attaching hub caps at each end of the axle; remove the hub caps.

4. Place a center punch mark in the center of the drawbar, one inch back from the eye.

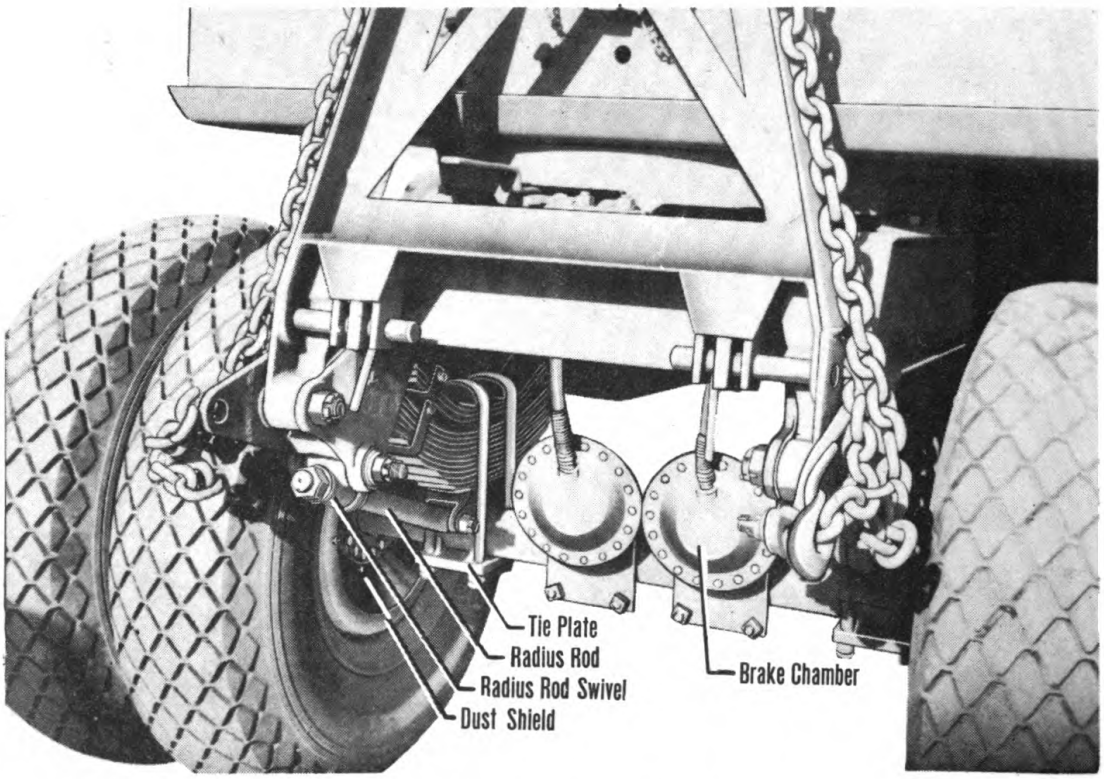

Figure 15—*Front Undercarriage of Dolly.*

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5. Use a steel tape to measure the distance from the center punch mark on the drawbar to the outer end of the axle spindle on both sides. If the measurement is identical, the axle is in alignment.

> NOTE: Bushings of the drawbar must be tight to obtain an accurate check of axle alignment. Bushing replacement procedure is given on page 81

6. If an adjustment of axle alignment is necessary, remove the hex nut and tongue washer from the front end of the radius rod.

7. Remove the cotter pin, castellated nut and bolt holding the radius rod swivel (figure 15) to the spring hanger; slip out the bolt and rubber bushings, releasing the swivel from the hanger.

8. Swing the radius rod down and remove the swivel bracket.

9. Insert or remove spacer washers, as required, between the rod collar and the swivel bracket.

10. Reinstall the radius rod, reversing removal procedure.

> NOTE: It is seldom necessary to adjust more than one radius rod to obtain axle alignment.

Rear

Rear axles of the trailer are fixed and require no alignment adjustment.

CHECKING FRONT AXLE FOR BEND

1. Securely block the rear wheels of the trailer to prevent its shifting.

2. Set the hand brake.

3. Lower the screw jacks on each side of the main unit frame and use them to raise the front end of the trailer until the dolly wheels are clear of the ground.

> CAUTION: Place blocking under the main unit frame to support the trailer in the event the screw jacks fail or slip.

4. Remove the dolly wheel hub assemblies. (See page 49.)

5. Place an axle gauge in position on the front side of the axle.

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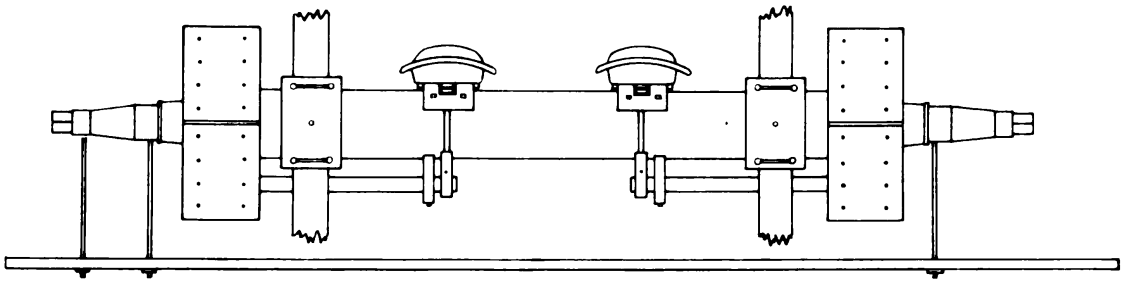

Figure 16—*Checking Front Axle for Bend*

6. Hold the single-pronged end of the gauge firmly against the inner bearing surface at one end of the axle, and adjust the double prongs on the other end of the gauge until they contact the inner and outer bearing surface. (See figure 16.)

7. After the double prongs have been adjusted at the front of the axle, move the gauge over to the rear of the axle. If either of the two prongs fail to contact its bearing surface, a bent axle is indicated.

8. Use a feeler gauge to determine the amount of bend, and replace the axle if bend is in excess of .002".

9. If checking both sides of one spindle reveals no bend in the axle, turn the gauge end for end and check the other spindle without disturbing the setting of the prongs.

10. Again, if there is clearance at either bearing surface, check with a feeler gauge and replace the axle if the clearance is in excess of .002".

11. If the prongs are in contact at both points, the axle is not bent.

FRONT AXLE

Disassembly

1. Securely block the rear wheels of the trailer to prevent its shifting.

2. Set the hand brake.

3. Lower the screw jacks on each side of the main unit frame, and use them to raise the front end of the trailer until the dolly wheels clear the ground.

> CAUTION: Place blocking under the main unit frame to support the trailer in the event the screw jacks fail or slip.

4. Shut off the air supply to the front axle brake chambers.

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by closing the shut-off cock above the tire carrier shaft operating nut on the main unit frame. (See figure 8.)

5. Disconnect the air hose lines from the front brake chambers. (See figure 15.)

6. Remove the outer and inner wheels with their tires. (See page 46.)

7. Remove the hubs and drums as assemblies. (See page 49.)

8. Disconnect the radius rod (figure 15) at its axle end by removing the locking cotter pin, castellated nut and bolt that holds it to the spring seat welded to the axle.

9. Support the axle with blocking or a wood horse and remove lock nuts and nuts from the four U-bolts, releasing the lower tie plate and the axle.

10. Slide or pull the axle from under the dolly, using a wood horse or mobile jack.

11. Remove the six hex-head bolts attaching the dust shields at each end of the axle; remove the dust shields.

12. Remove the locking wire from the anchor pin retainer screws; remove the retainer screws.

13. Use a screwdriver to remove a lock wire from each brake shoe anchor pin (figure 17); drive out the anchor pins, taking care not to damage their felts.

14. Unhook the return spring linking the two brake shoes at the cam end, and remove the shoes.

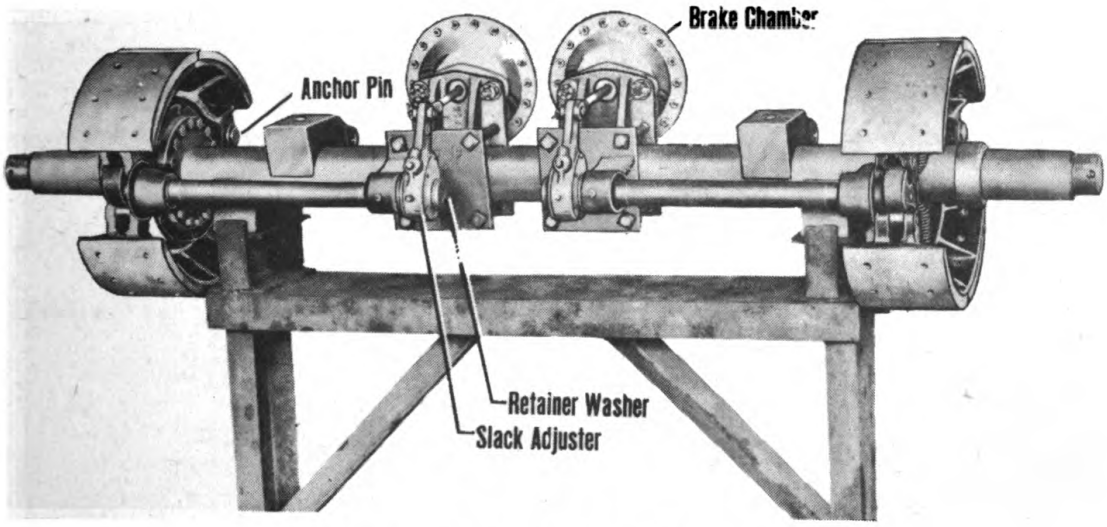

Figure 17—*Front Axle, with Brake Shoes in Position*

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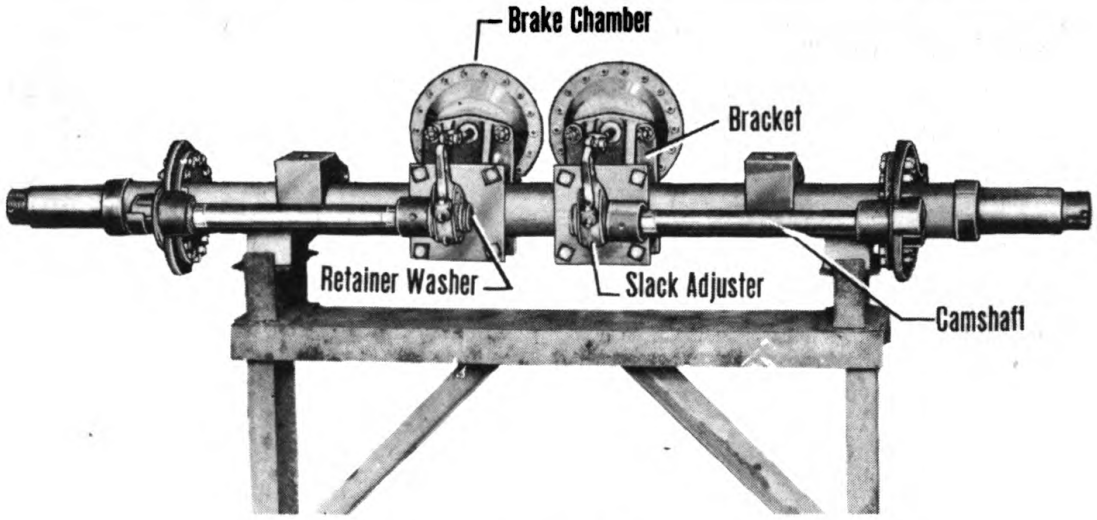

Figure 18—*Front Axle, with Brake Shoes Removed*

15. Disconnect the brake chamber push rod from the slack adjuster, removing the clevis pin.

16. Remove the brake chambers from their axle mounting brackets by removing cotter pins and castellated nuts.

17. Remove the brake chamber mounting brackets by removing the four bolts holding them to the axle.

18. Remove the screw from each slack adjuster retainer washer (figure 18), and slip off the retainer washers; tap the slack adjuster from the end of the camshaft.

19. Mark the left- and the right-hand camshaft assemblies so they can be identified for reassembly.

20. Remove the sixteen nuts from bolts attaching each spider

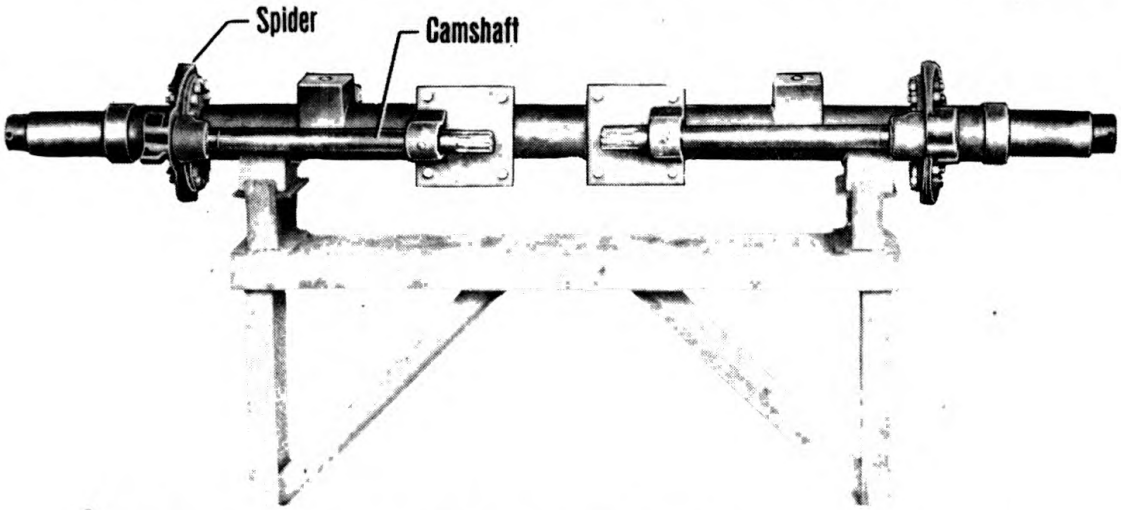

Figure 19—*Front Axle, with Brake Chambers and Slack Adjusters Removed*

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to its axle flange, and slip the spiders and camshafts from the axle. (See figure 19.)

NOTE: Inspect grease seals and replace if damaged.

Reassembly

To reassemble and reinstall the front axle, reverse the disassembly procedure.

FRONT AXLE TROUBLE CHART

The following chart will aid in diagnosing trouble caused by a faulty front axle:

Symptom	Cause	Remedy
Hard pulling or wandering.	1. Out of line.	1. Realign by means of adjustable radius rod.
	2. Bent axle.	2. Replace axle.
Scuffed tires, both sides.	1. Out of line.	1. Realign by means of adjustable radius rod.
	2. Bent axle.	2. Replace axle.
Scuffed tires, one side.	1. Bent axle.	1. Replace axle.
	2. Loose wheel	2. Tighten wheels and adjust bearings.

REAR AXLES

Disassembly

1. Lift the rear end of the main unit frame with a jack.

CAUTION: Block the front wheels, or the rear wheels on the side opposite the one being serviced, to keep the trailer from shifting, and put blocking under the frame to protect against jack failure.

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2. Remove the outer and inner wheels with their tires. (See page 46.)

3. Remove the hubs and drums as assemblies. (See page 49.)

4. Disconnect the brake rods (figure 20) at slack adjusters on both sides of the trunnion brackets by removing cotter pins and sliding out the attaching clevis pins.

5. Place a jack under the axle to support it after the brackets have been removed.

6. Remove nuts from the four bolts attaching each of the trunnion brackets to the trailer frame, transferring the weight of the axle to the jack.

7. Slide the axle assembly from beneath the trailer frame and slip off the trunnion brackets.

8. Mark the left- and right-hand camshaft assemblies so they can be identified for reassembly.

9. Remove the snap lock ring from between the slack adjuster and the spider, releasing the cam and shaft. Pull the cam and shaft from the trunnion, releasing the slack adjuster.

10. Remove the six hex-head bolts attaching the dust shields at each end of the axle; remove the dust shields.

11. Remove the locking wire from the anchor pin retainer screws; remove the retainer screws.

12. Use a screwdriver to remove a lock wire from each brake shoe anchor pin; drive out the anchor pins, taking care not to damage their felts.

13. Unhook the return spring linking the two brake shoes at the cam end, and remove the shoes.

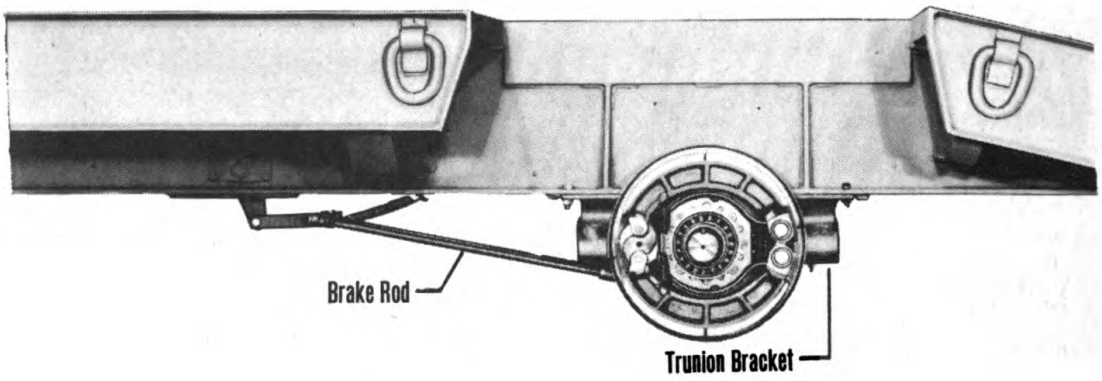

Figure 20—*Rear Axle, with Outer Hub and Drum Removed*

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14. Remove the sixteen nuts from bolts attaching each spider to its axle flange, and slip the spiders from the axle.

NOTE: Inspect grease seals and replace if damaged.

Reassembly See Figure 20A

To reassemble and replace the trunnion axle, reverse the disassembly and removal procedure.

NOTE: Before sliding the mounting brackets over the trunnion axle, coat the axle bearing surfaces with a light film of grease.

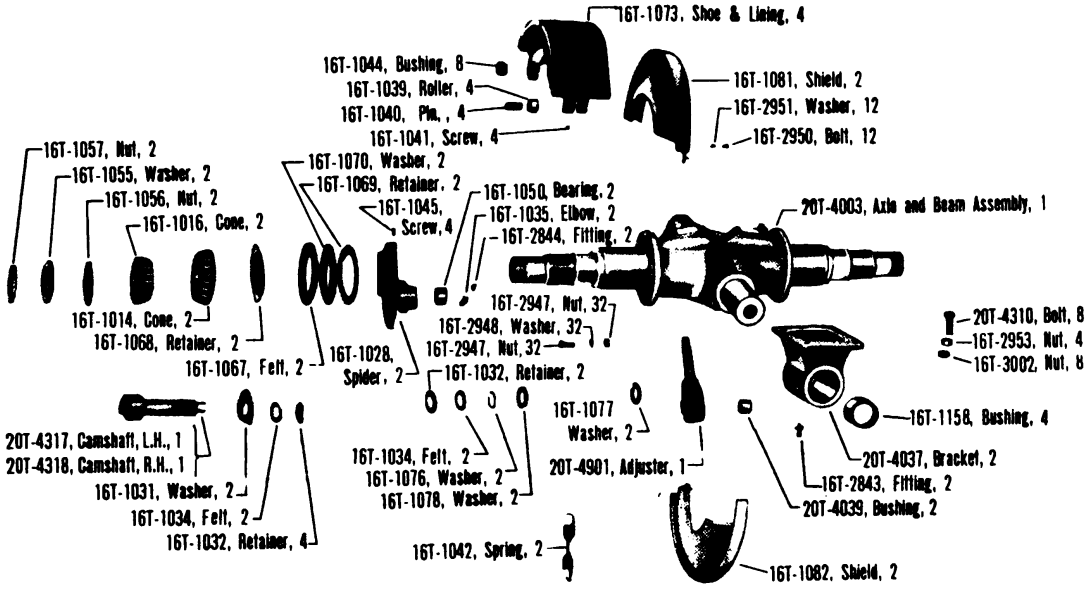

Figure 20A—*Trunnion Rear Axle and Brake Parts*

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SECTION 3

WHEELS, TIRES AND HUBS

WHEELS

Removal

1. Dual wheels with tires on the front or dolly axle and on the rear or trunnion axles are removed in the same manner.

> NOTE: When the four wheels are to be removed from a rear trunnion axle, it is advisable to remove the tires inside the frame first. Oscillation of the axle makes removal of wheels from the inner end of the axle difficult if undertaken after removal of the wheels from the outer end of the axle.

2. To raise the dolly wheels sufficient to clear the ground, lower the jacks at both sides of the main unit frame and jack up the front end of the trailer with its dolly. Block the dolly to prevent its turning on the king pin.

> CAUTION: Block the rear wheels of the trailer to prevent movement of the unit. Place block-

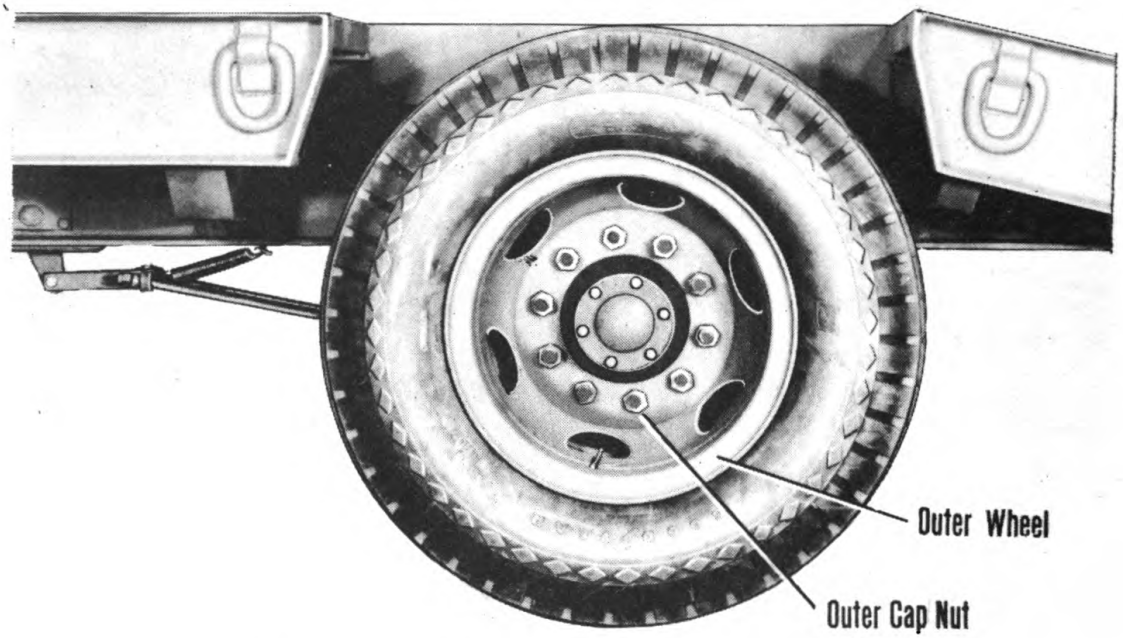

Figure 21—*Rear Axle, with Outer Wheel in Place*

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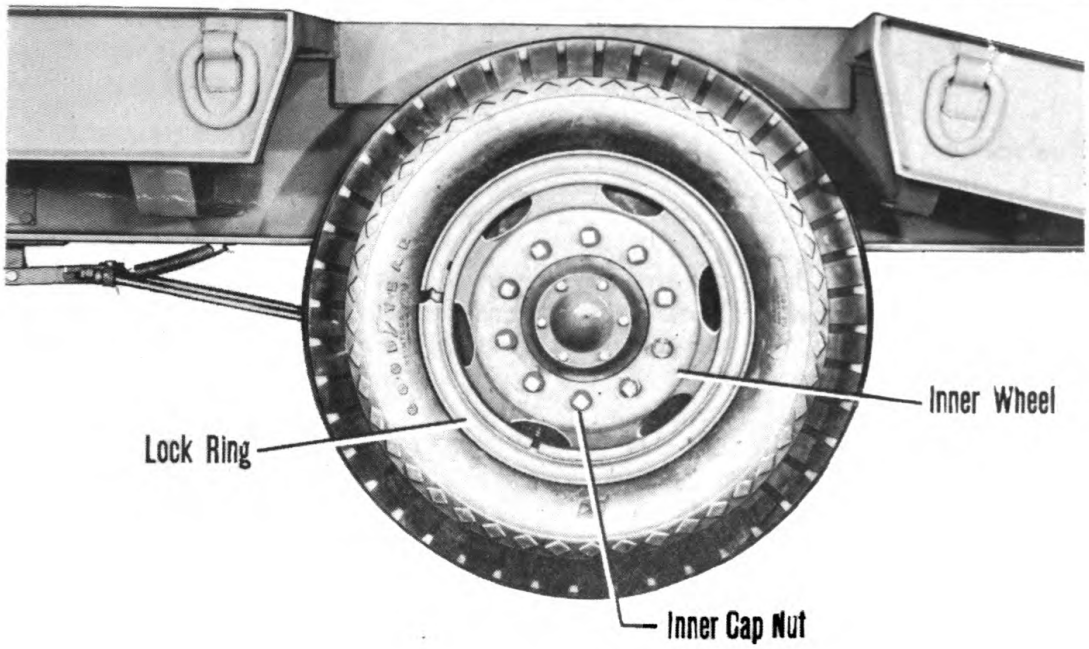

Figure 22—*Rear Axle, with Outer Wheel Removed*

ing under the front of the main unit frame to guard against injury in the event of jack failure.

3. To raise the rear wheels sufficient to clear the ground, place the hydraulic jack furnished with the trailer under the trunnion axle beam on the side to be serviced and raise the rear end of the trailer.

CAUTION: Block the opposite rear wheels of the trailer, and of the dolly if it is attached to the main unit, to prevent the trailer from shifting. Place blocking under the rear end of the trailer frome to guard against injury in the event of jack failure.

4. Place a greased plank under tires of the wheel to be removed so that the wheel and tire can be slid from the axle. A wheel and tire is too heavy to be easily removed without use of a skid.

5. Remove the ten nuts that hold the outer wheel to hub studs (figure 21); slip off the wheel with the tire.

NOTE: Hub studs and nuts used for wheel mountings are marked "R" and "L" to denote right-hand and left-hand threads. Those marked "L" must be used on the left side of the trailer, while those marked "R" must be used on the right side.

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6. Remove the ten inner stud nuts, releasing the inner wheel; slip off the wheel with its tire. (See figure 22.)

Replacement

To replace trailer wheels, reverse the disassembly procedure.

> NOTE: Be sure the inner stud nuts are tightened after placing the inner wheel in position and before placing the outer wheel in place. The outer wheel mounts on the inner wheel cap nuts.

TIRES

Removal

1. Remove the tire and wheel as an assembly from the hub. (See page 46.)

2. Remove the core from the valve stem to permit the air to escape from the tube.

3. Insert a tire tool in the locking ring, next to the split in the ring; pry off the ring.

4. Remove the tire from the wheel.

Replacement

1. Place the tube in the casing and inflate slightly. Place the tire flap carefully in position to protect the tube from contact with the wheel.

2. Place the wheel on the floor or ground with the valve slot up.

3. Place the tire over the wheel with the valve up.

4. Start the locking ring on the wheel in a clockwise direction, prying it down on the wheel.

5. Check the wheel and locking ring to make sure they are properly coupled; inflate the tire.

> CAUTION: Before inflating the tire, wrap two safety chains loosely around two different points of the tire and wheel to safeguard against injury should the locking ring let go during inflation.

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6. Replace the inflated tire and wheel, as an assembly,on the hub. (See page 48 .)

HUBS AND BRAKE DRUMS

Removal—Front

1. Remove the six cap screws, with their lock washers, that hold the hub cap to the hub; slip off the cap, taking care not to damage its gasket or to let it fall into the dirt.

2. Remove the cotter pin locking the castellated nut.

3. Use the spindle nut wrench furnished with the trailer to loosen and remove the castellated nut.

4. Jerk the hub and drum assembly outward sharply to start the outer bearing off the spindle. Push the hub and drum back on the axle and carefully remove the bearing by hand.

5. Pull off the hub and drum assembly.

6. The hub, drum and oil slinger may be separated readily by removing the hex nuts from the ten hub and drum studs within the drum.

7. The inner bearing may be removed by removing six capscrews holding the dust collar within the drum. Removal of the dust collar releases the inner bearing.

Removal—Rear

1. Remove the six cap screws, with their lock washers, that hold the hub cap to the hub; slip off the cap, taking care not to damage its gasket or to let it fall into the dirt.

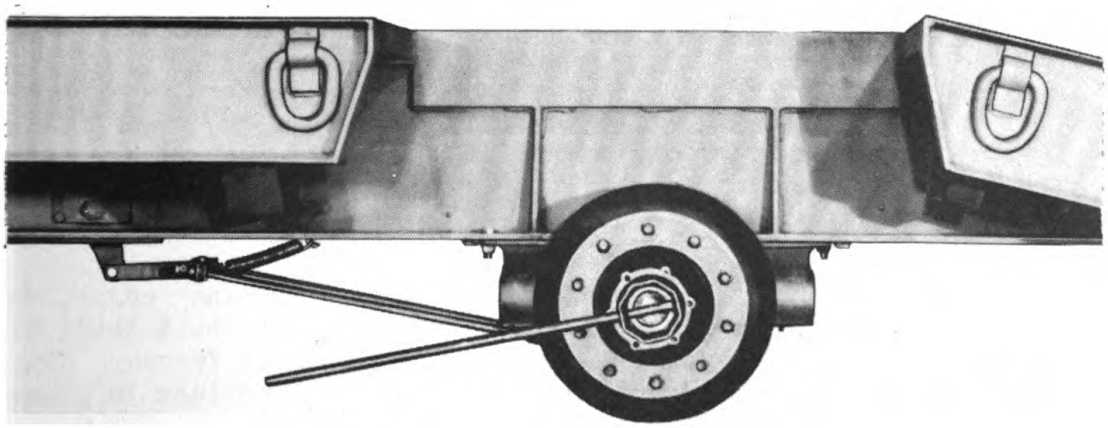

Figure 23—*Removing Hub and Drum Assembly*

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2. Use the spindle nut wrench furnished with the trailer to loosen and remove the outer spindle nut. (See figure 23.)

3. Slip off the tongue washer between the outer nut and the wheel bearing adjusting or inner nut.

4. Use the spindle nut wrench to remove the inner nut from the axle.

5. Jerk the hub and drum assembly outward sharply to start the outer bearing off the spindle. Push the hub and drum back on the axle and carefully remove the bearing by hand.

6. Pull off the hub and drum assembly.

7. Slip off the inner bearing, taking care to protect it from dirt.

8. The hub, drum and oil slinger may be separated readily by removing the hex nuts from the ten hub and drum studs within the drum.

NOTE: Inspect grease seals and replace if damaged.

Replacement—Front and Rear

1. Clean all parts thoroughly in a suitable cleaning solvent.

2. Inspect all parts and replace any that are worn or damaged.

3. Pack the wheel hub with wheel bearing grease, WB-1, in a 1/2-inch layer around the axle in the space between the inner and outer bearings.

4. Place the assembled drum and hub on the axle, reversing disassembly procedure.

5. Replace the outer bearing.

6. Install nut and tighten until the drum cannot be rotated by hand; then loosen it gradually until the drum rotates freely. Lock the nut in place with a cotter pin.

7. On the rear axle, place the inner or bearing adjusting nut on the axle and tighten until the drum cannot be rotated by hand; then loosen it gradually until the drum rotates freely. Slip a tongue washer on the axle spindle over the nut, and lock in place with the outer nut.

8. Replace the hub cap.

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SECTION 4

BRAKE ADJUSTMENT AND RELINING

MINOR BRAKE ADJUSTMENT

1. The adjustment of front and rear brakes is identical.

2. Jack up the wheels, and turn the adjusting nut of the slack adjuster at each wheel clockwise until the wheel cannot be turned.

3. Back the adjusting nut off two notches or more so that no drag is felt on the brake drum.

BRAKE RELINING

Front and Rear

1. Inspection holes in each drum permit visual inspection of brake shoes and linings without removing the wheels from the axle. Inspection can be made readily to determine extent of lining wear, and whether grease is impairing brake efficiency.

2. When relining is necessary, the four brake blocks of a brake assembly must be replaced.

3. Remove the tire and wheel assemblies. (See page 46.)

4. Remove the wheel hub and drum assembly. (See page 49.)

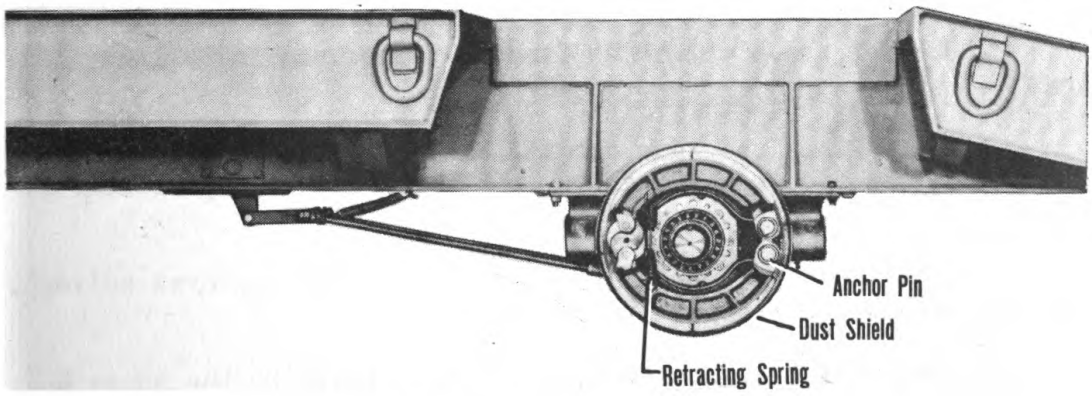

Figure 24—*Rear Axle Brake Shoes*

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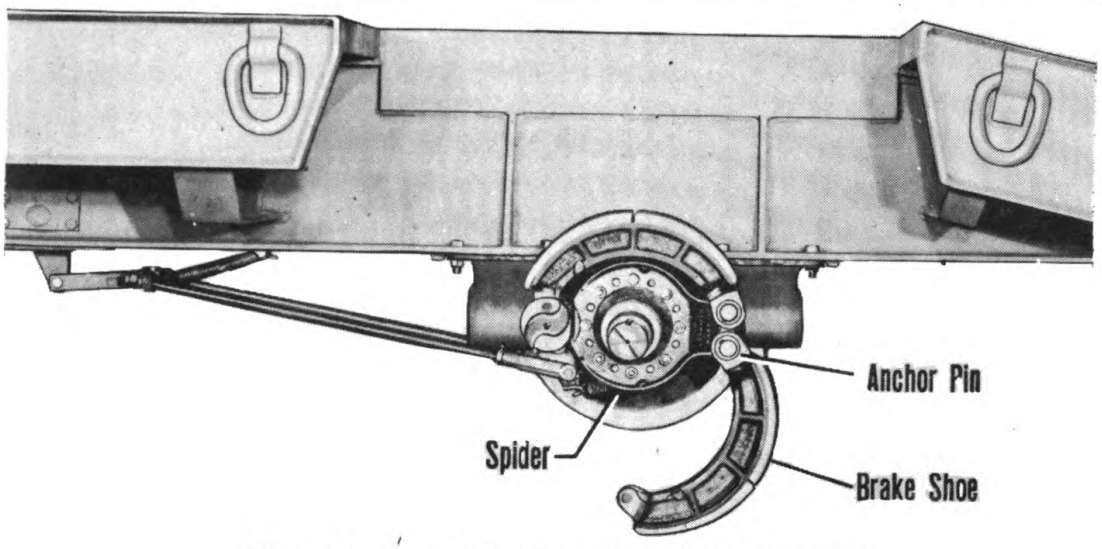

Figure 25—*Rear Axle, Showing Brake Shoe Removal*

5. Remove the cap screws with lock washers that attach the dust shield assembly to spider and take off the shield. (See figure 24.)

6. Remove the brake shoes:

a. Remove the locking wire from the anchor pin retainer screws; remove the retainer screws.

b. Use a screwdriver to remove the lock wire from each anchor pin.

c. Unhook and remove the brake shoe retracting spring (figure 24).

d. Drive out the anchor pins, taking care not to damage their felts. (See figure 25.)

e. Remove the brake shoes from the spider. (See figure 26.)

7. Remove the old linings from the shoes and install new linings.

a. Place the shoe across an open vise and use a long 3/16-inch tapered punch to drive out the brake lining rivets, releasing the old linings.

b. Wash the shoes in gasoline or other approved solvent, using a wire brush or wire buffing wheel.

c. Use C-clamps to hold the new lining to the shoe, making sure the lining is placed so that holes in it and in the shoe line up. Use a brake relining machine to install five rivets. Re-

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move the clamps and install the remaining rivets.

> NOTE: If a brake relining machine is not available, place a 7/16-inch bolt firmly in a vise, with the thread end up, and use it as a bucking tool while peening the rivets with a small ball peen hammer.

8. To install relined brake shoes, reverse the disassembly procedure.

9. Replace the wheel hub and drum as an assembly. (See page 50.)

10. Replace the tires and wheels as units. (See page 48.)

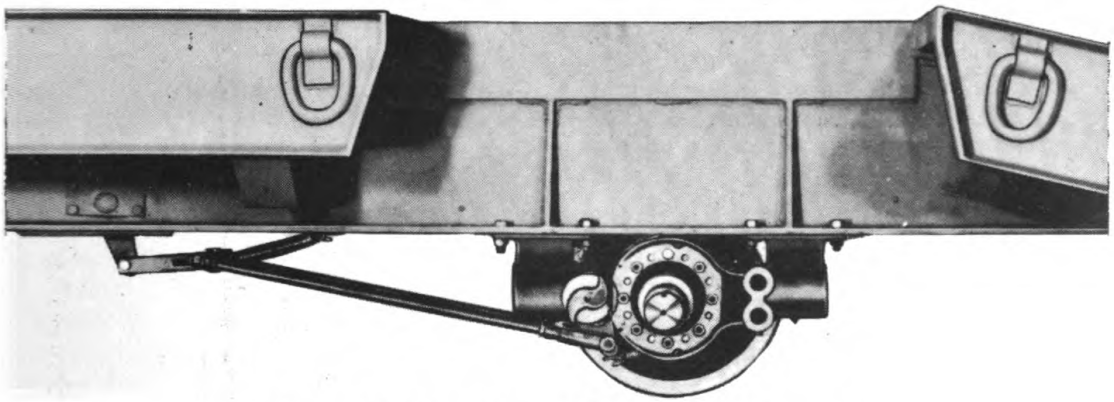

Figure 26—*Rear Axle with Brake Shoe Removed.*

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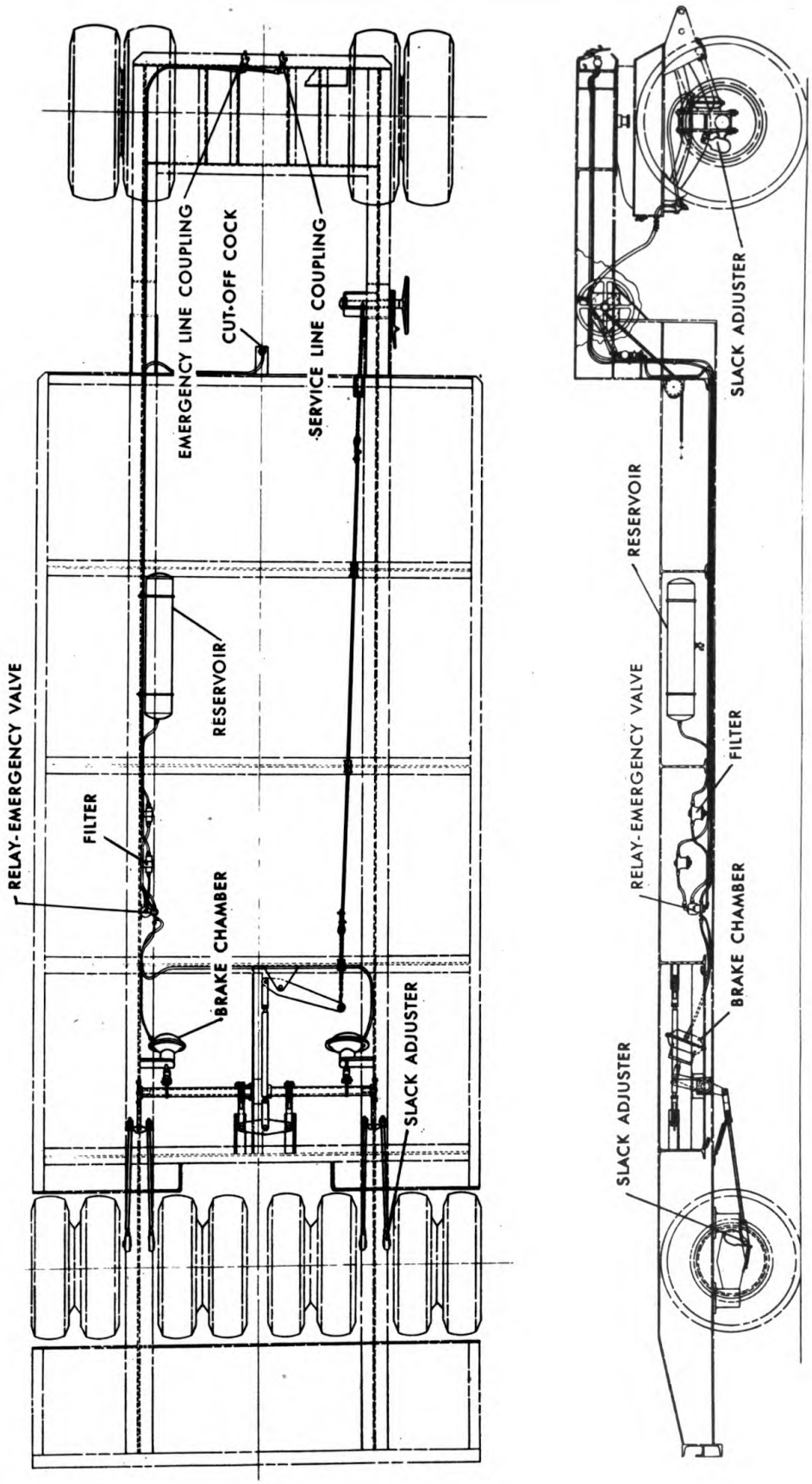

Figure 27— *Air Brake System Diagram.*

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SECTION 5

AIR BRAKE SYSTEM

PREVENTIVE MAINTENANCE

1. Monthly, or after each 1,000 miles.

a. Check travel of brake chamber push rods and adjust brakes if necessary. Push rod travel should be kept at the minimum without brakes dragging.

(1) Adjust all brakes by turning the adjusting screw on the end of each slack adjuster worm shaft. All slack adjusters are fitted with a friction type lock arrangement so the adjustment is automatically locked.

(2) Jack up each wheel, and make the adjustment as close as possible without the brakes dragging.

(3) After proper adjustment and with the brakes applied, the slack adjuster arm and the brake chamber push rod should form an angle slightly less than 90 degrees, and all slack adjusters on the trailer should be at this same angle.

b. Remove drain plugs and drain air line filters.

c. Inspect all hose assemblies for abrasions, swelling or other damage. Replace if necessary.

d. Inspect all hose coupling gaskets for abrasions, swelling or other damage. Replace if necessary.

e. Test air brake system for serviceability.

2. Every Six Months, or after 6,000 miles.

a. Remove covers from air line filters and inspect condition of strainers. Clean or replace if necessary.

b. Remove grease plugs and lubricate all slack adjusters with chassis lubricant, using a grease gun. One or two shots should be sufficient.

> CAUTION: Do not operate grease gun too long, otherwise the pressure of the grease may distort the cover plates or even break the rivets and force the cover plates off the slack adjuster body.

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c. Inspect all tubing and fittings for damage. It is important that tubing not be collapsed or dented at any point as this restricts the flow of air and affects the operation of the air brake equipment. Replace all damaged tubing or tubing fittings.

d. Test all air brake devices in the air brake system for serviceability.

TESTING FOR SERVICEABILITY

1. Complete Air Brake System. (See figure 27.)

a. Connect the trailer air brake system to the air brake system of the towing vehicle. (See page 20.) Start the engine, if necessary, to charge both air brake systems to 100 pounds, as registered by the dash gauge on the towing vehicle.

b. Leakage tests.

(1) With the engine stopped and the brakes released, observe the rate of drop in air pressure registered by the dash gauge on the towing vehicle. The rate of drop in air pressure should not exceed three pounds per minute.

(2) With the engine stopped and brakes fully applied, observe the rate of drop in air pressure registered by the dash gauge. The rate of drop in air pressure should not exceed four pounds per minute.

(3) Leakage in either of the above tests is the combined leakage in the air brake system on the towing vehicle and the air brake system on the trailer. Leakage in the trailer air brake system is determined by comparing the leakage in the above tests with the leakage found in similar tests with the cut-out cocks in the hose lines connecting the towing vehicle to the trailer closed.

(4) If leakage in either of the above tests is excessive, check all devices and connections for leakage, and repair or replace the leaking device or connection.

c. Operating tests.

(1) With the vehicles moving, apply the brakes and check their effectiveness. Check for quick braking response on all wheels during application and release of the brakes.

(2) With the vehicles stopped, close the cut-out cock in the emergency line at the rear of the towing vehicle. Disconnect emergency hose line from the trailer. Check to be sure all trailer brakes apply automatically without any noticeable leakage at the emergency line hose coupling at the front of the trailer, or at the relay-emergency valve.

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(3) Reconnect the emergency hose line and open the emergency line cut-out cock at the rear of the towing vehicle. The trailer brakes should release automatically.

(4) If the brake system fails to pass any of the above operating tests, check all units for serviceability.

2. Relay-Emergency Valve. (See figure 28.)

a. Operating tests.

(1) With the air brake system charged, apply the brakes and check to be sure all brakes apply properly.

(2) Release brakes and check to be sure air pressure is exhausted promptly from the exhaust port of the relay-emergency valve, through the exhaust check valve.

b. Leakage tests.

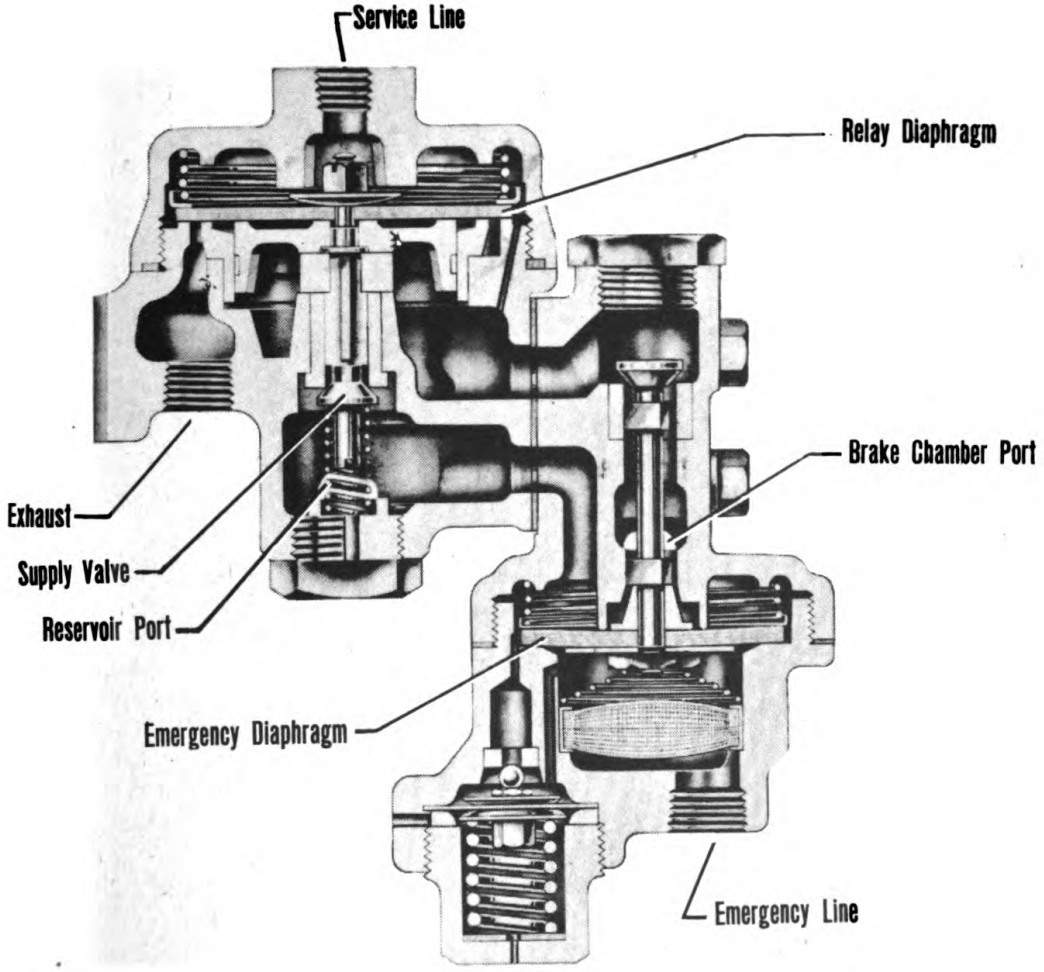

Figure 28—*Cross Section of Relay Emergency Valve.*

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(1) With the brakes released, coat the exhaust port of the exhaust check valve with soap suds to determine leakage.

(2) With the brakes fully applied, coat the exhaust port with soap suds to determine leakage.

(3) With the relay-emergency valve in its emergency position, coat the exhaust port of the relay-emergency valve with soap suds to determine leakage.

(4) Leakage in any of the above tests should not exceed a three-inch soap bubble in three seconds. If excessive leakage is found, the relay-emergency valve should be replaced.

3. Brake Chambers. (See figure 29.)

a. Operating tests.

(1) Apply the brakes and observe that the brake chamber push rods move out promptly without binding.

(2) Release the brakes and observe that the brake chamber push rods return to their release position promptly without binding.

b. Leakage tests.

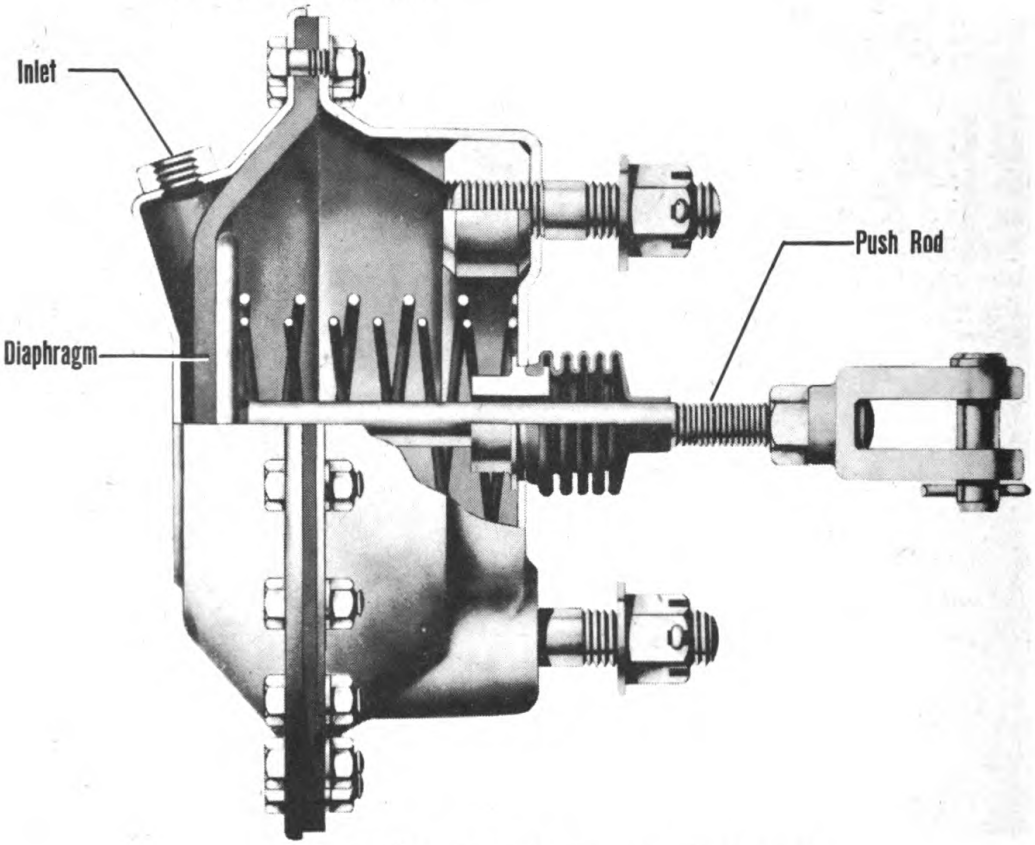

Figure 29—*Cross Section of Brake Chamber.*

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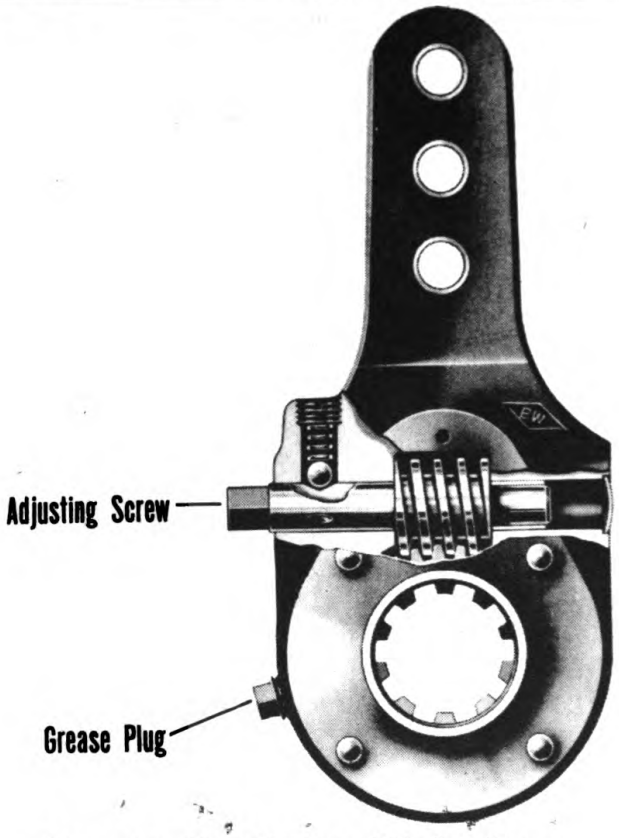

Figure 30—*Cross Section of Slack Adjuster.*

(1) With brakes fully applied and while holding the diaphragm in place, coat the bolting flanges with soap suds to check for leakage. No leakage is permissible. If leakage is found, tighten the flange bolts. All flange bolts must be tightened evenly and only sufficiently to prevent leakage; otherwise the diaphragm will be distorted and premature failure will result.

(2) With the brakes fully applied, check for leakage through the diaphragm by coating the clearance hole around the push rod and the drain holes in the non-pressure plate with soap suds. No leakage is permissible. If leakage is found, the diaphragm must be replaced.

(3) Excessive push rod travel will cause premature failure of the brake chamber diaphragm. When diaphragms are replaced, brake chamber release springs should also be checked and replaced if necessary. It is important when replacing brake chamber springs to always install the same type of spring as the one removed; otherwise uneven braking will result.

4. Slack Adjuster. (See figure 30.)

a. Operating tests.

(1) Adjust brakes (see page 51) and note brake chamber push rod travel when brakes are applied. Make several

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brake applications and again check push rod travel. Push rod travel should remain the same as it was after adjustment. If the push rod travel increases, or if difficulty is experienced in keeping the brakes adjusted in service, the slack adjuster must be replaced.

5. Air Filter. (See figure 31.)

a. Operating tests.

(1) Remove cover and inspect the condition of the air strainer. Curled hair strainers should be washed in cleaning solvent and dried before being replaced. Cotton type strainers must be cleaned by carefully brushing dust or dirt off the outside. If either type of strainer is covered with an oily or gummy deposit, a new strainer must be installed. When assembling filters, a new gasket must be used. Cotton strainers may be used to replace curled hair strainers.

(2) The frequency of cleaning the filter, or replacing the strainer, depends entirely upon the operating conditions and the amount of dirt passing into the filter.

b. Leakage tests.

(1) With the brakes applied, coat the outside of the filter with soap suds to check for leakage. No leakage is permissible. If any leakage is found through the walls of the filter, the filter must be replaced. If leakage is found past the gasket between the cover and the body of the filter, the cover should be tightened or a new gasket installed.

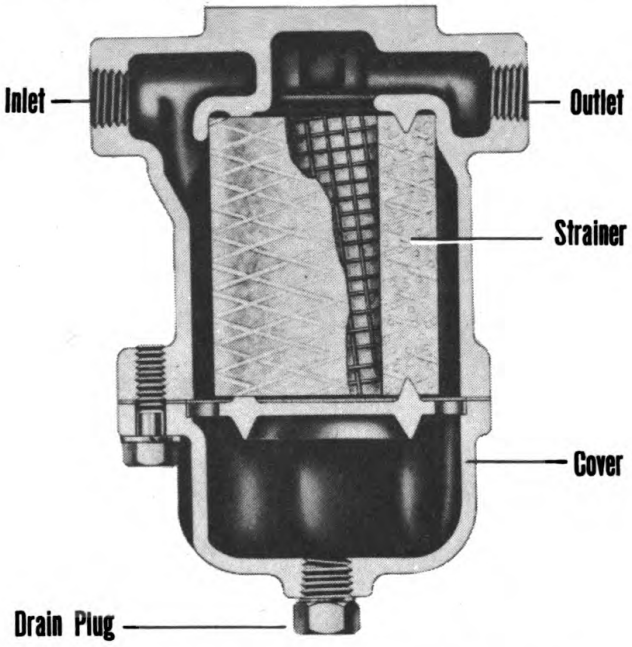

Figure 31—*Cross Section of Air Filter.*

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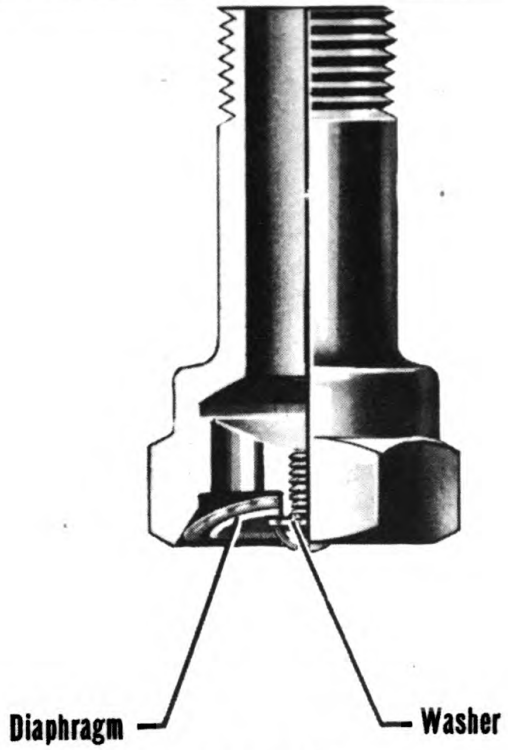

Figure 32—*Cross Section of Exhaust Check Valve.*

6. **Exhaust Check Valve.** (See figure 32.)

a. **Leakage test.**

(1) Remove the exhaust check valve and immerse the lower half of the valve containing the diaphragm in water. Check for leakage of water past the diaphragm into the check valve. No leakage is permissible. If leakage is found, remove the diaphragm and inspect its condition and the condition of the diaphragm seat. If leakage is caused by the presence of dirt, cleaning the dia-

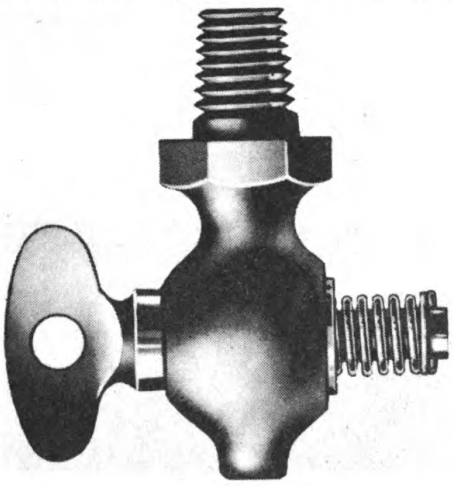

Figure 33—*Cross Section of Drain Cock.*

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phragm seat should correct the trouble. If leakage is caused by a defective diaphragm, the diaphragm must be replaced. If leakage is caused by a damaged diaphragm seat, the complete exhaust check valve must be replaced.

7. Drain Cock. (See figure 33.)

a. Leakage tests.

(1) With the air brake system fully charged, test for leakage past the key, using soap suds. Also check for leakage through the body by coating the outside of the drain cock with soap suds.

(2) Leakage in excess of a three-inch soap bubble in three seconds is not permissible.

(3) Leakage will be caused by a dirty or damaged key or body. Leakage due to dirt can be corrected by cleaning and applying a thin coating of cup grease to the key before assembling. Leakage due to a damaged key or body cannot be repaired, and the drain cock must be replaced.

8. Reservoir. (See figure 34.)

a. Leakage test.

(1) With the brake system charged, coat the outside of the reservoir with soap suds to check for leakage. No leakage is permissible. If any leakage is found, the reservoir must be replaced.

b. Inspection.

(1) Inspect the inside and outside surfaces for damage or corrosion. A small flashlight is helpful when inspecting the interior. If any damage or corrosion is found that would weaken the reservoir, the reservoir must be replaced.

9. Hose, Hose Assemblies and Hose Connectors. (See figures 35 and 36.)

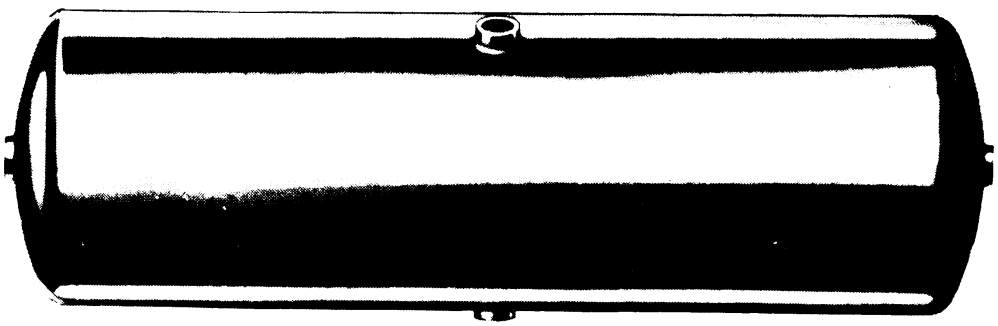

Figure 34—*Air Brake System Reservoir.*

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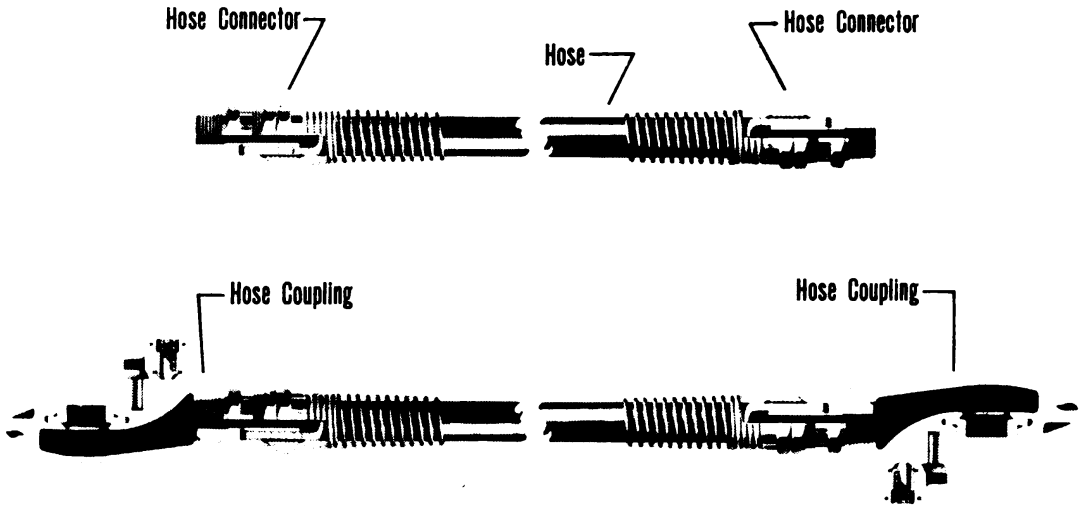

Figure 35—*Cross Section of Typical Hose Assemblies*

a. Operating tests.

(1) If any evidence is found indicating that a hose line is restricted, it must be removed and air must be blown through it in both directions to be sure the passage through the hose is clear and not obstructed in any way.

b. Leakage tests.

(1) With brakes applied to be sure the hose line being tested is under air pressure, coat the outside of the hose and hose connectors with soap suds to check for leakage. No leakage is permissible. Leakage at the connectors is sometimes corrected by tightening the connector nut. If this fails to correct the leakage, the connectors, hose, or both, must be replaced.

c. Replacement.

(1) Hose assemblies are easily repaired by removing the detachable connectors and installing a new piece of hose, as follows:

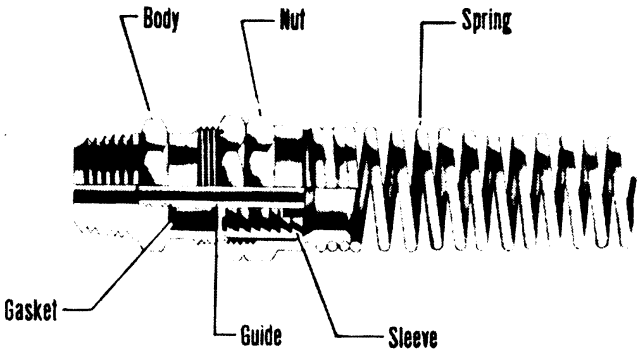

Figure 36—*Cross Section of Hose Connector.*

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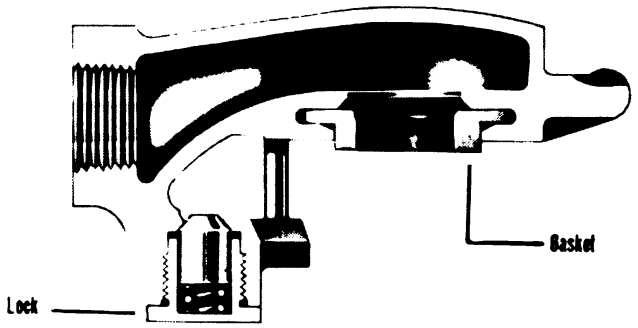

Figure 37—*Cross Section of Hose Coupling.*

(2) Remove connector nut and pull hose out of the connector body. Do not attempt to remove used sleeve from hose.

(3) Cut a new piece of hose to required length, being sure the cut is made at right angles to the outside wall of the hose and that the end of the hose is smooth.

(4) Blow out the hose with an air hose to remove all cuttings.

(5) Position the connector nut and sleeve on the hose, being sure the barbs on the inside of the sleeve point toward the end of the hose being connected.

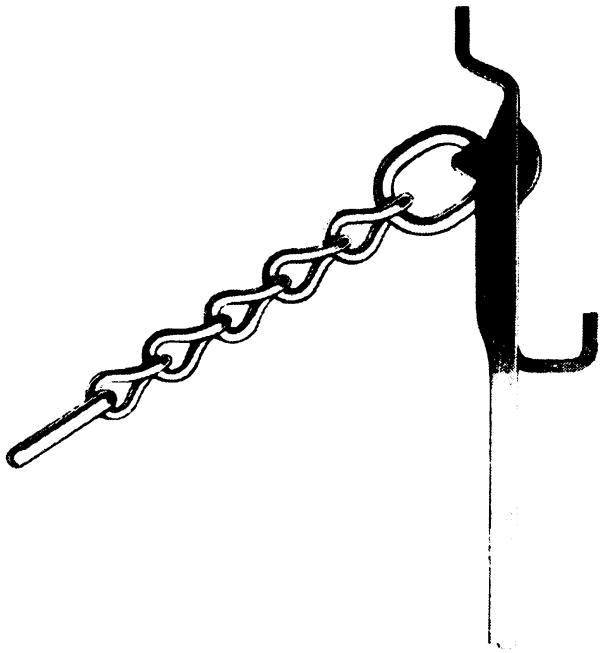

Figure 38—*Dummy Coupling.*

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(6) Position the new gasket over the end of the guide in the connector body so the side with removal protector covering is next to the hose. Remove the protector covering from the gasket.

(7) Put the end of the hose in the connector body, making sure the end of the hose and the gasket are against the bottom of the recess in the connector body.

(8) Move the sleeve until it is against the edge of the connector body. Tighten the connector nut. It is only necessary to tighten the nut sufficiently to insure an air-tight joint.

(9) When installing a hose assembly, where both ends are permanently connected, the hose connector at either end is used as a swivel by loosening the nut on one of the connectors. The hose is then turned in the loose connector before the connector nut is again tightened. This permits the installation of the hose assembly without the hose being kinked or twisted.

10. Hose Couplings and Dummy Couplings. (See figures 37 and 38.)

a. Leakage tests.

(1) With the hose couplings connected, cut-out cocks opened, and brakes applied, coat the hose couplings all over with soap suds. There should be no leakage.

(2) Leakage is usually caused by worn, damaged or improperly installed gaskets. To correct leakage, install a new gasket.

(3) Old gaskets should be removed by prying them out with a screwdriver.

(4) Before attempting to install a new gasket, be sure the groove in the coupling in which the gasket fits is thoroughly cleaned; otherwise it is impossible to properly install a new gasket.

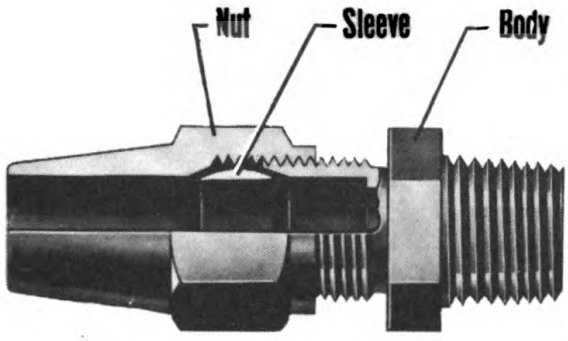

Figure 39—*Cross Section of Typical Tubing Connector.*

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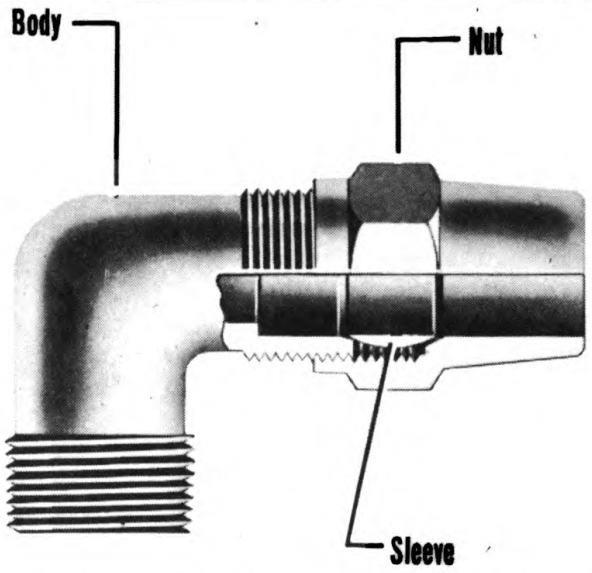

Figure 40—*Cross Section of Typical Tubing Elbow.*

(5) To install a new gasket, partially collapse it with the fingers and enter one side of the gasket flange in the groove in the coupling. Then use a blunt nose screwdriver or some similar instrument to push the gasket into place. When properly installed, the exposed face of the gasket is flat and not twisted or bulged at any point.

11. Tubing and Tubing Fittings. (See figures 39 and 40.)

a. Operating tests.

(1) If any evidence is found indicating that a tubing line might be restricted, it must be removed and air blown through it in both directions to be sure the passage through the tubing is clear and not obstructed in any way.

(2) Tubing should also be inspected for partial restrictions such as may be caused by dents or kinks. Tubing having dents or kinks must be replaced.

b. Leakage tests.

(1) With the air brake system fully charged and brakes applied, coat all tubing lines and fittings with soap suds to check for leakage. No leakage is permissible. Leakage at the tubing fitting is sometimes corrected by tightening the tubing fitting nut. If this fails to correct the leakage, the tubing fitting, or both, must be replaced. If any leakage is found in the tubing, a new piece of tubing must be installed.

c. Replacement.

(1) When replacing tubing lines, always be sure to

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use tubing having the same inside and outside diameter as the piece being replaced.

(2) Cut tubing to required length with a hack saw or tubing cutter. As the cut is made, make sure the end of the tubing is smooth and that it is cut squarely with the outside wall. Also, be sure the ends of the tubing are not crimped or partially closed. Ream or file the ends of the tubing, if necessary.

(3) Blow out tubing with an air hose to remove all cuttings and filings. This is very important.

(4) Place the nut and sleeve on the tubing and put the end of the tubing in the recess in the tubing fitting body.

(5) Hold the tubing at the bottom of the recess and tighten the nut to seal the joint against leakage. It is only necessary to tighten the nut until sufficient pressure is placed on the sleeve to prevent leakage. Always use a new sleeve when replacing tubing lines. Tubing fitting nuts and bodies may be used again provided they are in serviceable condition.

12. Quick Release Valve. (See figure 41.)

a. Operating tests.

(1) Apply brakes and observe that when the brakes are released, air pressure is quickly exhausted through the exhaust port of the valve. Be sure the exhaust port is not restricted in any way.

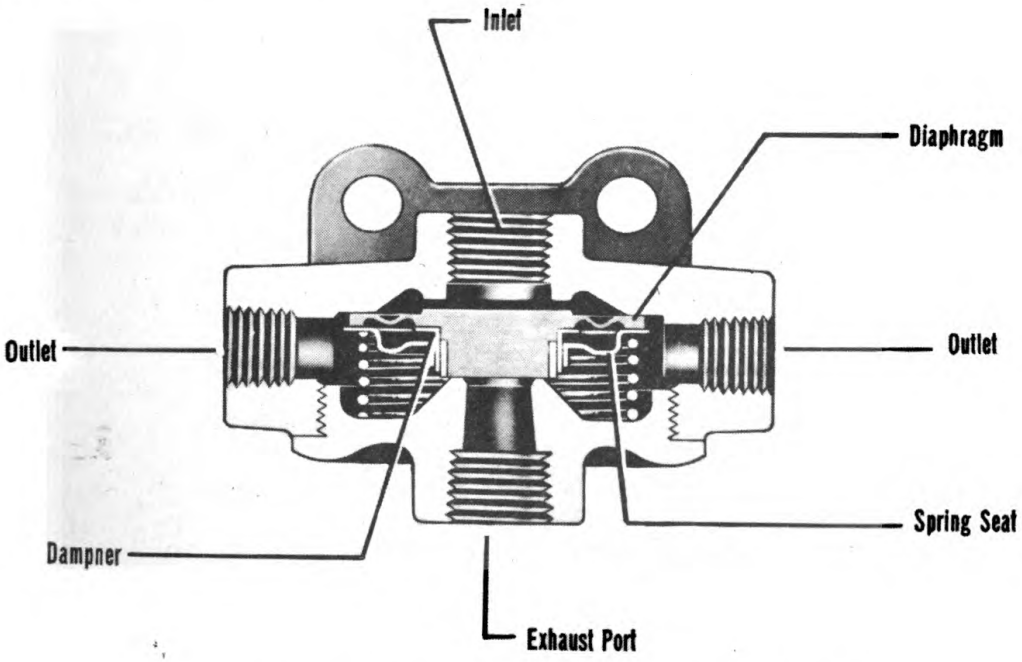

Figure 41—*Cross Section of Quick Release Valve.*

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b. Leakage tests.

(1) With the brakes applied, coat the exhaust port with soap suds to detect leakage. Leakage in excess of a three-inch soap bubble in three seconds is not permissible. If excessive leakage is found, the quick release valve must be replaced.

13. Cut-Out Cock. (See figure 42.)

a. Operating tests.

(1) Cut-out cocks are open when the handle is at a 90-degree angle with the body of the cock, and closed when the handle is parallel with the body of the cock. Stops are provided so the handle cannot be turned beyond its normal open or closed positions.

(2) Cut-out cocks should always be opened and closed by hand. The handle should never be struck with a hammer or any such heavy instrument, otherwise the cock will be damaged and leakage will develop.

(3) When installing or removing cut-out cocks, or when connecting hose lines to them, be sure to use the wrench on the end of the cut-out cock being tightened. Any severe strain put on the cut-out cock body, due to using the wrench on the wrong end of the body, will distort the body and cause leakage.

b. Leakage tests.

(1) With the brakes applied and cut-out cock closed

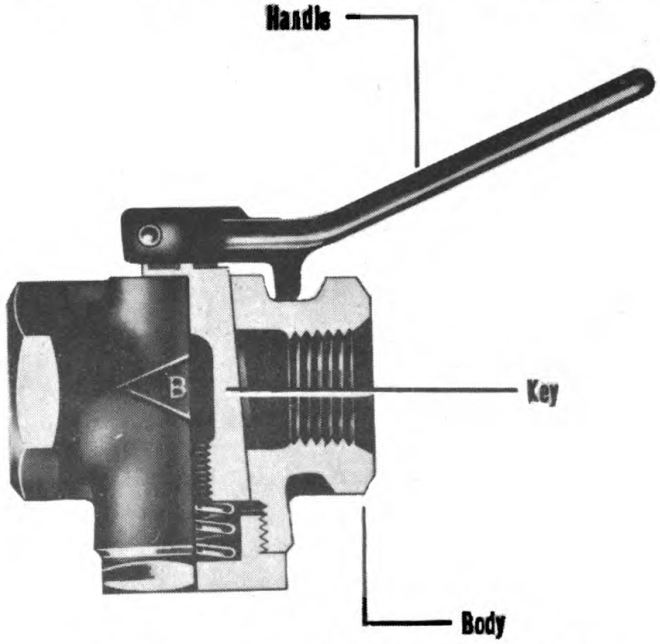

Figure 42—*Cross Section of Cut-Out Cock*

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(hose line disconnected), test for leakage past the key, using soap suds. Also check for leakage through the body by coating the outside of the cut-out cock with soap suds.

(2) With brakes applied and cut-out cock open (hose line disconnected), check for leakage through the body by coating the outside of the cut-out cock with soap suds.

(3) Leakage in excess of a three-inch soap bubble in three seconds in either of these tests is not permissible.

(4) Leakage is caused by a dirty or scored key or body. Leakage due to dirt can be corrected by cleaning and applying a light coating of cup grease on the key before assembly. Leakage due to a scored key or body cannot be repaired and the cut-out cock must be replaced.

TROUBLE SHOOTING

Inasmuch as the air brake system on a trailer is dependent upon the air brake system of the towing vehicle for its air supply and control, the air brake system of the towing vehicle must be in good condition to obtain good brake performance on the trailer. Before condemning the air brake system on a trailer, always check to be sure the air brake system on the towing vehicle is functioning properly.

The following trouble chart will be helpful in tracing deficiencies in the air brake system:

TROUBLE CHART

SYMPTOM	POSSIBLE CAUSE	POSSIBLE REMEDY
1. Insufficient brakes.	(a) Brakes need adjusting, lubricating or relining.	(a) Adjust, lubricate or reline brakes.
	(b) Low air pressure in the air brake system (below 80 pounds).	(b) Correct cause by checking for leaks. (See page 56.)
	(c) Defective relay-emergency valve.	(c) Check relay-emergency valve; repair or replace.
2. Brakes apply too slowly.	(a) Brakes need adjusting, lubricating or relining.	(a) Adjust or lubricate brakes.

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		(b)	Low air pressure.	(b)	Correct cause of low pressure in air brake system. (See page 56.)
		(c)	Restriction in tubing or hose line.	(c)	Repair or replace line.
		(d)	Clogged air line filter.	(d)	Clean filter.
		(e)	Excessive leakage with brakes applied.	(e)	See Symptom 9.
3.	Brakes release too slowly.	(a)	Brakes need adjusting or lubricating.	(a)	Adjust or lubricate brakes.
		(b)	Defective exhaust check valve in exhaust port of relay-emergency valve.	(b)	Repair or replace.
		(c)	Exhaust port of relay-emergency valve plugged with pipe plug.	(c)	Remove plug.
		(d)	Restricted tubing or hose line.	(d)	Repair or replace.
		(e)	Clogged air line filter.	(e)	Clean filter.
4.	Brakes do not apply.	(a)	Cut-out cocks improperly closed.	(a)	Open cut-out cocks.
		(b)	Brake system not properly connected to brake system of towing vehicle.	(b)	Connect lines correctly.
		(c)	No air pressure in brake system.	(c)	Charge brake system.
		(d)	Restriction in tubing or hose line.	(d)	Repair or replace.
		(e)	Clogged air line filter.	(e)	Clean filter.

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5.	Brakes do not release.	(a)	Brake system improperly connected to brake system of towing vehicle.	(a)	Connect lines correctly.
		(b)	Brake valve on towing vehicle in applied position.	(b)	Move brake valve to released position.
		(c)	Brake rigging binding.	(c)	Lubricate or adjust brake rigging.
		(d)	Relay-emergency valve in emergency position.	(d)	Build up pressure in towing vehicle brake system or open reservoir drain cock on trailer.
		(e)	Cut-out cocks improperly closed.	(e)	Open cut-out cocks.
		(f)	Restriction in tubing or hose line.	(f)	Repair or replace.
6.	Brakes grab.	(a)	Grease on brake lining.	(a)	Reline brakes.
		(b)	Brake rigging binding.	(b)	Lubricate brake rigging.
		(c)	Defective relay-emergency valve.	(c)	Repair or replace.
7.	Uneven brakes.	(a)	Brakes need adjusting, lubricating or relining.	(a)	Adjust, lubricate or reline brakes.
		(b)	Grease on brake lining.	(b)	Reline brakes.
		(c)	Brake shoe release spring or brake chamber release spring broken.	(c)	Replace broken spring.
		(d)	Brake drum out of round.	(d)	Repair or replace brake drum.
		(e)	Leaking brake chamber diaphragm.	(e)	Replace brake chamber diaphragm.

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8.	Excessive leakage with brakes released.	(a)	Relay-emergency valve leaking.	(a) Replace relay-emergency valve.
		(b)	Leaking lines and connections.	(b) Repair or replace.
9.	Excessive leakage with brakes fully applied.	(a)	Leaking relay-emergency valve.	(a) Replace relay-emergency valve.
		(b)	Leaking brake chamber diaphragm.	(b) Replace diaphragm.
		(c)	Leaking lines or connections.	(c) Repair or replace.
10.	Excessive leakage with brakes applied and relay-emergency valve in emergency position.	(a)	Defective relay-emergency valve.	(a) Replace relay-emergency valve.
11.	Excessive oil and water present in the air brake system.	(a)	Reservoirs not being drained often enough.	(a) Drain all reservoirs at least once a week, daily if necessary. Clean system if necessary.
		(b)	Compressor on towing vehicle passing excessive oil.	(b) Replace compressor.

NOTE: Detailed instructions covering the disassembly, inspection, repair, assembly, and test of (Air Brake Device) after they have been removed from a vehicle are given in TM9-1827A. This manual is contained in reference libraries of Engineer Heavy Shop Companies and Engineer Maintenance Companies.

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SECTION 6

ELECTRICAL SYSTEM AND LIGHTS

The electrical circuits used on this trailer are illustrated in the general electrical circuit diagram, figure 43. This diagram should be used to trace the various circuits for wiring replacement or repair. Electrical units are shown on the diagram in their relative position, and each wire in the system is of distinctive color with the key given in the diagram.

The lighting equipment includes two amber and two red clearance lamps, two red and two blue blackout lamps, one combination blackout stop and tail light and one combination service stop and tail light and blackout tail lamp.

Lights Blackout Stop and Tail

1. The combination service stop and tail light and blackout tail lamp is located at the left-hand rear of the trailer, while the combination blackout stop and blackout tail light is at the right-hand rear.

2. The lens of each blackout tail lamp is designed to produce two beams, so directed that when one vehicle is following another vehicle at a specified safe distance the two beams merge into a single high visible beam.

3. To obtain the accuracy necessary to insure this effect, the bulb is soldered to the lens retainer, and the lens and filter are crimped to the retainer to form a complete unit. When the bulb burns out, it is necessary to replace the complete bulb unit. (See figure 44.)

Clearance Lamps

1. The service procedure on standard clearance lamps and blackout clearance lamps is identical.

2. To replace a lens, turn the two screws (figure 44) that hold the lens housing to the lamp about three-quarters of the way

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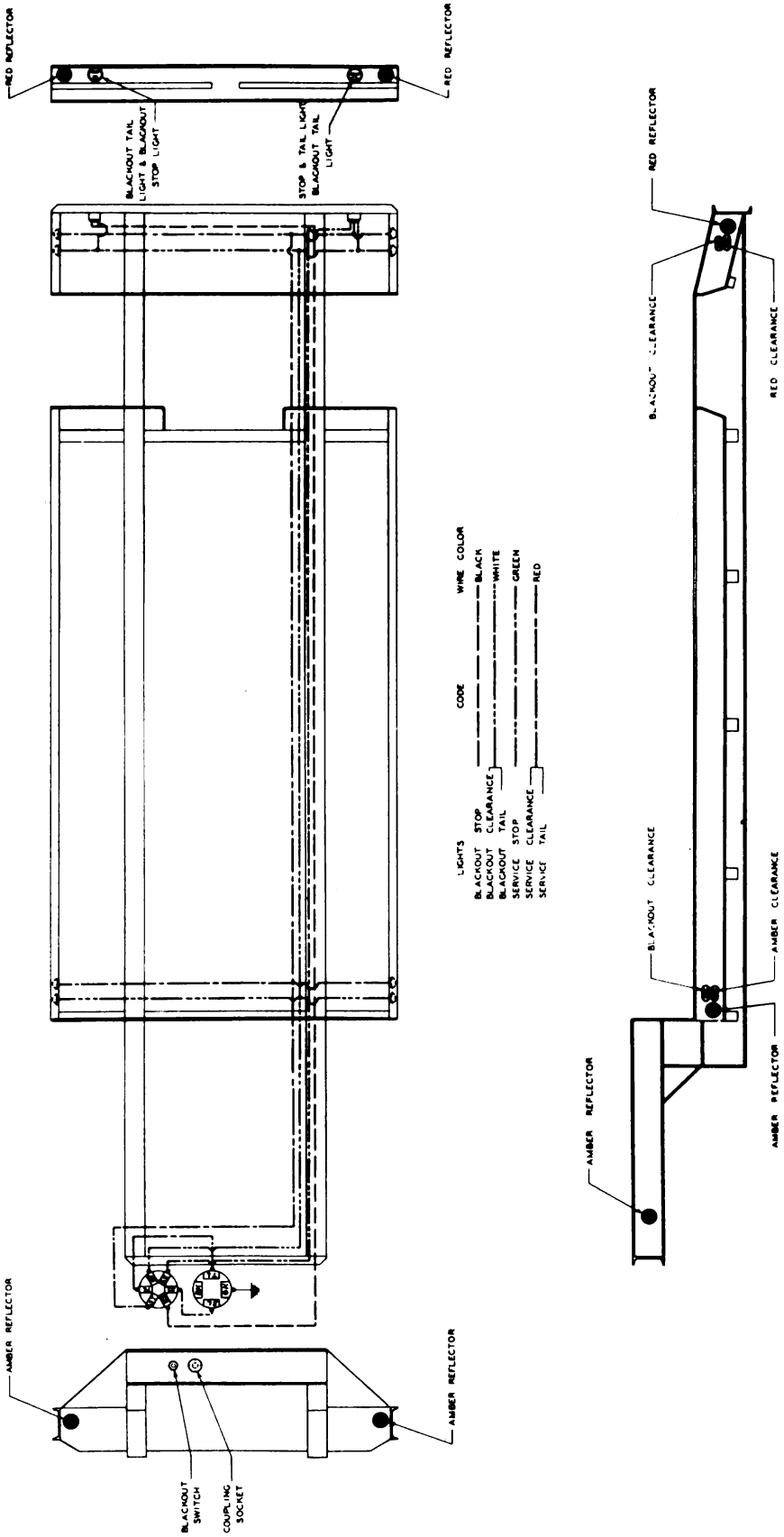

Figure 43—*Wiring Diagram.*

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out and lift off the housing. Push either of the two clips from the lens and lift the lens out of the housing. Place a new lens in position, with the marking "bottom" at the lower end, and reverse the removal procedure. Be sure the felt gasket is in position between the backing plate and the housing.

3. To replace a bulb, turn the two screws holding the lens housing about three-quarters of the way out and lift off the housing. Push either of the two clips from the lens and lift the lens out of the housing. Remove the old bulb and insert a new one. Return the lens to its correct position, with the side marked "bottom" at the lower end, and reassemble by reversing the disassembly procedure. Be sure the felt gasket is in position between the backing plate and the housing.

4. To replace a lamp assembly, remove the lens housing, the felt gasket and the four bolts holding the lamp backing plate to the trailer frame. Pull out the lamp and cut the spliced wire so as to leave it as long as possible. When installing a new lamp, use solder to make the connections. If solder is not available, splice the wires and tape them securely.

COUPLING SOCKET

1. The coupling socket (figure 9) is protected against entrance of dirt when the trailer is not in use by a spring cover.

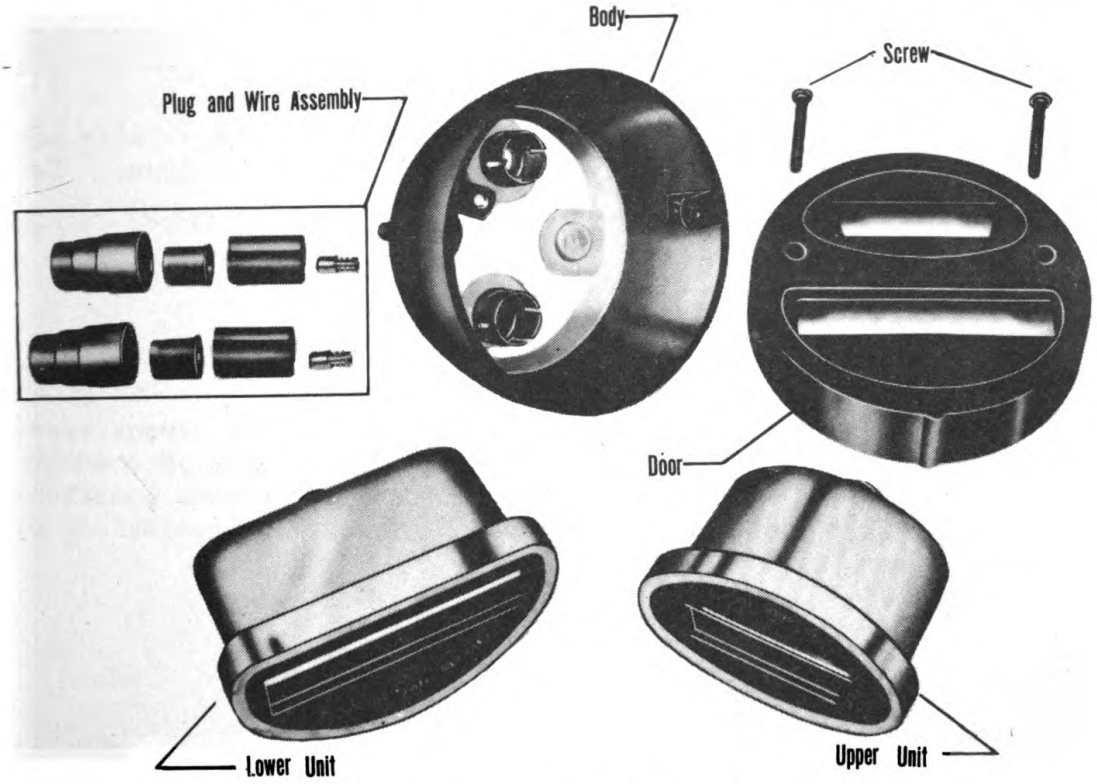

Figure 44—*Components of Blackout Stop and Tail Lamps.*

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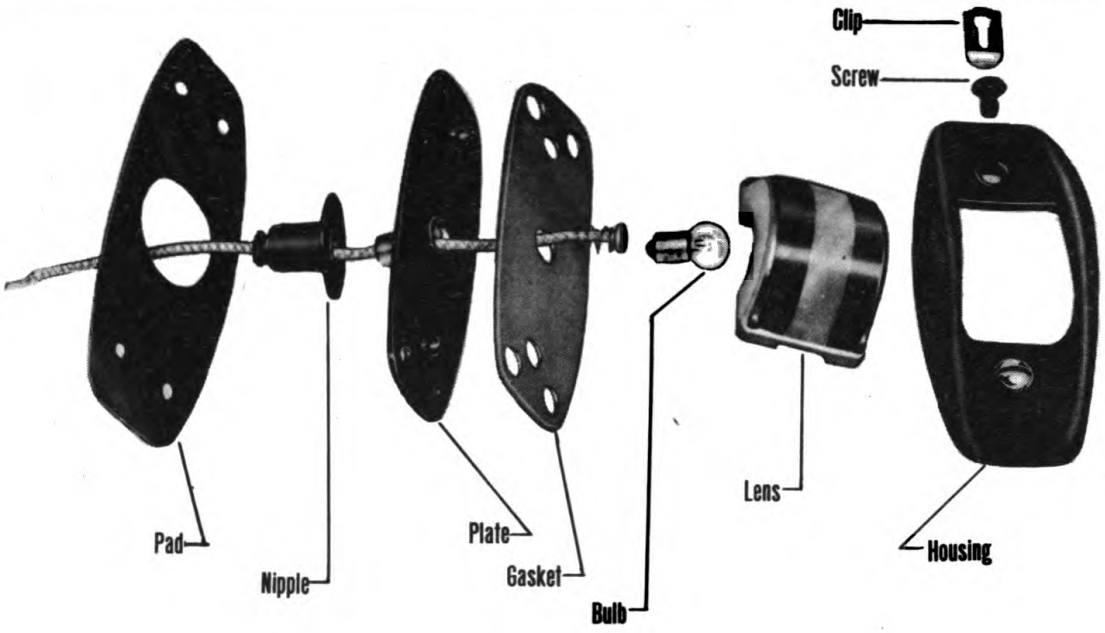

Figure 45—*Components of Clearance Lamps.*

The socket is held to the trailer frame by a flange bolted to the frame.

2. To check socket wiring connections, remove the socket cap from the end of the socket extending into the tool compartment. The cap is fastened to the socket case by a single hex nut.

3. Remove the socket cap.

4. Remove the nut holding the terminal cup washer; slip off the cup washer to expose the wire connections for inspection. Rewire if necessary.

5. To reassemble, reverse the disassembly procedure.

BLACKOUT SWITCH

The blackout switch (figure 9) is located on the front cross member of the main frame. It is operated with a coin or a screwdriver. The switch is either at a service or blackout position; there is no "OFF" position. The flow of current is controlled on the prime mover.

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TROUBLE CHART

The following chart will aid in diagnosing lighting troubles:

SYMPTOM	PROBABLE CAUSE	PROBABLE REMEDY
Failure to light when other lamps light.	(a) Burned out bulb.	(a) Replace.
	(b) Grounded or broken circuit.	(b) Check connections back to switch.
	(c) Stop light switch impaired.	(c) Check; replace if necessary.
	(d) Bulb loose or improperly mounted.	(d) Make sure lamp terminals engage socket terminals firmly.
Lights dim.	(a) Bulb loose or incorrectly mounted.	(a) Push bulb fully into socket.
	(b) Dirty lens.	(b) Wipe clean.
	(c) Poor connection at socket or a ground leak.	(c) Check socket, circuit and insulation; repair or replace.
Lights flicker.	(a) Loose wire connection or intermittent ground.	(a) Check wires and insulation; repair or replace.

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SECTION 7

TRAILER FRAME

The rugged design of the frame of this trailer makes repairs infrequent, baring collision or major accident which may result in bent or twisted crossmembers.

BENT FRAME MEMBERS

1. A heavy I-beam, jacks and chains may be used to straighten a bent frame member, providing the distortion is not too severe. The bent frame member may be heated to a dull red to facilitate shaping, but care should be taken to prevent excessive heating that would weaken the structural characteristics of the frame member.

2. Severely bent and twisted frame members should be cut out and replaced.

3. When replacing a bent section of a frame member, cut across the outside of the damaged section at a 30-degree angle, insert the section to be spliced in, and weld. The 30-degree angle will provide a mend over a greater area and result in a stronger weld.

a. Back up the spliced joints with plate or channel reinforcements extending about six inches on each side of the joint on the inner side of the channel.

b. Place a one-inch diameter hole in every four square inches of the splice plate or channel, and plug weld at these points.

> NOTE: The plug welding hole should be welded solid with bare welding rod, and coated rod should be used for the remainder of the welding.

SPRINGS

Removal

1. Springs may be removed with the dolly connected or disconnected from the main unit frame.

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a. If the dolly is left connected, lower the screw jacks at both sides of the main unit frame and raise the trailer until tires of the wheels on the side to be serviced just clear the ground and the weight on the other side is almost entirely off the wheels. Block the dolly to avoid accident in the event of jack failure, and to prevent the dolly from swinging on the king pin.

b. If the dolly is disconnected, jack it up so that the tires of the wheels on the side to be serviced just clear the ground. Securely block the dolly.

2. Remove the tire and wheels as assemblies. (See page 46.)

3. Place blocking under the axle at the end being serviced to prevent the axle from dropping when spring U-bolts are removed.

4. Remove the hex lock nuts and regular nuts from the U-bolts binding the springs to be removed, releasing the spring tie plate just under the axle.

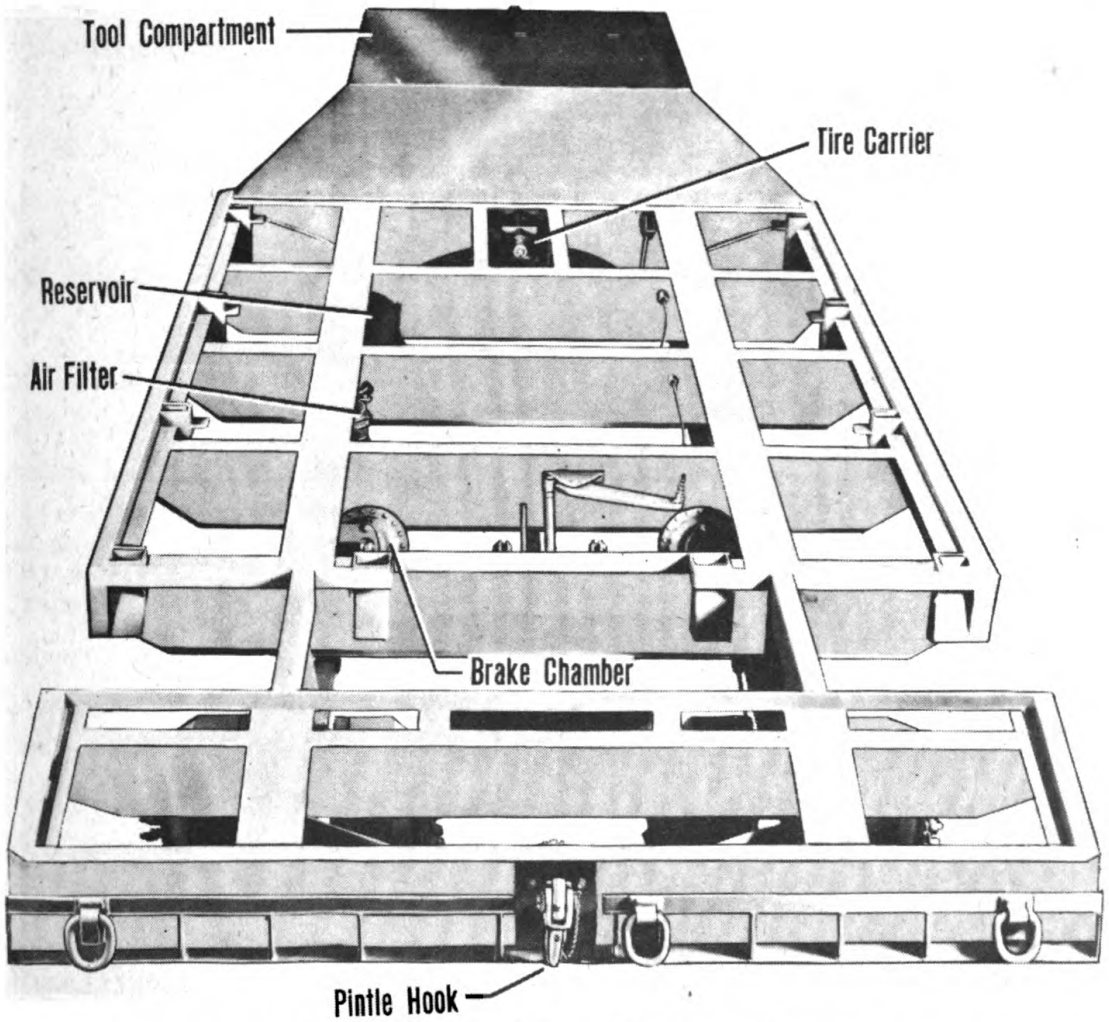

Figure 46—*Looking Down on Full Bed of Trailer, with Platform Removed.*

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5. Drive the U-bolts upward and remove them from the dolly.

6. Lift the U-bolt pad from the helper spring.

7. Lift the helper spring from the spring hangers.

8. Remove the spacer plate located between the helper and the main spring.

9. Remove the square-head bolt attaching the pipe spacer in the rear spring hanger.

10. Lift the main spring from the dolly.

Replacement

1. To reassemble the axle to the dolly frame after installing a new spring, reverse the disassembly procedure but do not reinstall the wheels and tires.

2. Check front axle alignment, following the procedure outlined on page 38.

3. Reinstall wheels and tires as assemblies. (See page 48.)

SPRING HANGERS

Removal

1. Spring hangers may be replaced with the dolly connected or disconnected from the main unit frame.

2. Remove the springs, following the procedure outlined under "Springs - Removal" on page 78.

3. If the front hanger is being replaced, disconnect the radius rod at its swivel. (See figure 15.) Disconnect the drawbar, and use a torch to remove the safety chain.

4. Cut the damaged hanger, front or rear, from the dolly frame, using a torch. Cut all weld from the frame.

Replacement

1. Place a new hanger in place and weld into position.

2. To reassemble springs and the axle to the dolly, reverse disassembly procedure, but do not reinstall the wheels and tires.

3. Check front axle alignment, following the procedure outlined on page

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4. Reinstall wheels and tires as assemblies. (See page 48.)

RADIUS RODS

1. The adjustable radius rods seldom need replacement except following accident, although the rubber bushings at the swivel in the spring hanger and the bronze bushing at the axle end may need replacement.

2. To remove the radius rod, remove the cotter pin and castellated nut from the bolt holding the swivel to the spring hanger; drive out the attaching bolt and remove the rubber bushings to release the swivel. (See figure 15.)

3. Disconnect the radius rod from the spring seat by removing the cotter pin and the castellated nut from its attaching bolt; drive out the bolt.

4. To remove the bronze bushing from the axle end of the radium rod, press it out with an arbor press or drive it out with a steel bar. New bushings should be pressed into position on an arbor press. Try the attaching bolt in the bushing; ream the bushing to size if necessary.

5. To reassemble, reverse the disassembly procedure.

DRAWBAR

1. Drawbar hinge bushings must be replaced whenever play in the drawbar is sufficient to position the front axle at variance from a right-angle to the trailer's line of draft.

2. To remove the drawbar, remove the cotter pin from the drawbar attaching bolts, and turn off the castellated nuts. Pull out the attaching bolts, releasing the drawbar.

3. To remove a bushing, drive it out with a 1-1/2" or 1-7/16" diameter steel bar, or press it out on an arbor press.

4. Use an arbor press to put the new bushing in position, taking care not to burr or mushroom its end.

5. Try the attaching bolt in the bushing. It should be a light driving fit. If the bolt will not go in, ream the bushing to 1-1/4" diameter.

KING PIN

1. To replace a king pin, use a cutting torch to remove the gusset plate from the top of the king pin, and the king pin itself.

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CAUTION: Take care not to damage the fifth wheel plate on the main unit when cutting out the king pin.

2. Grind all old weld metal smooth and place a new king pin and gusset plates in position.

3. Use a 3/16" coated welding rod to weld the king pin in place when making the first pass, and a 1/4" coated rod for the second pass.

PINTLE HOOK

Disassembly

1. Remove the cotter pin at the end of the hook shaft under the trailer platform and turn off the castellated nut. (See figure 47.)

2. Pull out the hook at the rear of the trailer, releasing a plain washer, two sleeves and a spring.

3. To remove the latch, loosen the screw locking the latch pin that holds the latch to the pintle hook lock member. Drive out the pin, freeing the latch.

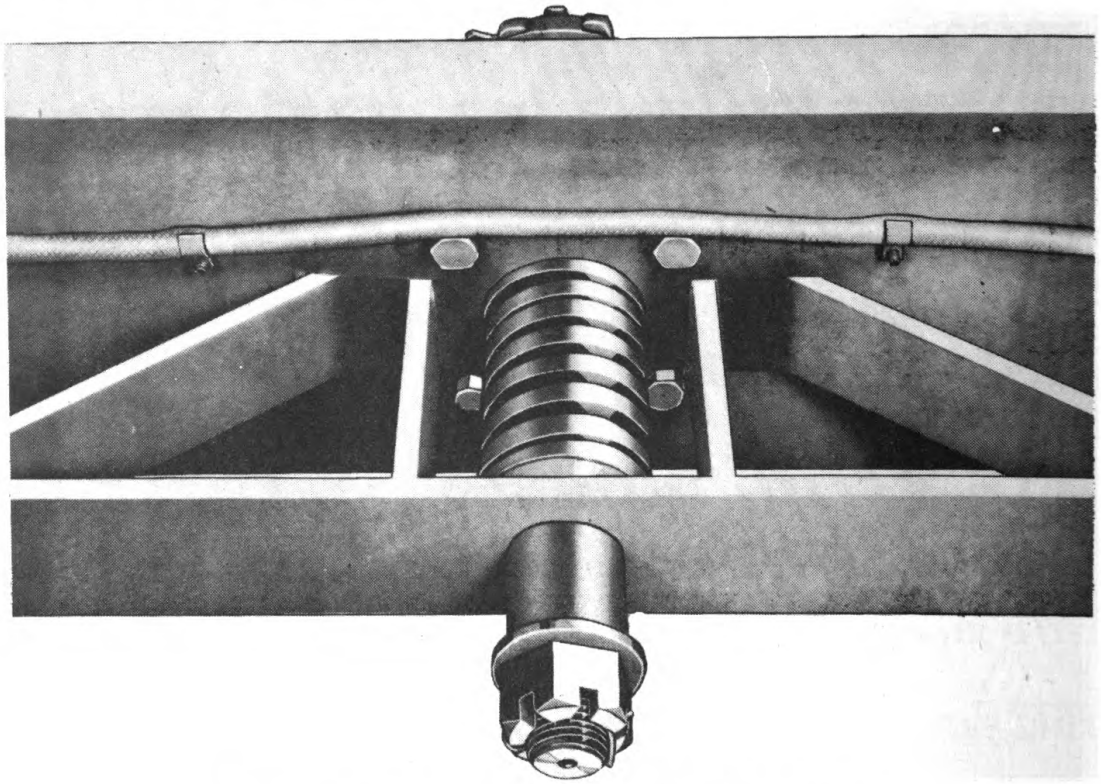

Figure 47—*Pintle Hook, Rear View, Platform Removed*

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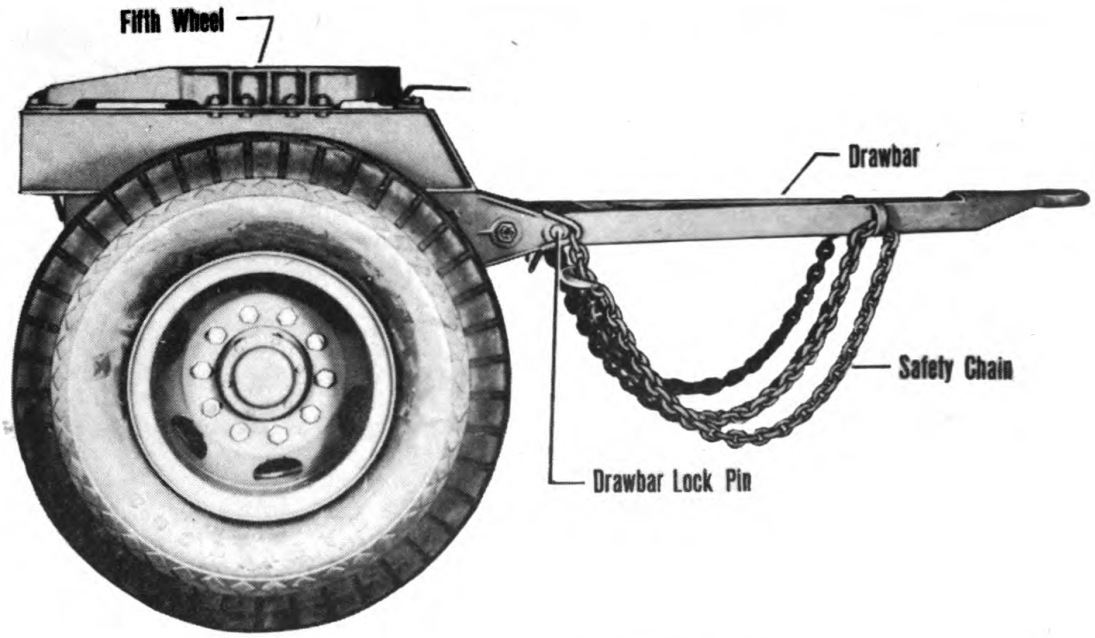

Figure 48—*Front Dolly with Fifth wheel*

4. To remove the lock from the hook, remove the cotter pin from the hex-head bolt attaching the lock to the hook; turn off the slotted hex nut and drive out the bolt to free the lock.

Reassembly

To reassemble, reverse the disassembly procedure.

FIFTH WHEEL

Disassembly

1. Remove the fifth wheel from the dolly frame by loosening and removing the hex nuts from the 14 mounting bolts; lift the fifth wheel from the dolly frame. (See figure 48.)

2. Remove the hex-head bolt attaching the lever to the fifth wheel main plate, releasing the sliding lock and its spring.

3. Remove the cotter pin from the pin attaching the hinged lock; slip out the pin, releasing the hinged lock and the plunger lock with its spring.

Reassembly

To reassemble and mount the fifth wheel, reverse disassembly procedure.

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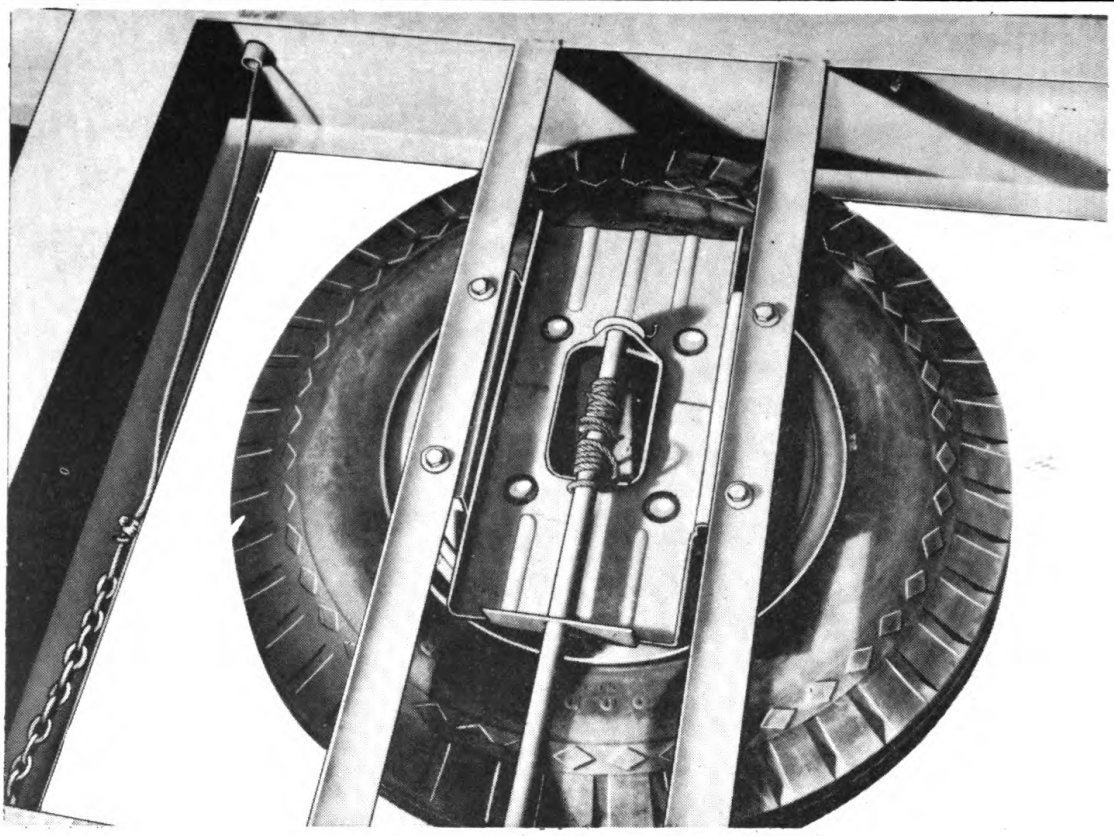

Figure 49—*Tire Carrier, with Platform Removed.*

TIRE CARRIER

The tire carrier (figure 49) is bolted to the trailer frame with its operating shaft protruding through the first main frame cross member.

Removal

1. Remove the tire from the carrier, leaving the cable hang free.

2. Remove the cotter pin and plain washer from the end of the tire carrier shaft.

3. Remove the cable from the shaft, and slip the shaft from the carrier main member and through the trailer frame.

4. Remove nuts and lock washers from the four bolts holding the main member to the frame, releasing the main member.

Replacement

To replace a tire carrier, reverse the disassembly procedure.

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CONTROL BRAKE

Slack adjusters of the trailer rear wheel brakes are actuated by brake chambers mounted on the trailer frame. The chambers actuate cross shafts to which the slack adjusters are connected by rods. The cross shafts are also actuated by turning the parking brake handwheel through cable, chain and rod linkage. An equalizer bar is provided to give even brake application through the left- and right-hand cross shafts. (See figures 7, 50 and 51.)

Linkage between all connecting parts of the brake control system is by means of clevis pins or wire clips. Parts may be removed for replacement readily in the event of accident or excessive wear.

Removal

1. To remove a cross shaft assembly, disconnect the clevis pins attaching links from the equalizer bar, the slack adjuster rods and the brake chambers.

2. Loosen nuts from bolts holding the cross shaft inner and

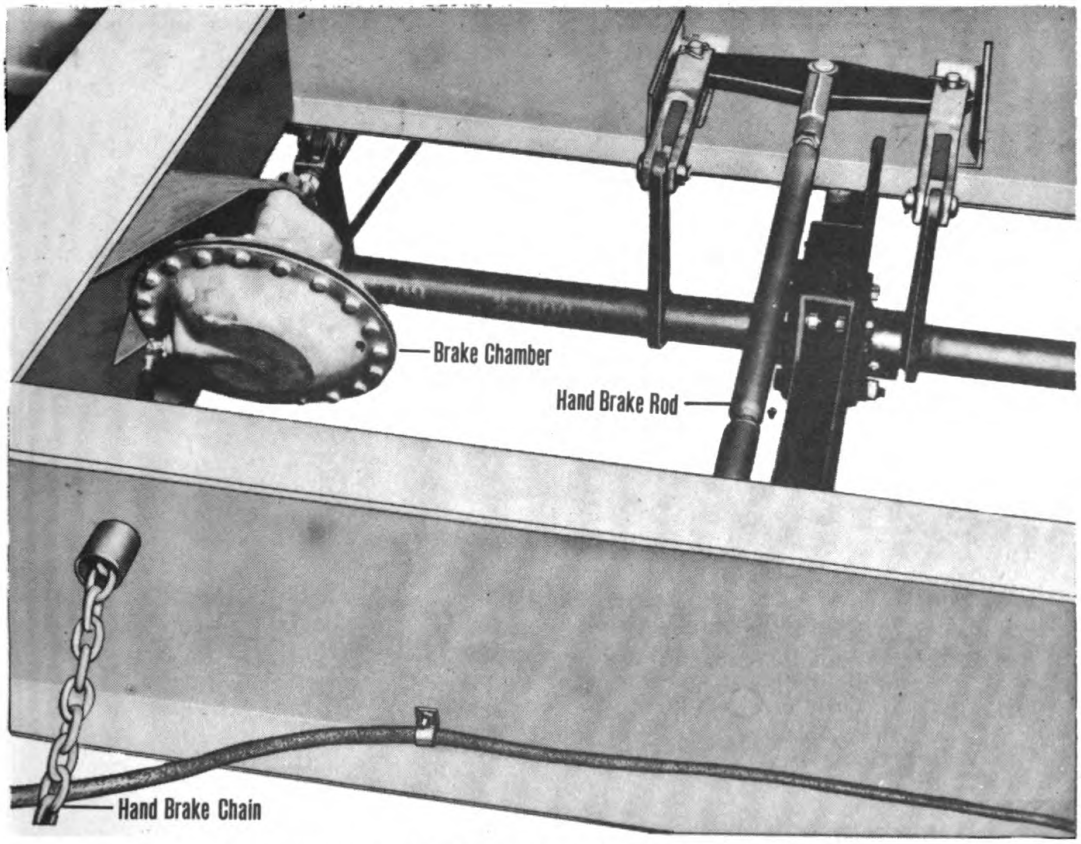

Figure 50—*Brake Control, with Platform Removed.*

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outer bearing brackets, permitting the cross shaft to drop from the trailer frame.

Replacement

To replace a cross shaft assembly, reverse disassembly procedure.

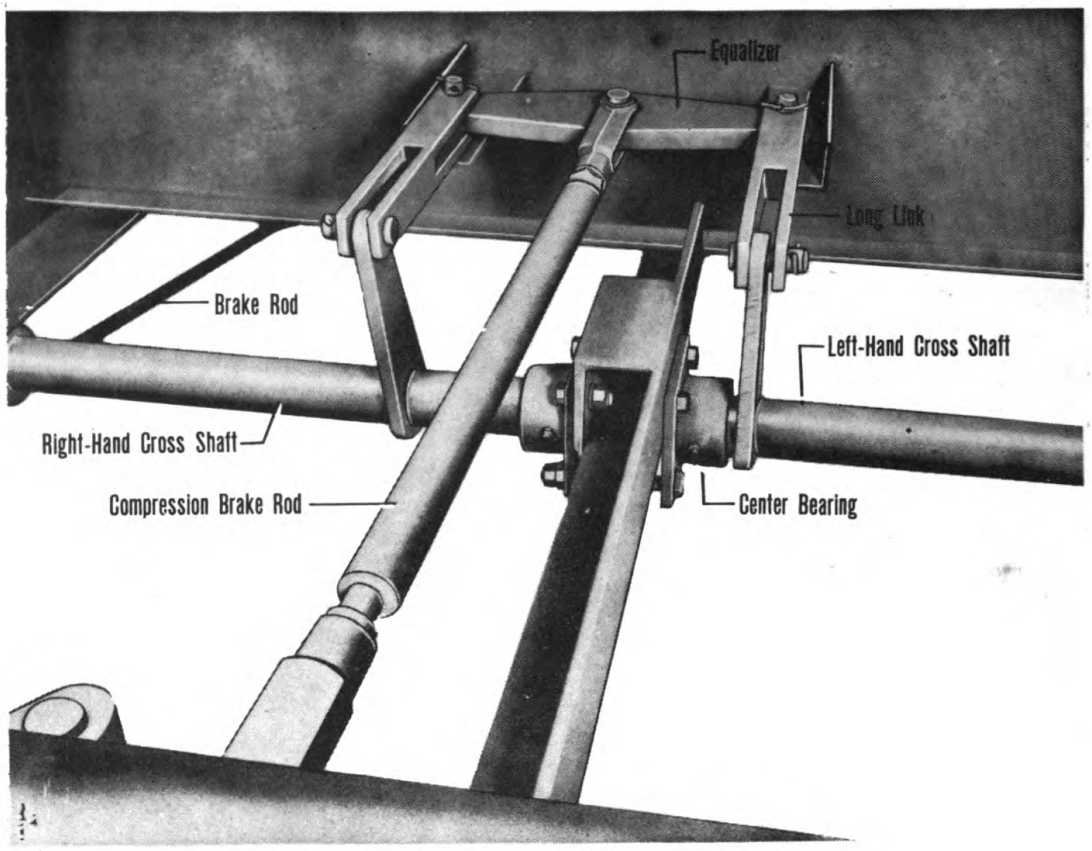

Figure 51—*Brake Control with Platform Removed*

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PARTS CATALOG

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PARTS CATALOG

This Parts Catalog is divided into three sections: a Pictorial Assembly List of purchaseable items with the government part number, part name and quantity required for each assembly shown on the illustration; an Assembly Parts List giving the items included in each purchaseable assembly; and a Numerical Parts List giving for each purchaseable item the government part number, name, the manufacturer and manufacturer's part number, the quantity used on the trailer, the page on which the part is pictured, the unit weight and the unit price.

Directly preceeding the Pictorial Assembly List is information on preparation of requisitions for trailer parts.

WARNING

SPARE PARTS can be supplied promptly and accurately only if positively identified by correct part number and correct part name.

FURNISH THIS INFORMATION ON ALL REQUISITIONS. WITHOUT FAIL, on all requisitions, give name of machine, name of manufacturer, model or size, manufacturer's serial number of each machine and subassemblies attached to machine, and components and accessories for which spare parts are required.

List spare parts for only one make or kind of machine on each requisition. Requisitions must be double spaced to provide room for office notations when necessary.

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PREPARATION OF REQUISITIONS

Sample Copy for Use in the Preparation of Requisitions

On this page is shown a sample spare parts requisition on QMC Form No. 400 which conforms to the latest revisions. The marginal notes give instructions for preparing a requisition for spare parts for Engineer equipment.

The revised QMC Form 400 has new column headings. Until new forms are available use the present form and type or write in corrections in column headings as shown below.

Under revised heading "Nomenclature" and "Unit" list the article and the unit (ea for each; lb for pound; etc.). Under heading "Maximum or Authorized Level" list the authorized organizational allowances or depot stock levels given in ENG 7 and ENG 8 of the ASF Engineer Supply Catalog (superseding Part III, Corps of Engineers Supply Catalog). The total number on hand for each item is listed under "On Hand". In column headed "Due In" enter the total quantity previously requisitioned but not delivered. Column headed "Required" is to be changed to read "Quantity Desired" and column headed "Approved" is to read "Remarks." For "Initial" and "Replenishment" requisitions, the sum of "Quantity Desired", "Due In", and "On Hand" should equal "Maximum or Authorized Level."

(Additional details on this subject are covered in ENG 1 of the ASF Engineer Supply Catalog which incorporates information formerly contained in Section AA-1, Part III, Engineer Supply Catalog.)

State PERIOD designation by use of one of the following terms:
(1) "INITIAL"—first requisition of authorized allowances.
(2) "REPLENISHMENT"-subsequent requisitions to maintain authorized allowances.
(3) "SPECIAL"—requisitions for necessary repairs not covered by allowances.

Type "SPARE PARTS" in upper right hand corner of requisition.

Address requisitions to Engineer Field Maintenance Office, P. O. Box 1679, Columbus, Ohio (except for spare parts for searchlights and barrage balloons which are addressed to Schenectady, N. Y. or Ogden, Utah ASF depots).

Give complete shipping instructions. Special instructions for packing, marking, routing, etc., should be given at bottom of requisition.

State proper nomenclature of machine, also make, model, machine serial number and U. S. A. registration number.

Prepare a separate requisition for each different machine.

State basis or authority and date delivery is required, immediately below description of machine.

Double space between items.

Group parts required under group headings as shown in manufacturers' parts catalogs (Technical Manuals).

State OCE stock numbers, manufacturers' parts numbers and nomenclature accurately and completely. Do not use abbreviations.

WAR DEPARTMENT
A. W. C. Form No. 400
(Revised 10 Aug. 1943)

SPARE PARTS

REQUISITION

To: Engineer Field Maintenance Office, P. O. Box 1679, Columbus, Ohio — No. of Sheets 1 — Sheet No. 1
Requisition No. R-531-3-44 — Date 25 January 1944 — Period Special
SHIP TO Engineer Property Officer, Pine Camp, NEW YORK
MARKED FOR: Supply Officer, 147th Engineer Regiment, Pine Camp, NEW YORK

Requisitioned By (show Signature, Rank, Organization, Destination. If different from "ship to" insert address): Robert E. Roe, Major, C. E., Engineer Property Officer

Approved By For the Commanding Officer: John D. Doe, Colonel, C. E., Executive Officer

MFG. NO.	NOMENCLATURE AND UNIT		AUTH. or MAX. LEVEL	ON HAND	DUE IN	REQUIRED	APPROVED
PARTS FOR TRAILER, SEMI, LOW-BED, WITH DOLLY, JANE MODEL LBD-620							
TRAILER SERIAL NUMBER 1146, USA REG. NO. USA - 0277280							
Basis: Repair of disabled equipment							
Delivery requested by 15 February 1944							
RELAY-EMERGENCY VALVE							
162-1656	BODY - Valve, Complete	ea.	-	0	0	1	
162-1667	GASKET	ea.	-	0	0	1	
SLACK ADJUSTER - REAR							
207-4920	BODY - Rear	ea.	-	0	0	2	
207-4923	BUSHING	ea.	-	0	0	1	
FIFTH WHEEL							
207-5039	LEVER - Forged	ea.	-	0	0	1	
207-5040	SPRING - Sliding Lock	ea.	-	0	0	1	
207-5041	SPRING - Plunger Lock	ea.	-	0	0	1	

*

*Nonexpendable items such as tools must be accounted for, when requisitioned, by a statement that they have been placed on REPORT OF SURVEY or STATEMENT OF CHARGES.

Emergency requisitions sent by telephone, teletype, cablegram, telegraph or radio must be confirmed immediately with requisition marked: "Confirming (state identifying data)."

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PREPARATION OF REQUISITIONS

A sample requisition in the correct form for submission by the Engineer Property Officer is shown on the opposite page.

THIS SHALL BE FOLLOWED IN MAKING OUT REQUISITIONS

In order to eliminate duplication of work, Property Officers may authorize organizations to prepare requisitions in final form, leaving requisition number space blank for completion by Property Officer.

THE FOLLOWING RULES WILL BE OBSERVED CAREFULLY IN PREPARING REQUISITIONS FOR SPARE PARTS:

a. Prepare a separate requisition for each different machine.

b. Type "SPARE PARTS" in upper right hand corner of requisition form.

c. State PERIOD designation by use of one of the following terms:

(1) "INITIAL"—first requisition of authorized allowances.

(2) "REPLENISHMENT"—subsequent requisitions to maintain authorized allowances.

(3) "SPECIAL"—requisitions for necessary repairs not covered by allowances.

d. Give complete shipping instructions.

e. State proper nomenclature of machine, and make, model, serial number and registration number.

f. State basis of authority, and date delivery is required, immediately below description of machine.

g. Group parts required under group headings as shown in manufacturer's parts catalogs.

h. State manufacturers' parts numbers and nomenclature descriptions accurately and completely. Do not use abbreviations.

i. Double space between items.

j. Emergency requisitions sent by telephone, telegraph, or radio must always be confirmed immediately with requisition marked: "*Confirming* (state identifying data)."

k. Nonexpendable items must be accounted for.

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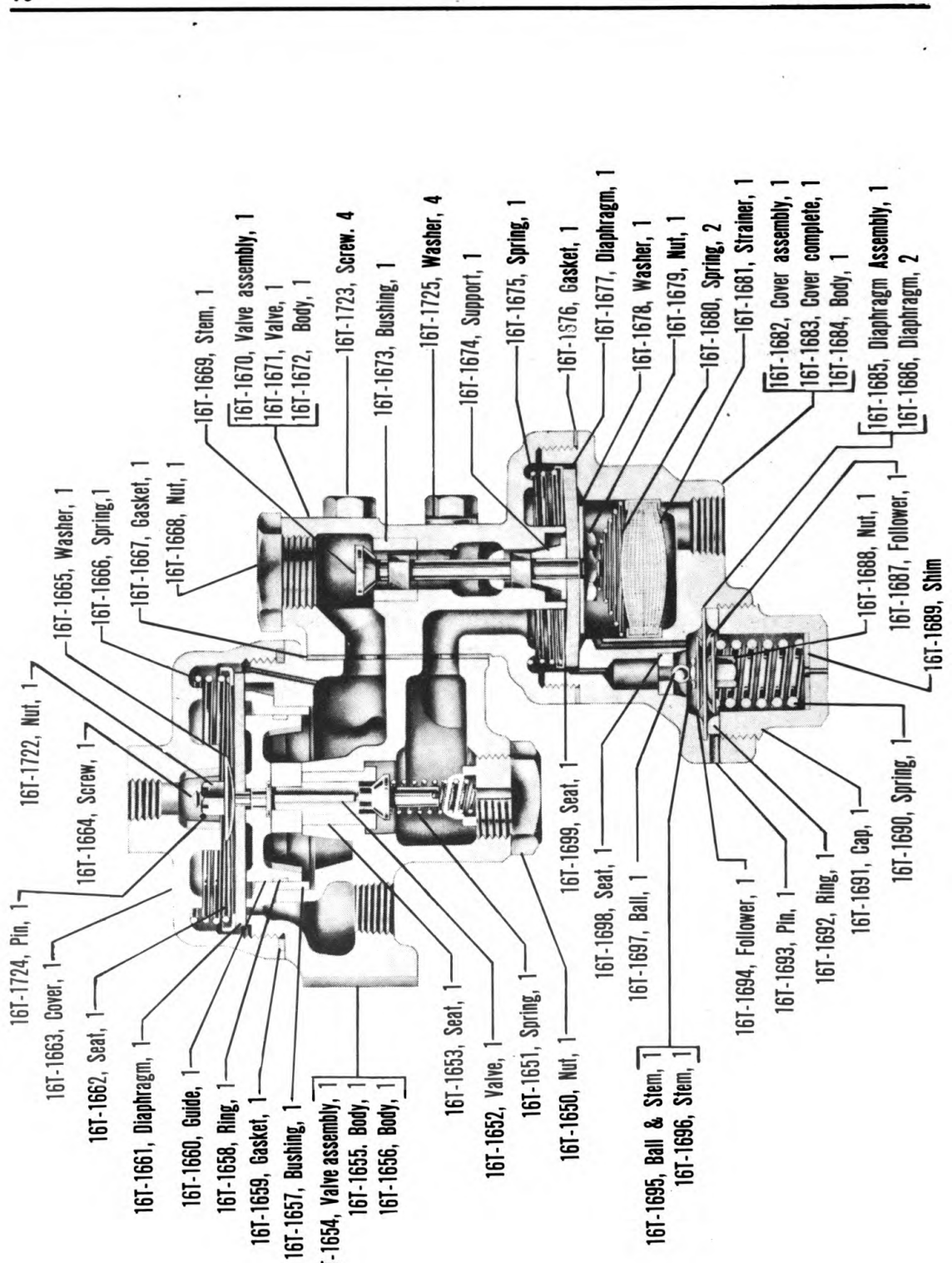

Figure 52—*Relay Emergency Valve.* **16T-1649**

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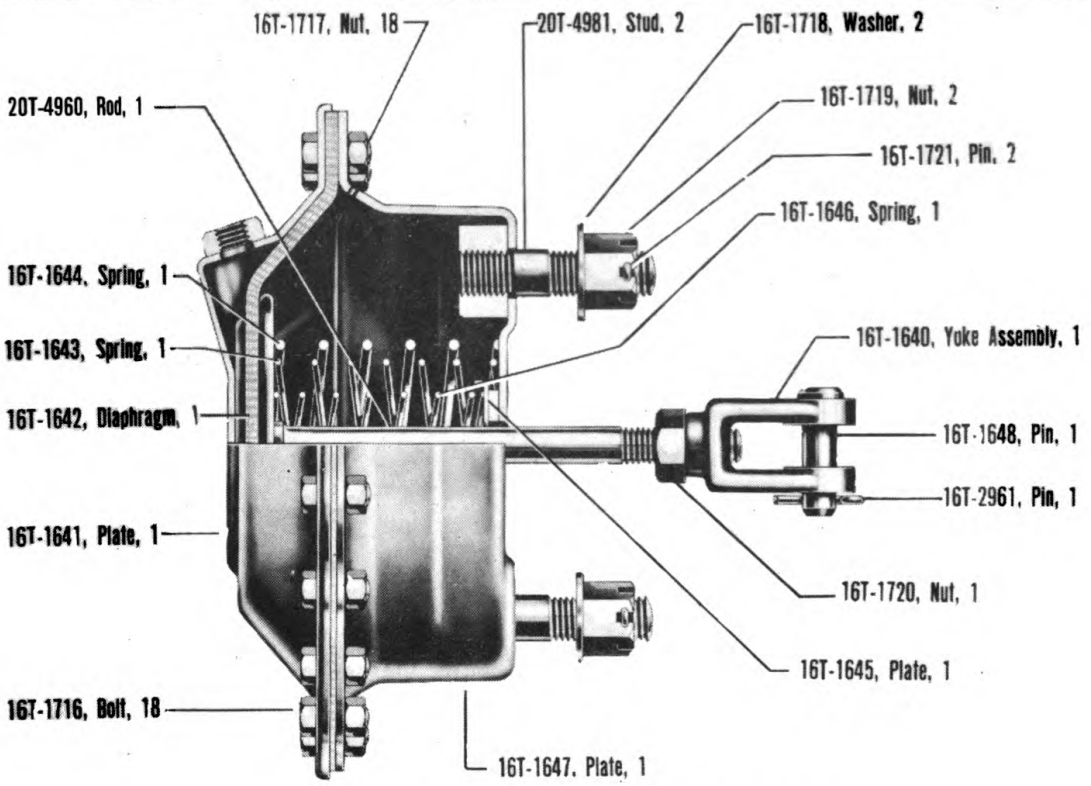

Figure 53—*Front Axle Brake Chamber, Type B* **20T-4940**

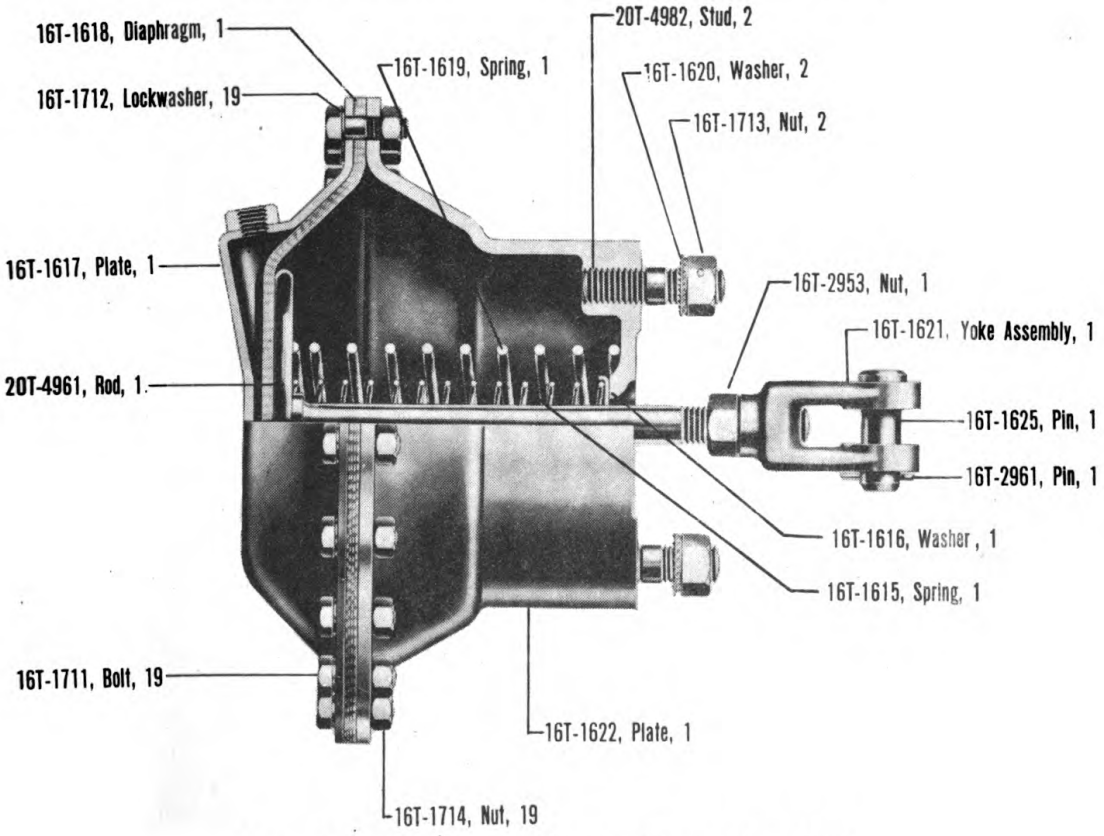

Figure 54—*Rear Brake Chamber Type F* **20T-4941**

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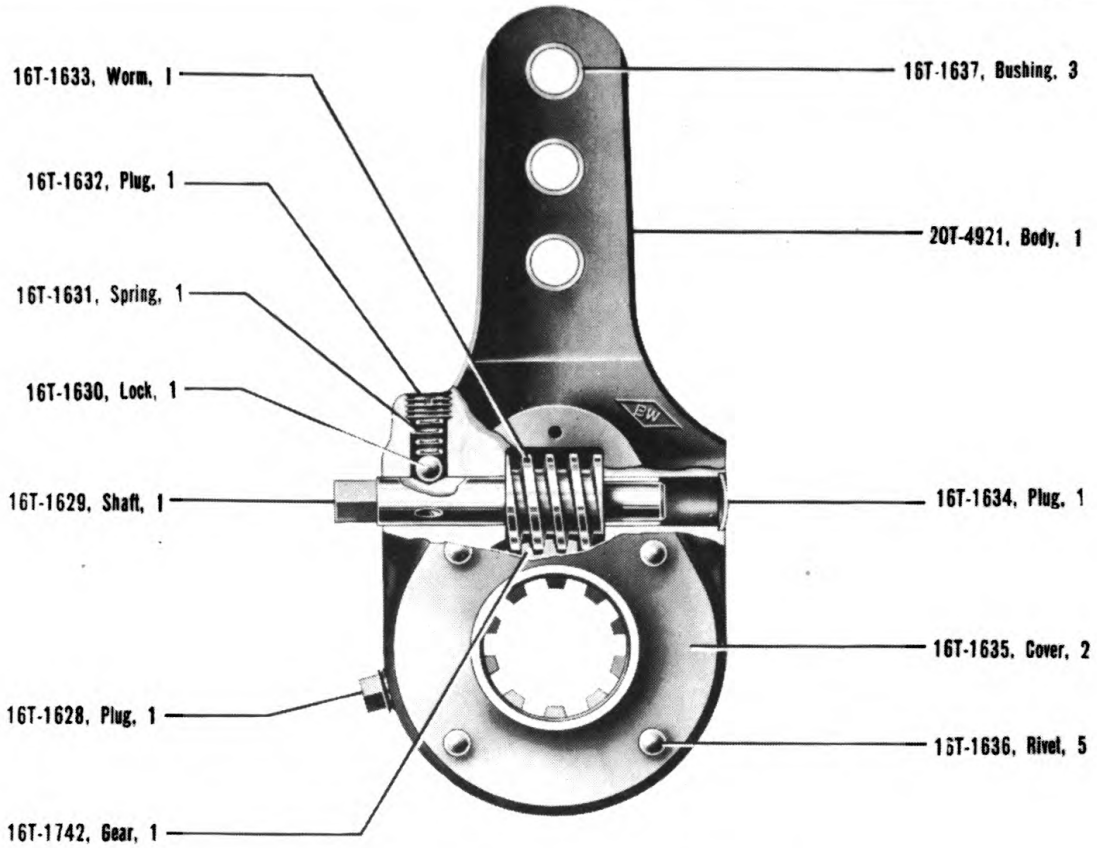

Figure 55—*Front Slack Adjuster* **20T-4900**

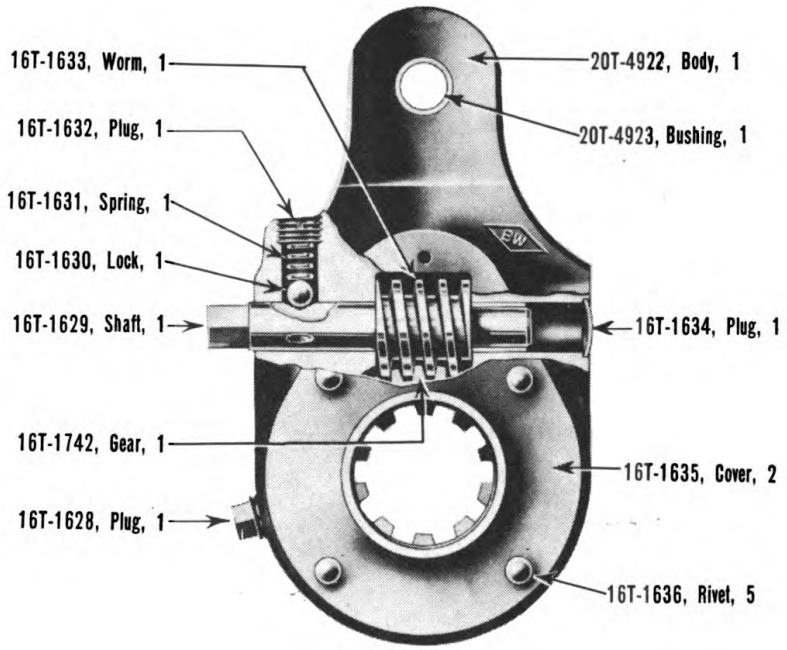

Figure 56—*Rear Slack Adjuster* **20T-4901**

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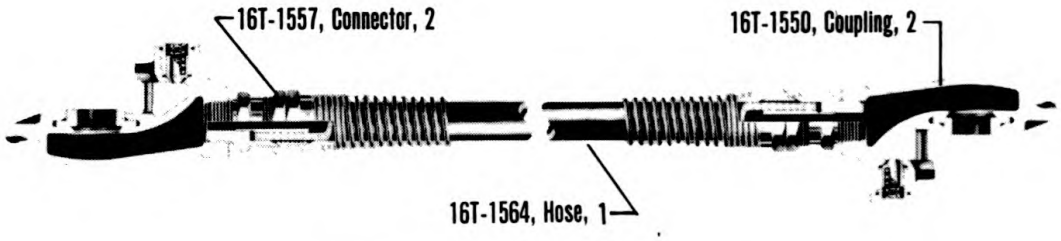

Figure 57—*Hose Assembly* **16T-1549**

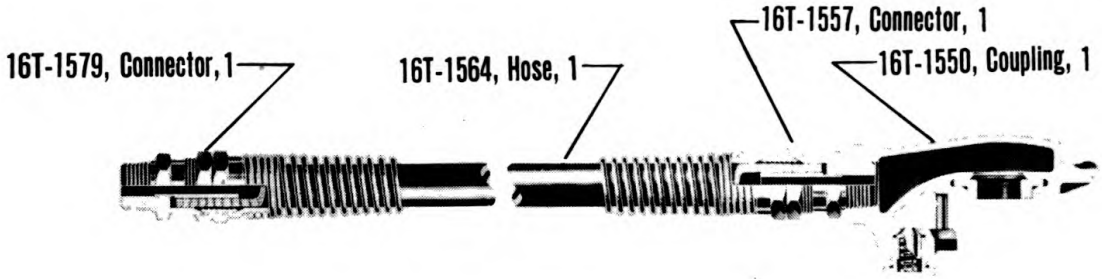

Figure 58—*Hose Assembly* **20T-5066**

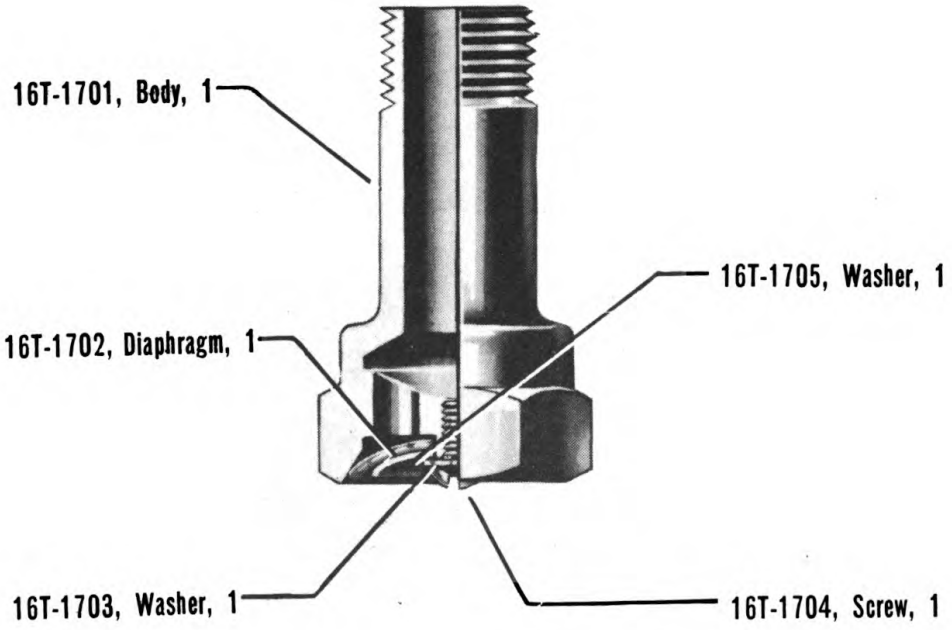

Figure 59—*Exhaust Check Valve* **16T-1700**

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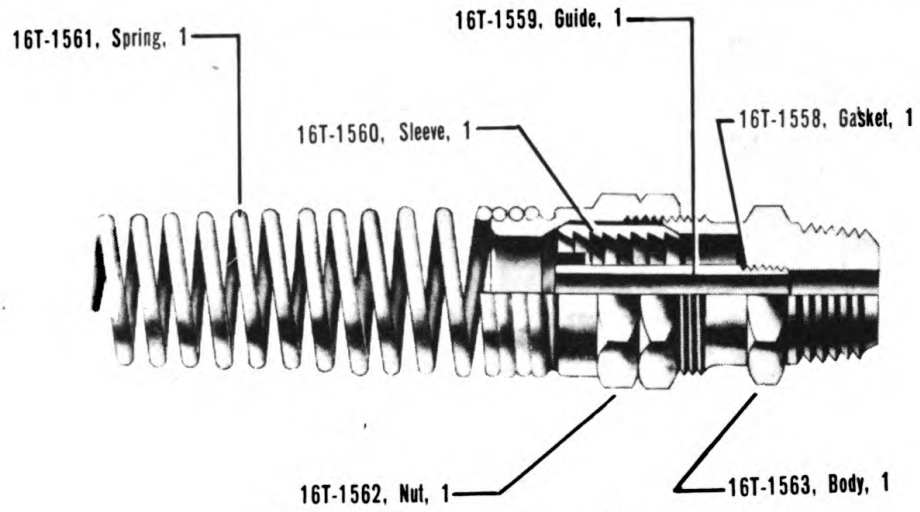

Figure 60—*Hose Connector* **16T-1557**

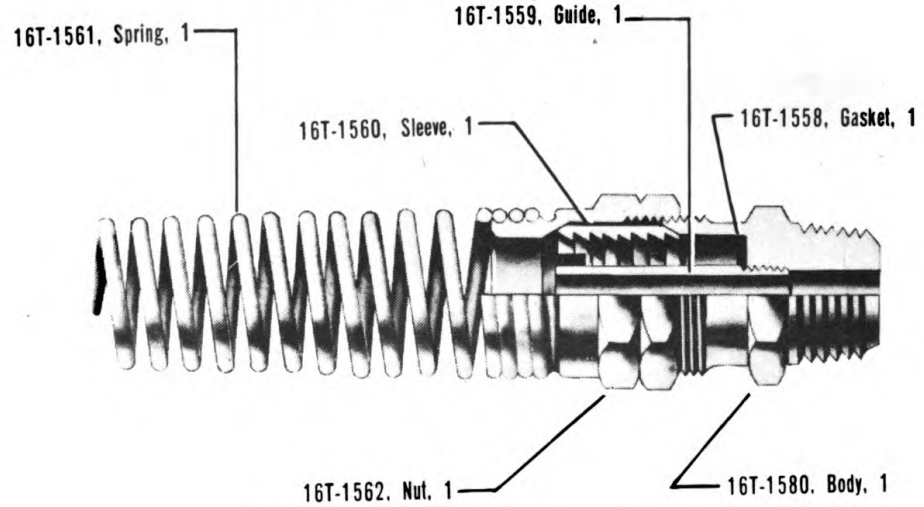

Figure 61—*Hose Connector* **16T-1579**

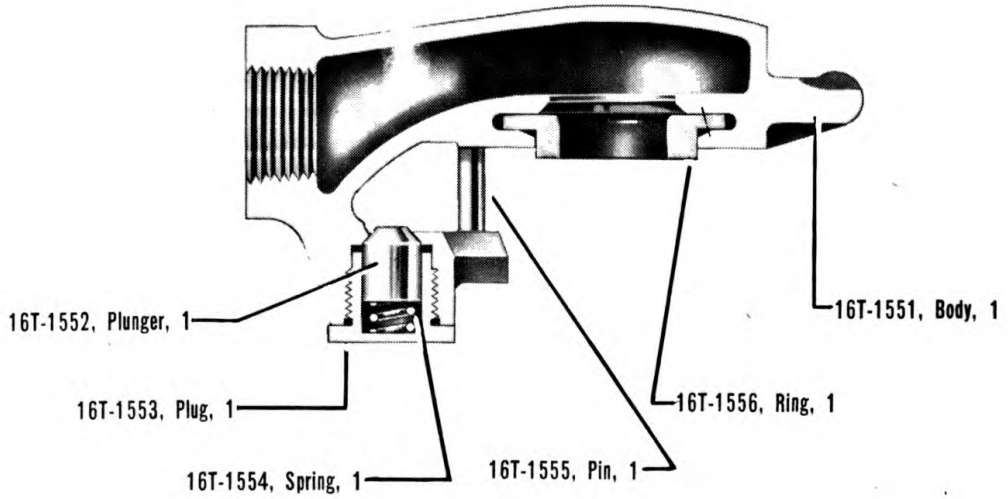

Figure 62—*Hose Coupling* **16T-1550**

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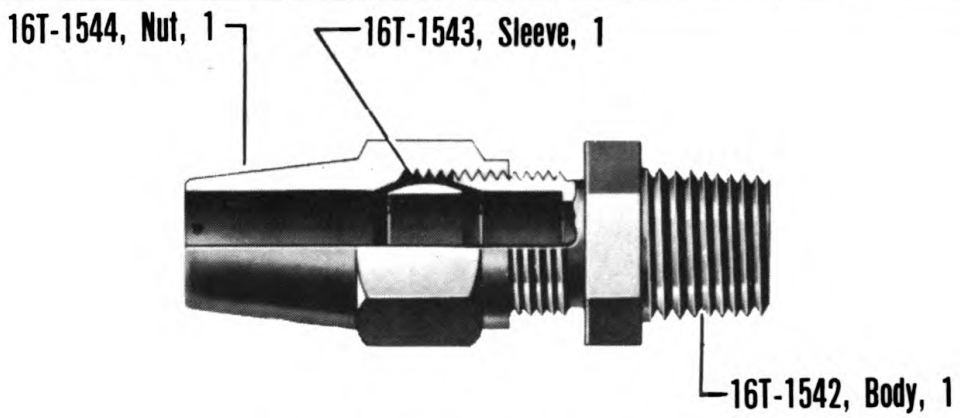

Figure 63—*Tubing Connector* **16T-1541**

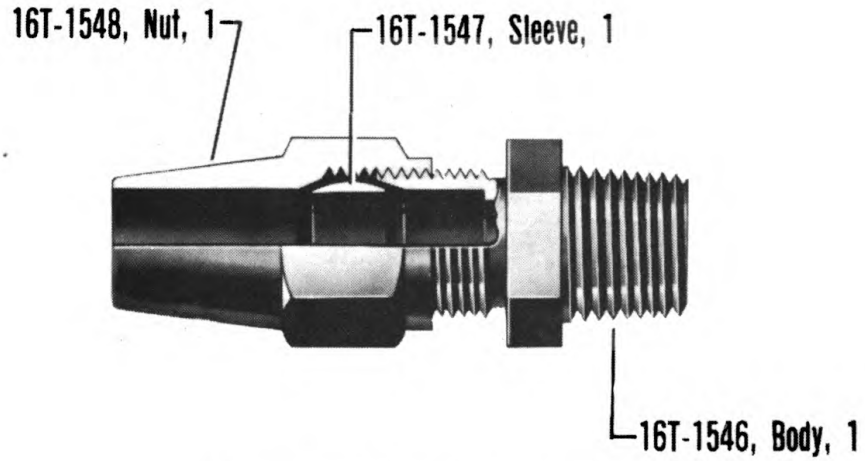

Figure 64—*Tubing Connector* **16T-1545**

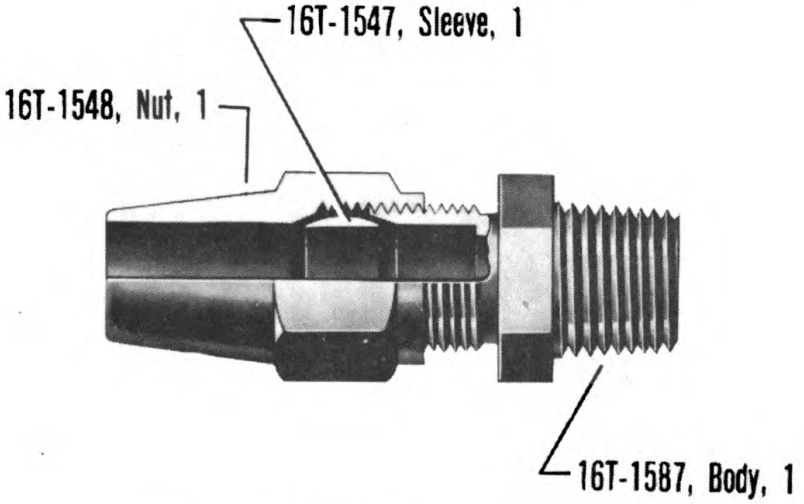

Figure 65—*Tubing Connector* **16T-1586**

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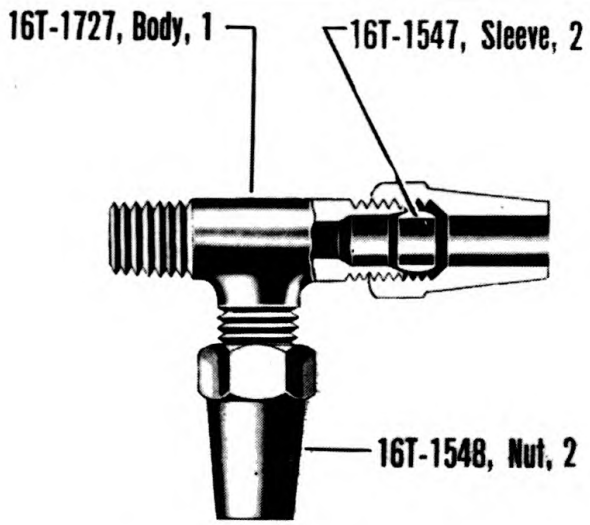

Figure 66—*Tubing Tee* 16T-1726

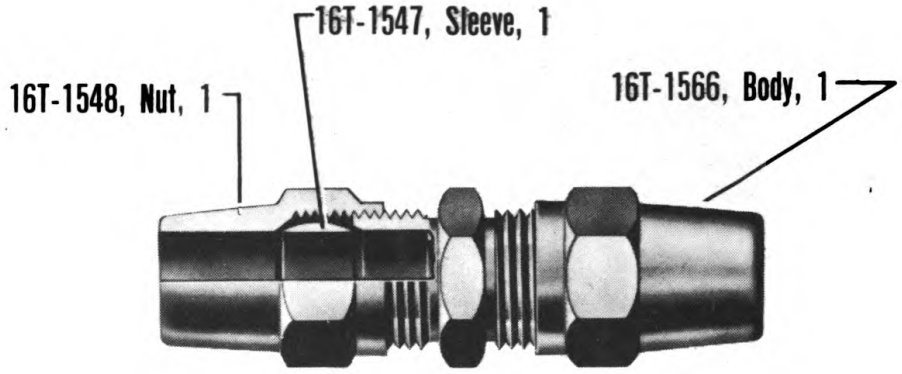

Figure 67—*Tubing Union* 16T-1565

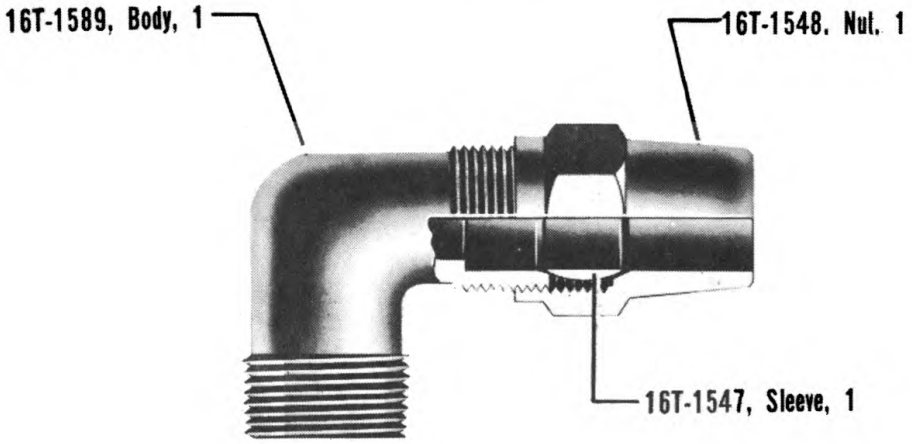

Figure 68—*Tubing Elbow* 16T-1588

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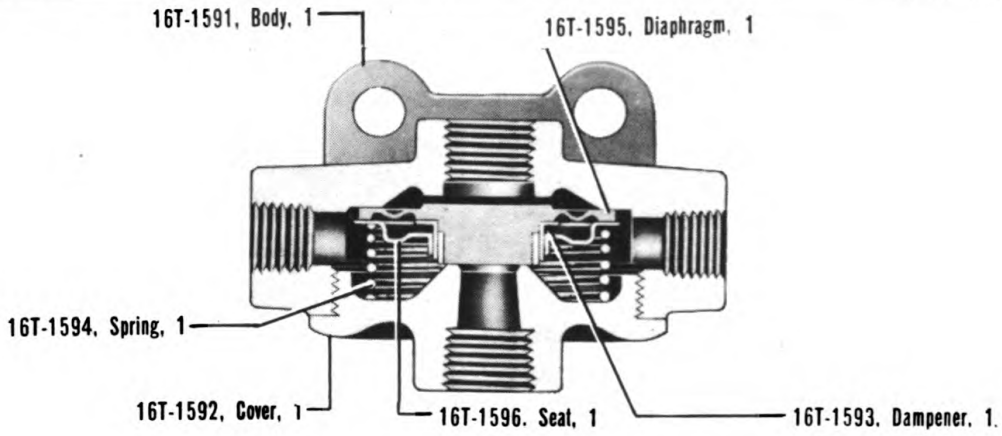

Figure 69—*Quick Release Valve* 16T-1590

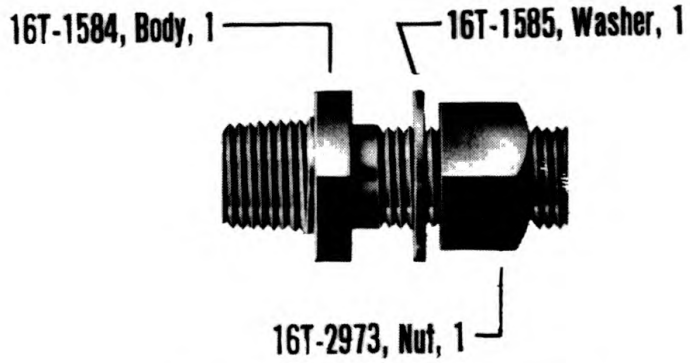

Figure 70—*Clamping Stud* 16T-1583

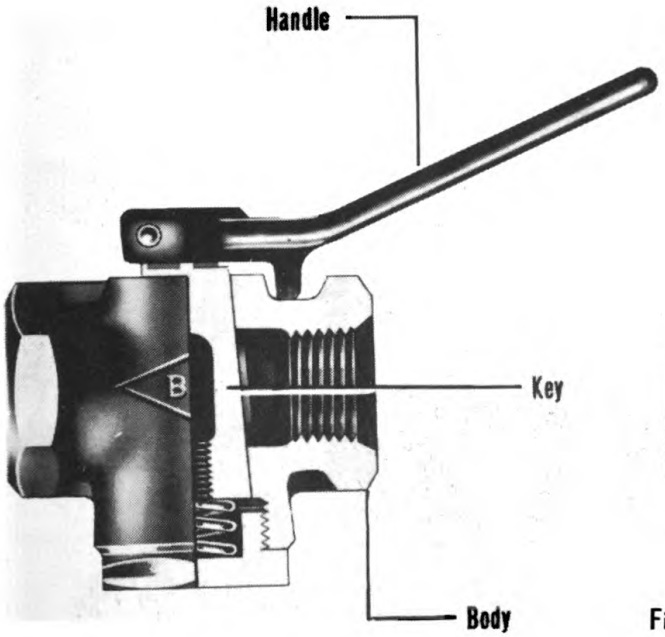

Figure 72—*Cutout Cock* 20T-5067

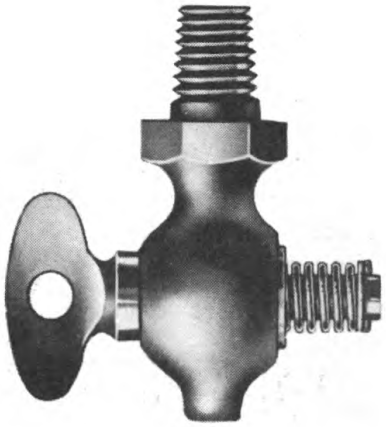

Figure 71—*Drain Cock* 16T-1570

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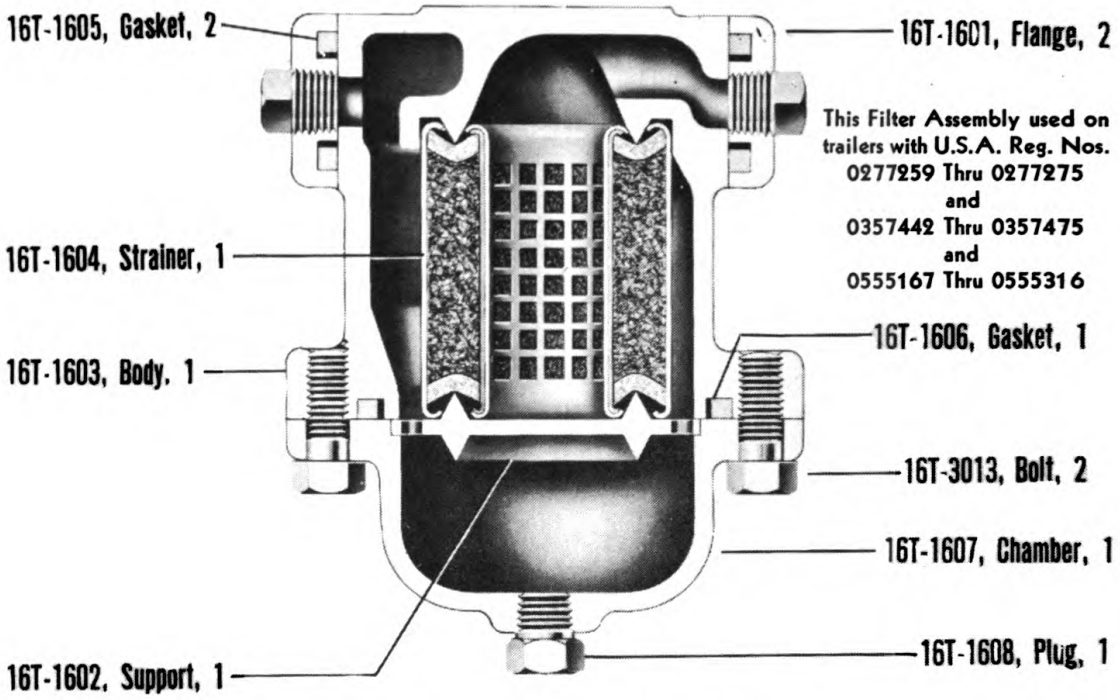

Figure 73—*Filter Assembly Type E* 16T-1600

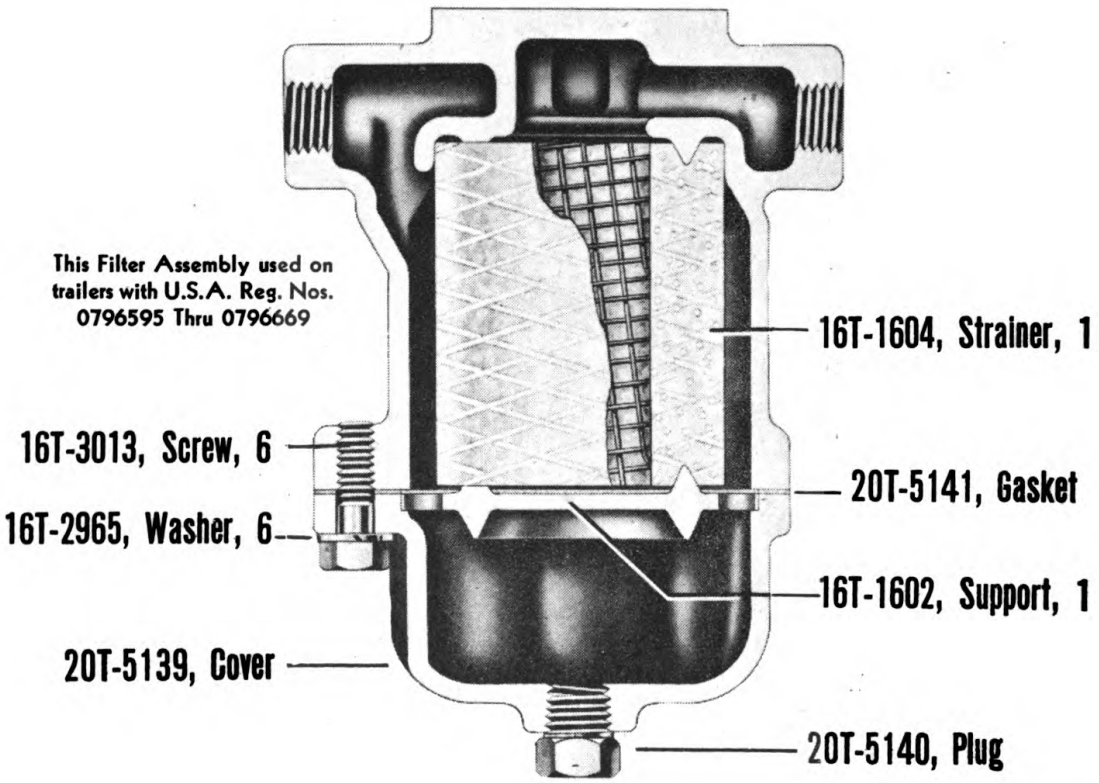

Figure 74—*Filter Assembly Type E* 20T-5138

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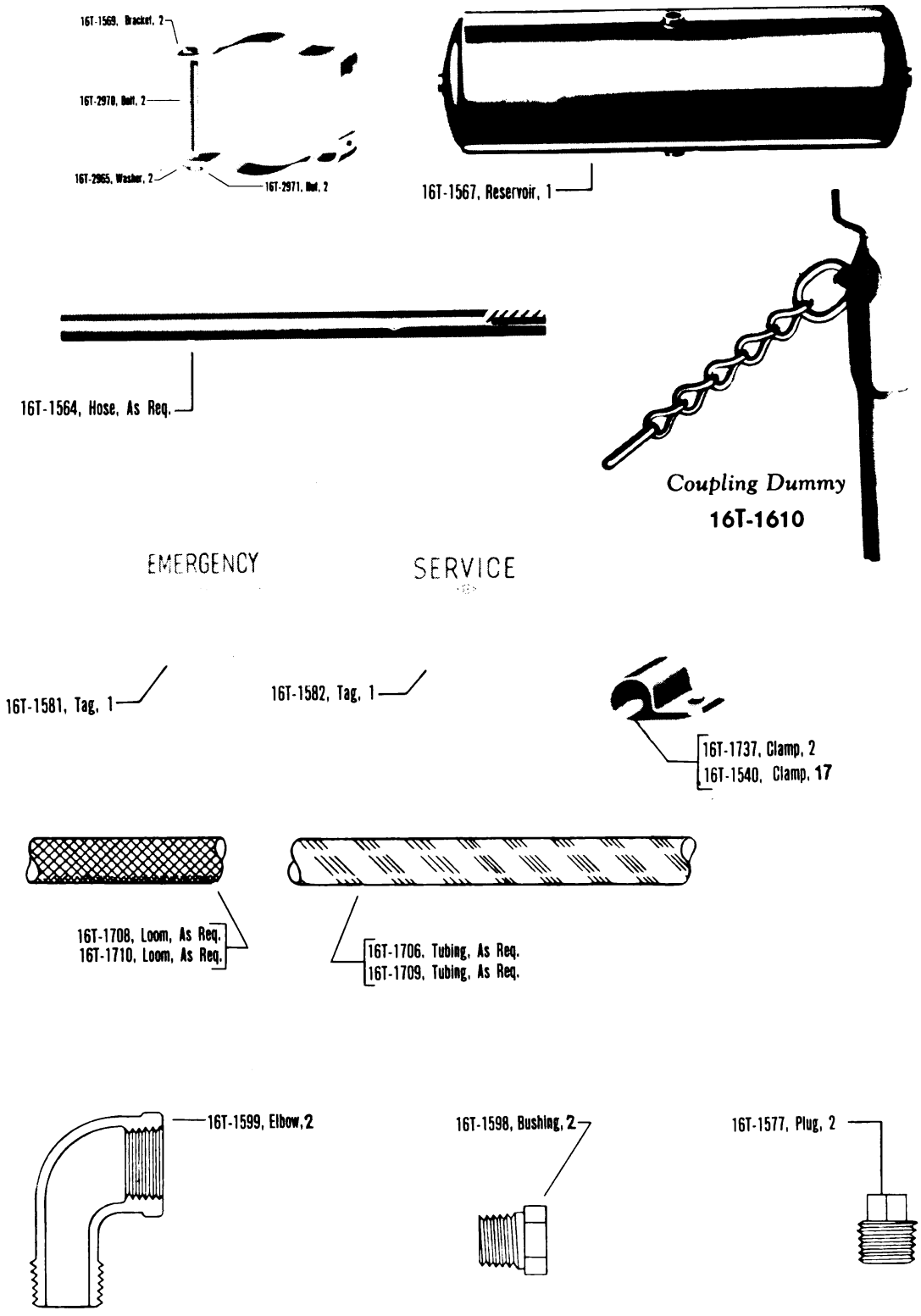

Figure 75—*Miscellaneous Air Brake System Parts*

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Figure 76—*Cable and Plug Assembly* **20T-4610**

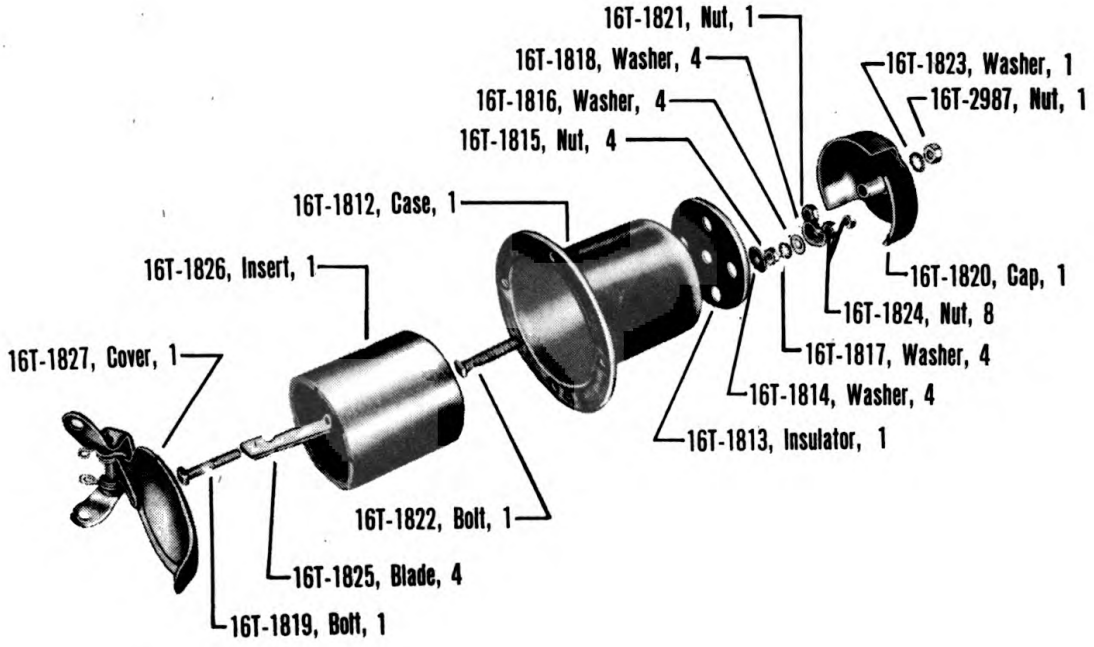

Figure 77—*Coupling Socket Assembly* **16T-1811**

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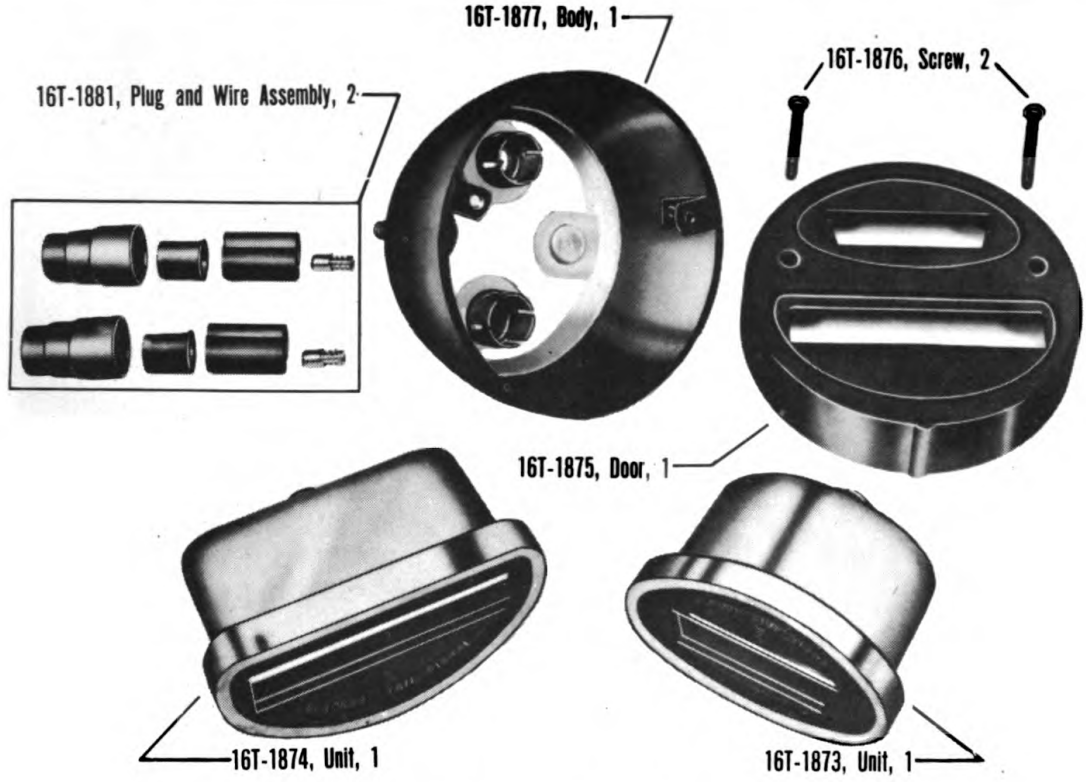

Figure 78—*Blackout Stop and Blackout Tail Lamp Assembly* **16T-1856**

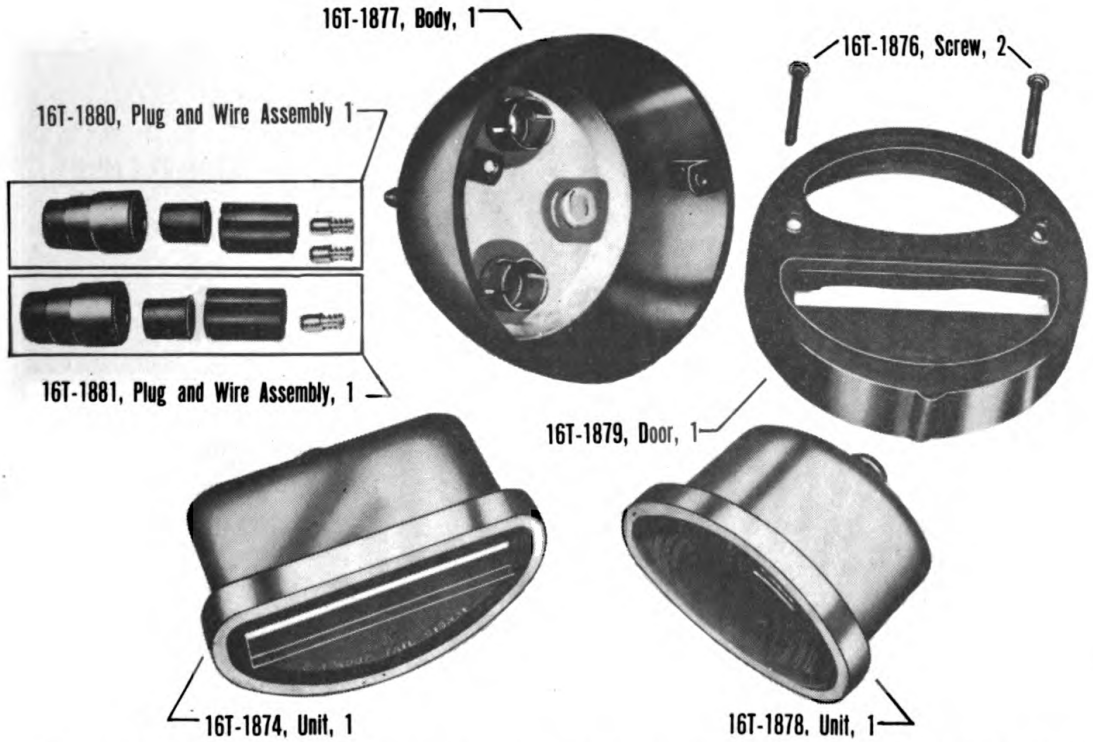

Figure 79—*Combination Service Stop and Tail-Blackout Tail Lamp-Assembly* **16T-1857**

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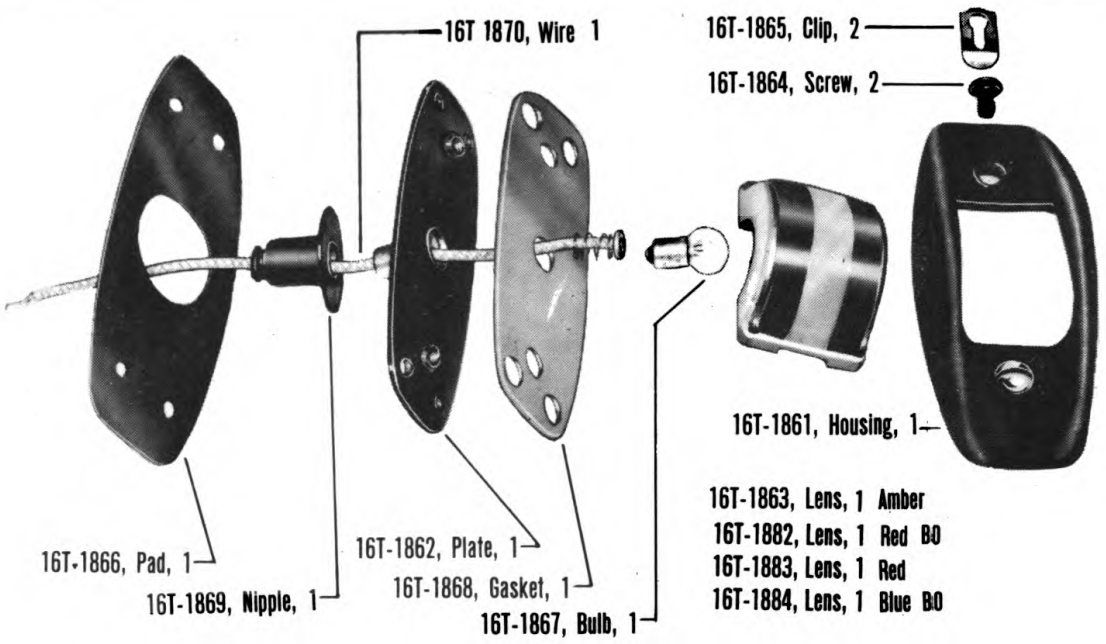

Figure 80—*Clearance and Blackout Lamp Assemblies*

Lamp—Amber Clearance **16T-1855**
Lamp—Red Blackout **16T-1858**
Lamp—Red Clearance **16T-1859**
Lamp—Blue Blackout **16T-1860**

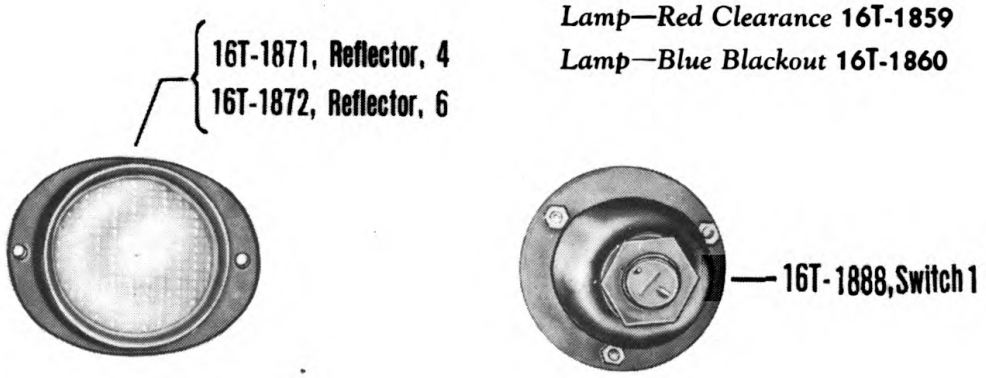

Figure 81—*Reflector* **16T-1871** *and* **16T-1872** *and Blackout Switch* **16T-1888**

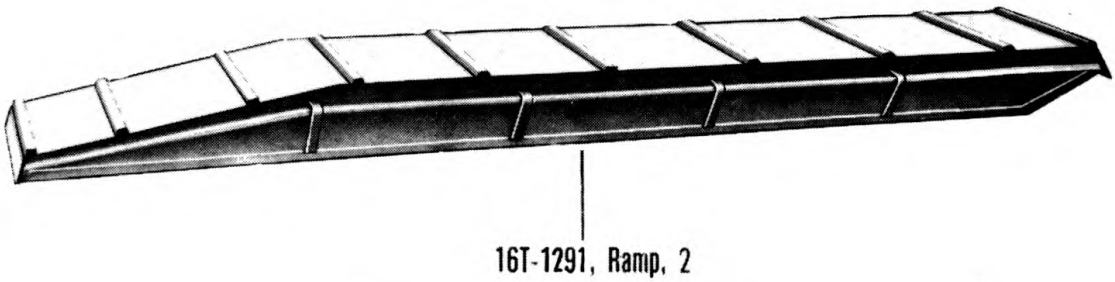

Figure 82—*Loading Ramp* **16T-1291**

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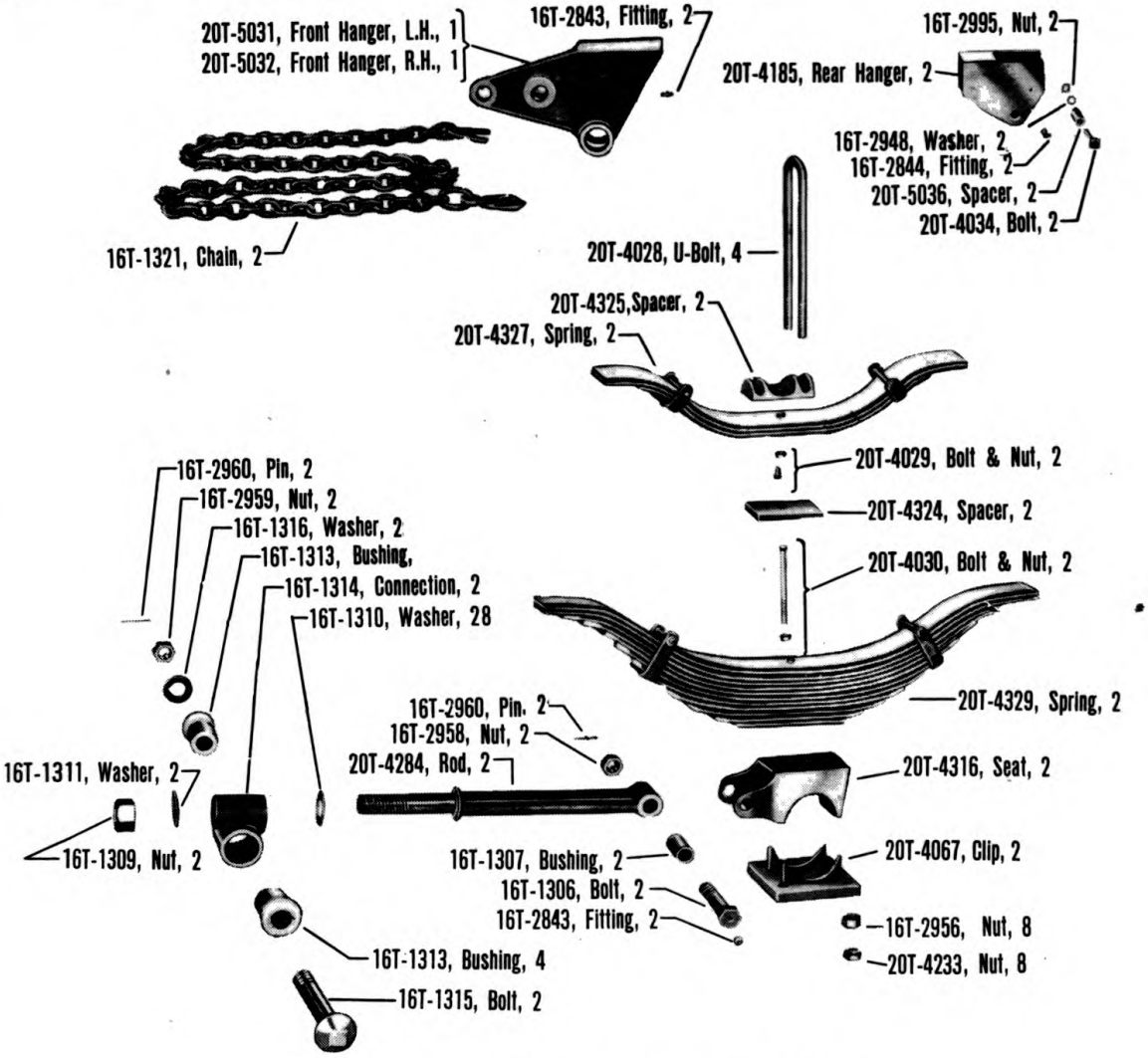

Figure 83—*Dolly Underconstruction Parts*

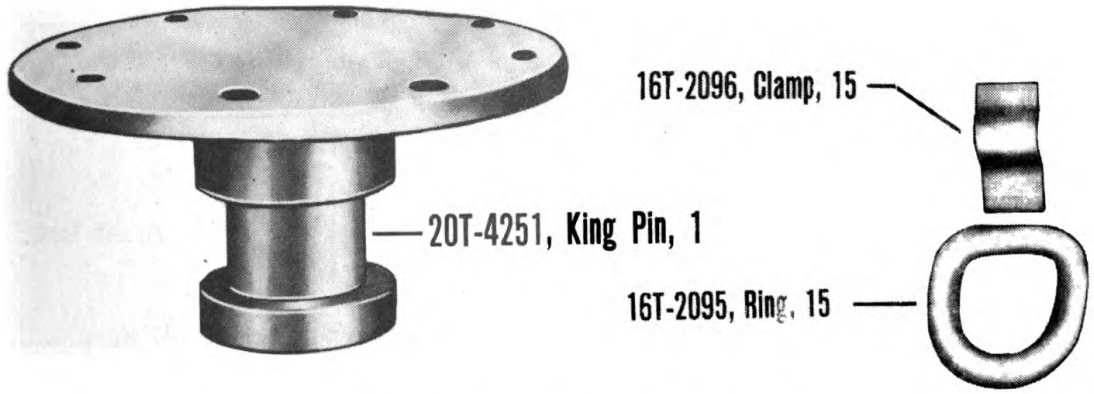

Figure 84—*King Pin, Lashing Ring and Clamp*

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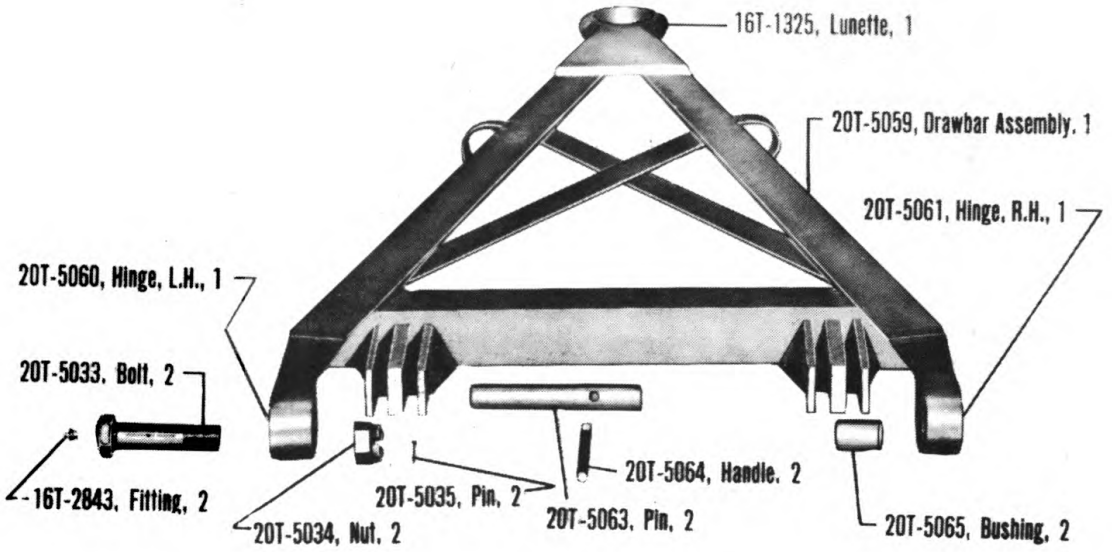

Figure 85—*Draw Bar Parts*

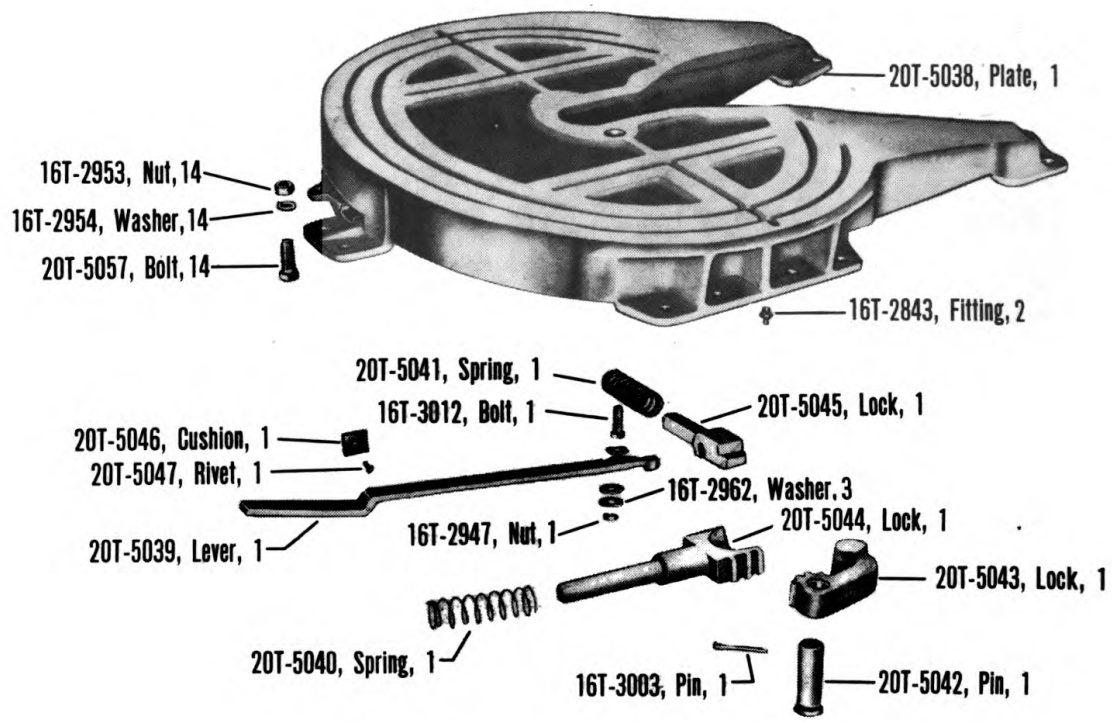

Figure 86—*Dolly Fifth Wheel Parts*

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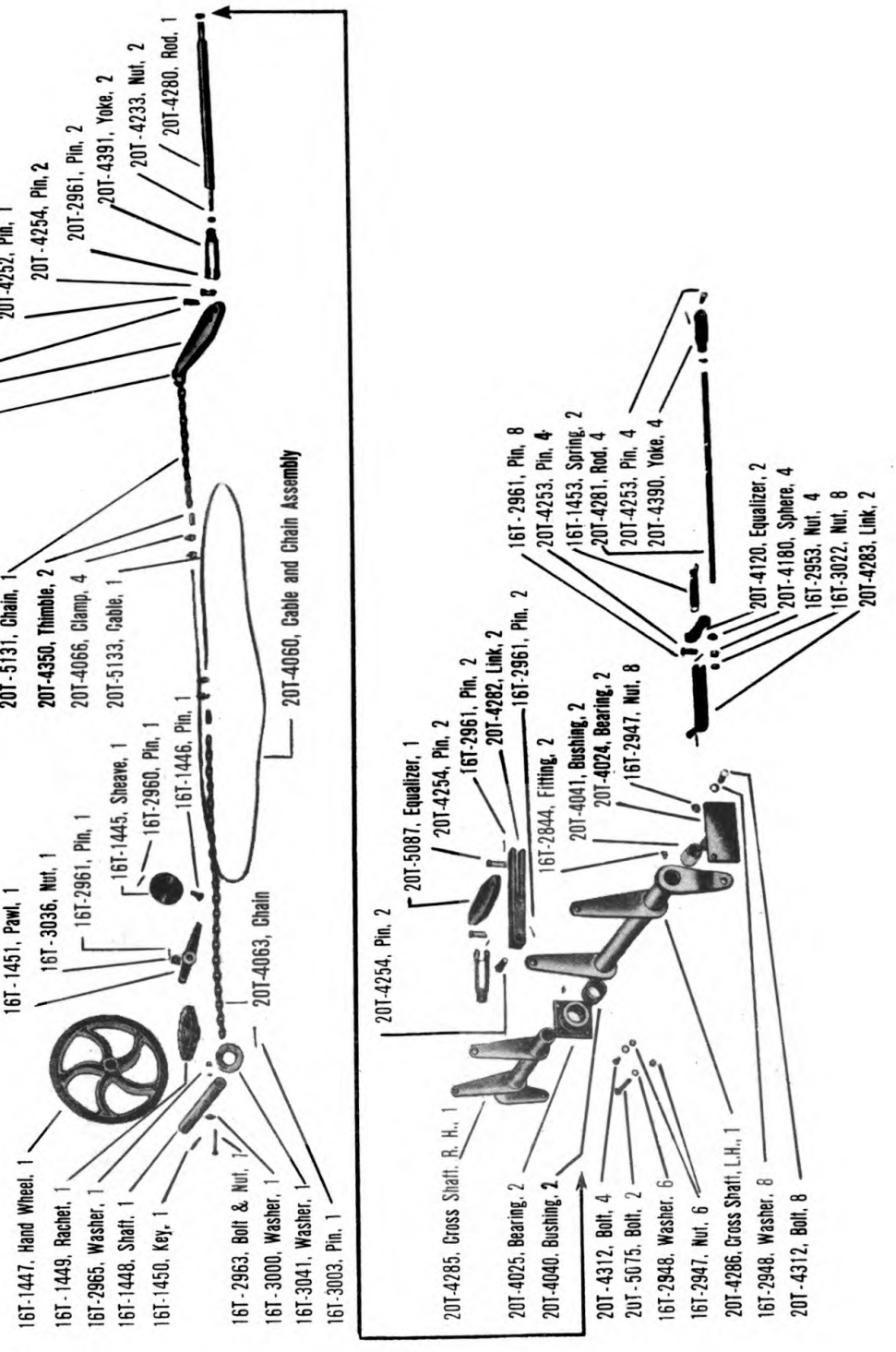

Figure 87—*Parking Brake Control Parts*

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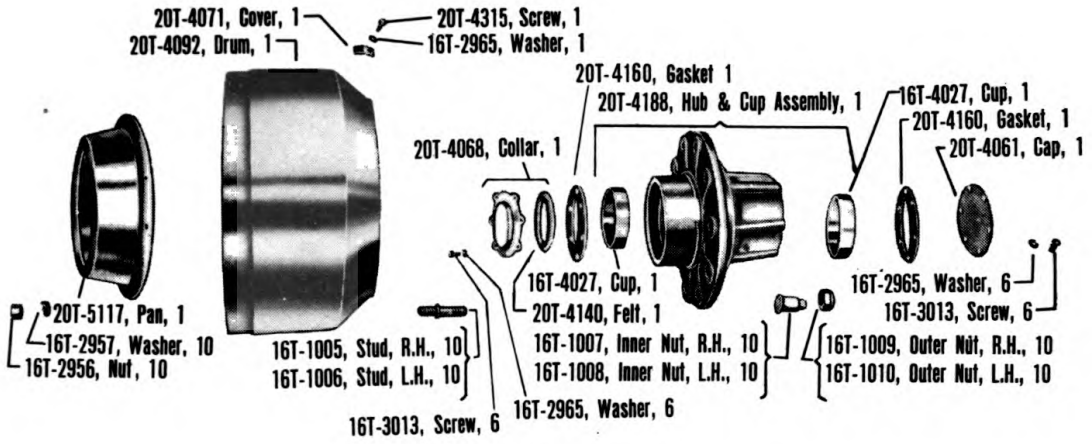

Figure 88—*Front Hub and Drum Assembly*

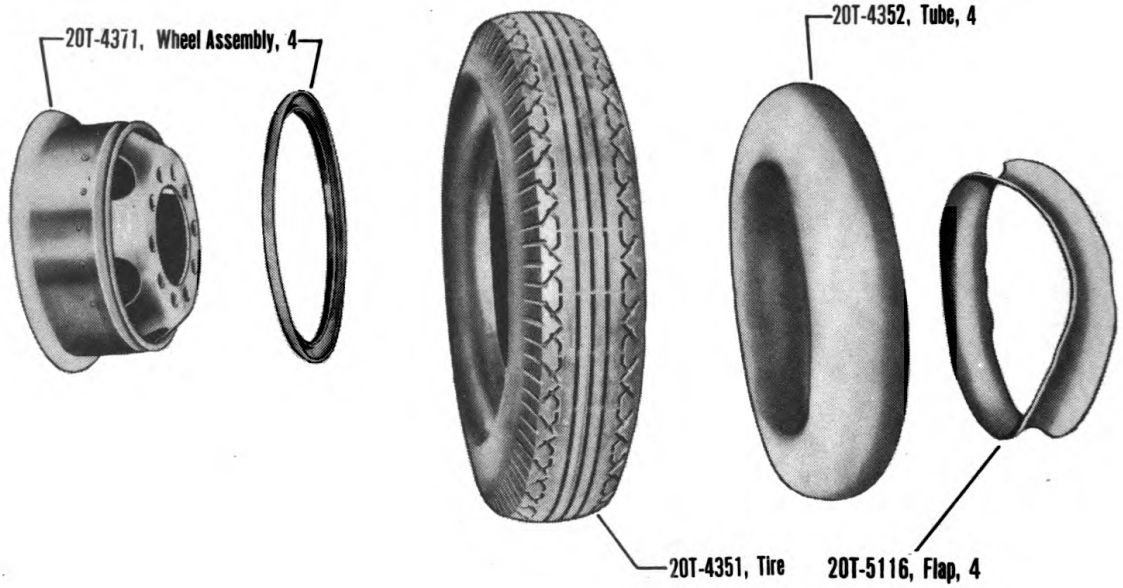

Figure 89—*Front Wheel Tire and Tube*

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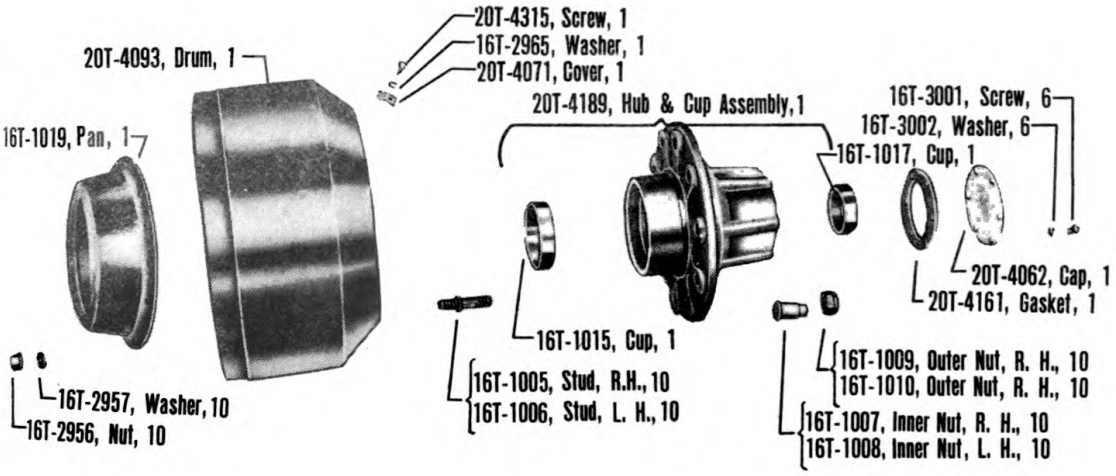

Figure 90—*Rear Hub and Drum Assembly*

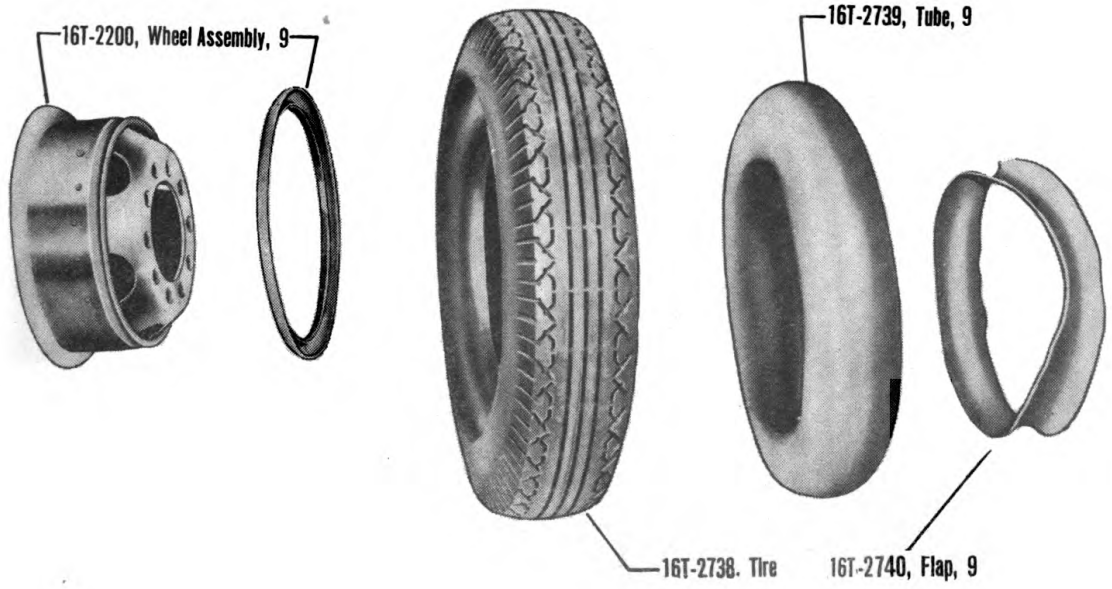

Figure 91—*Rear Wheel Tire and Tube*

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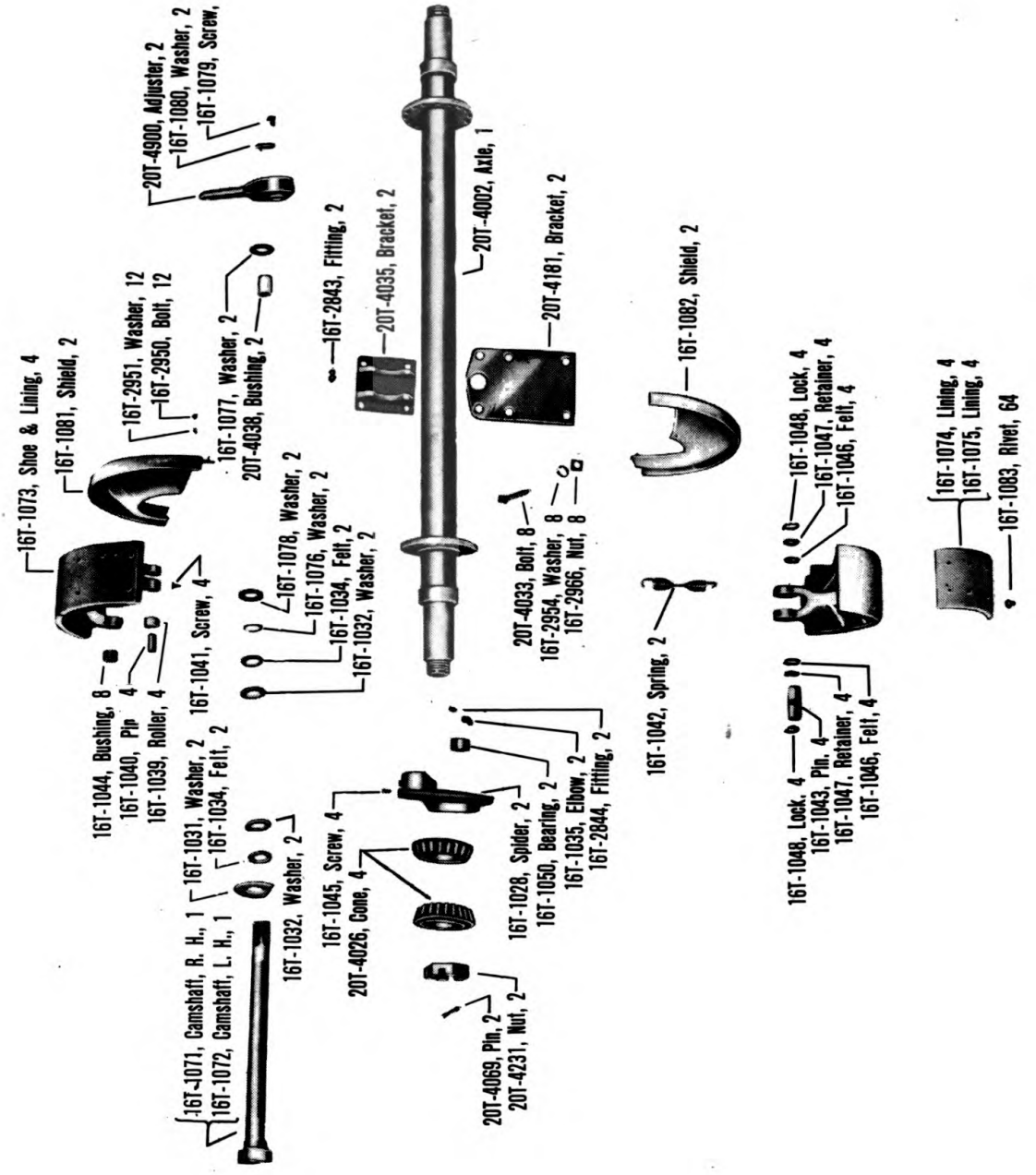

Figure 92—*Front Axle and Brake Parts*

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Figure 93—*Trunnion Rear Axle and Brake Parts*

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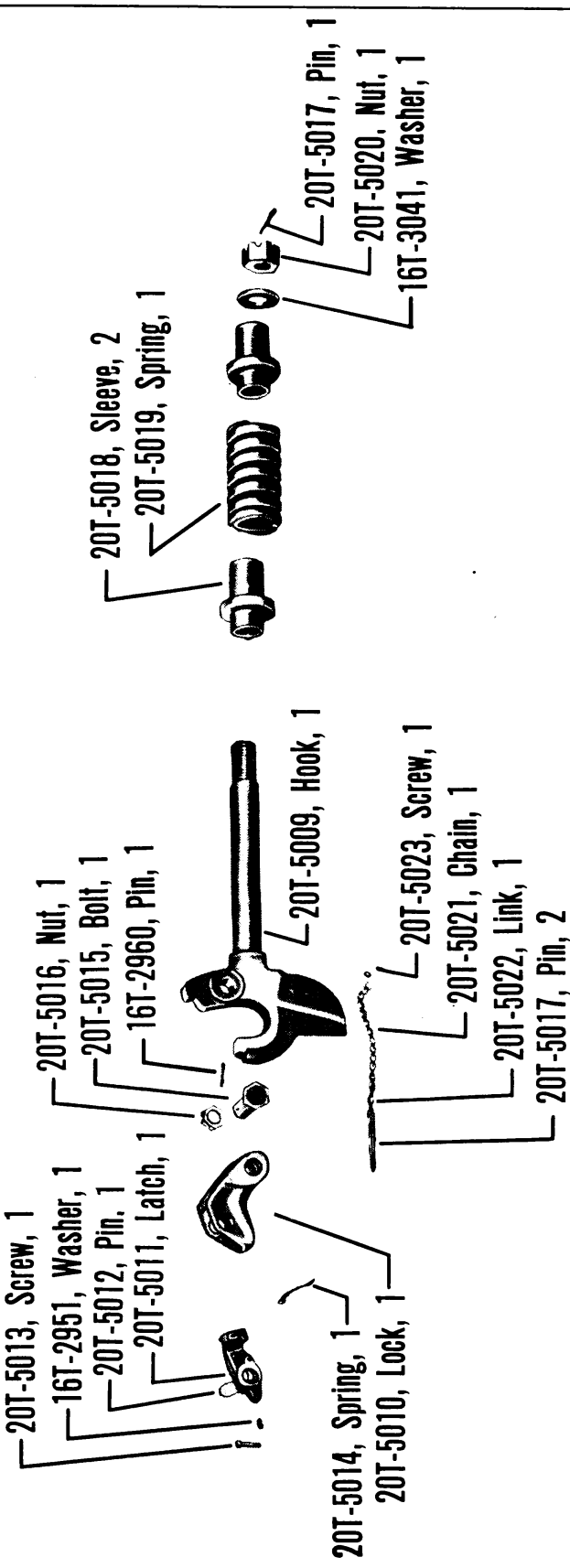

Figure 94—*Pintle Hook Assembly* **20T-5008**

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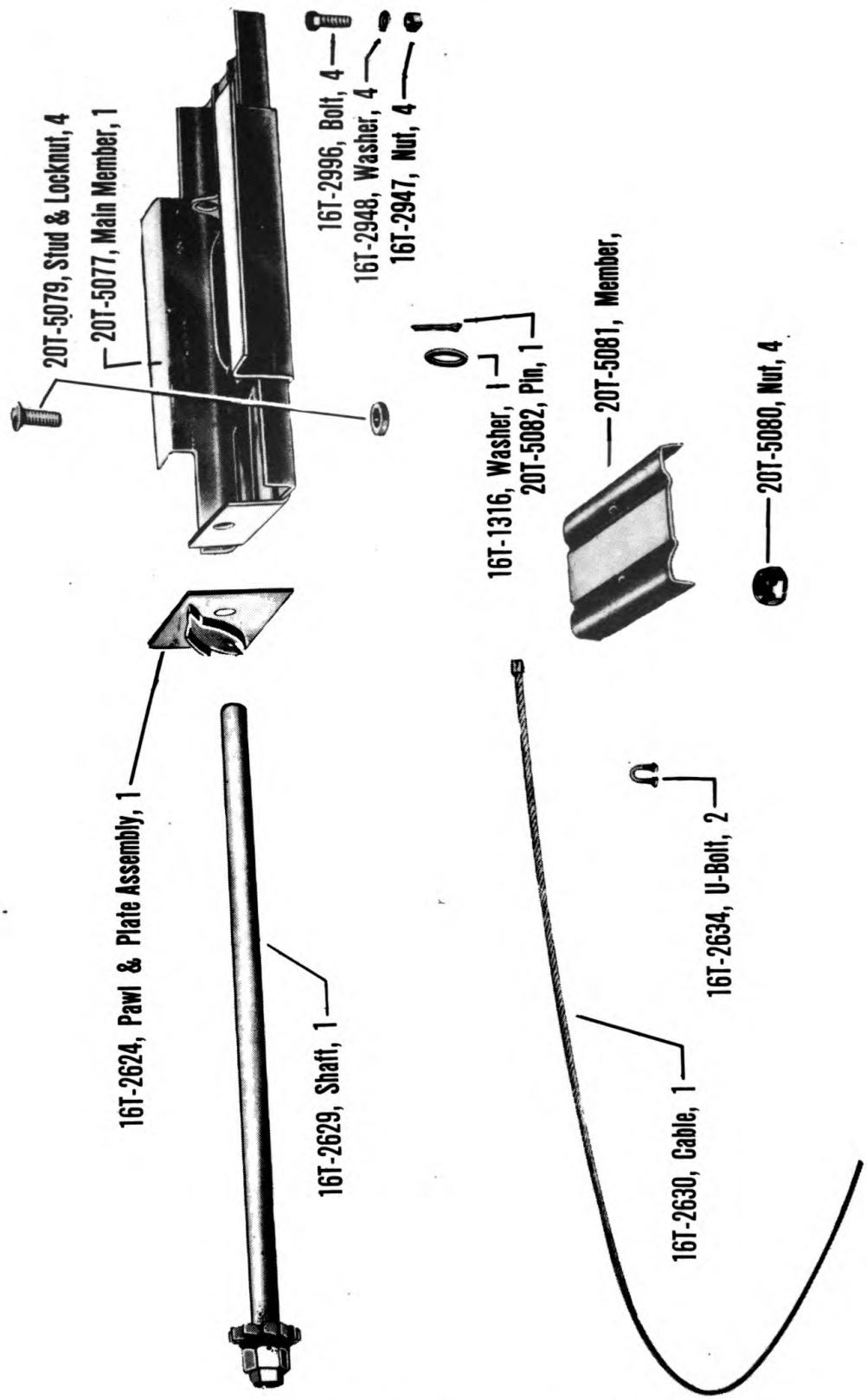

Figure 95—*Tire Carrier Assembly* 20T-5076

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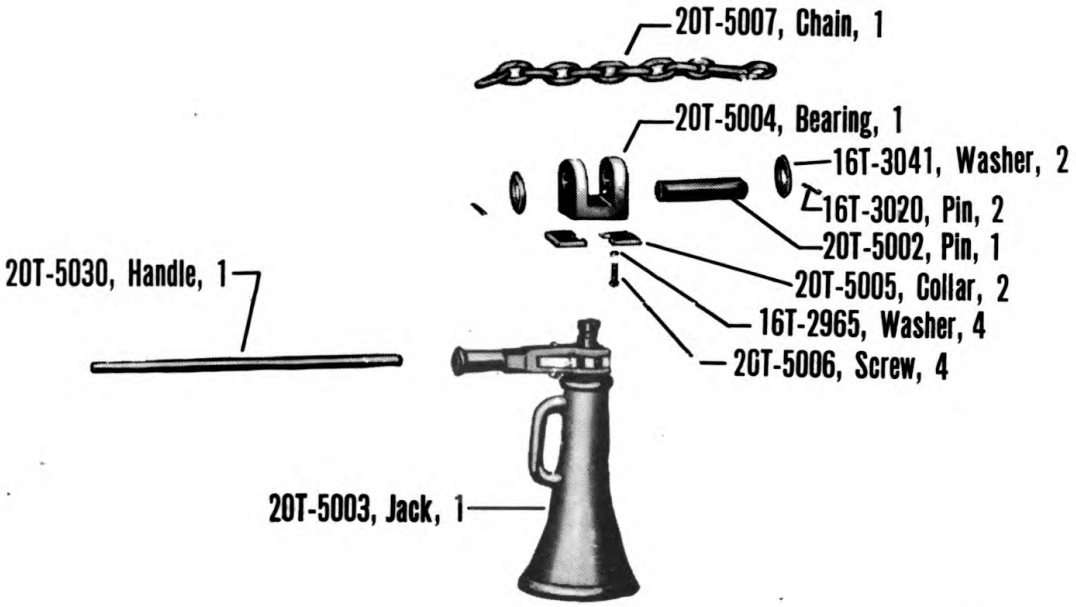

Figure 96—*Screw Jack Assembly*

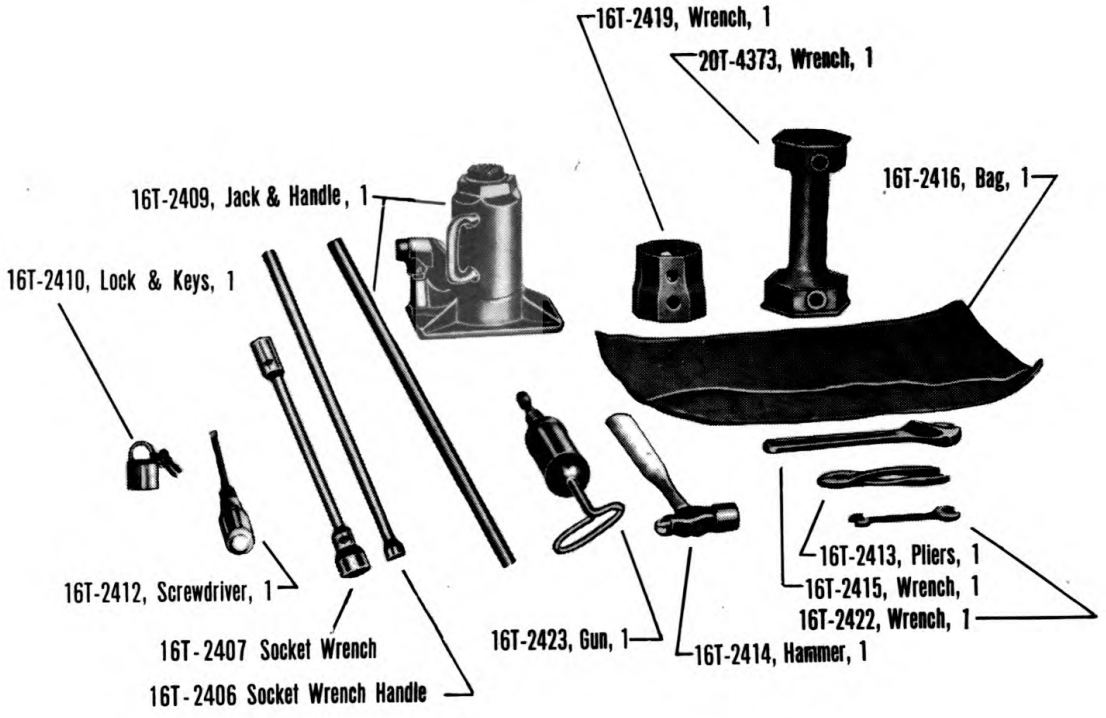

Figure 97—*Tools*

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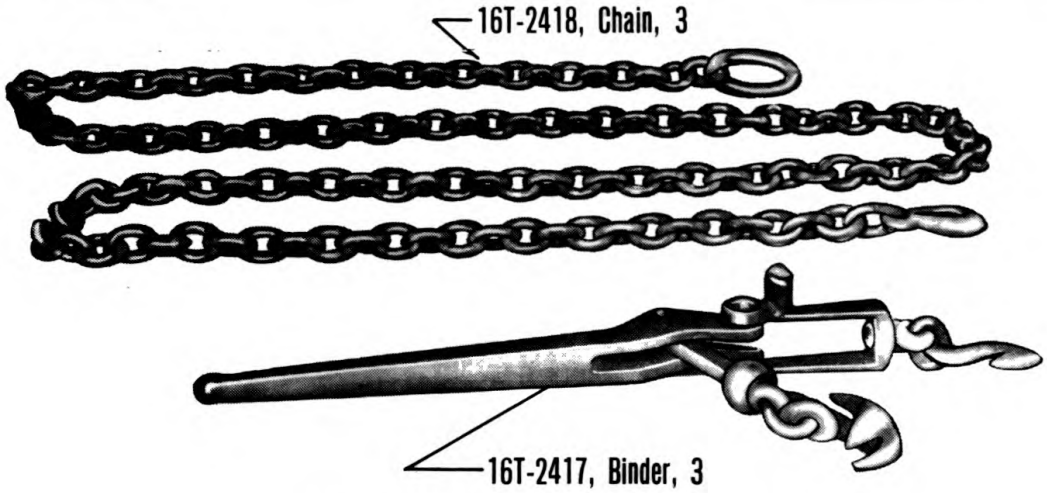

Figure 98 —*Load Binder Chain*

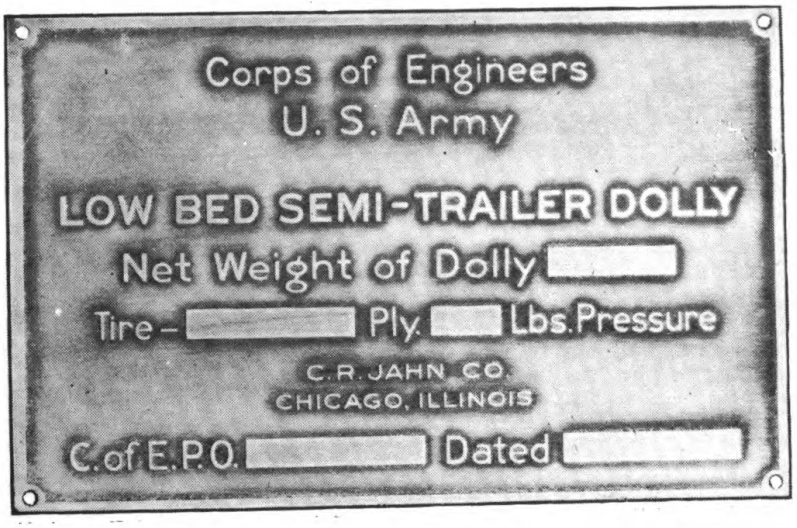

Figure 99—*Front Dolly Name Plate* **20T-5058**

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ASSEMBLY PARTS LIST

Components of assemblies and sub-assemblies are given in this list, which supplements the complete or Numerical Parts List that begins on page 122. A complete description of parts carried in the Assembly Parts List is given in the Numerical Parts List. Figure references given in the Assembly Parts List pertain to the illustrations for the various assemblies.

16T-1028, Spider & Needle Bearing Assembly (See figures 92 & 93)	2
Includes:	
16T-1050, Bearing - Spider needle	1
16T-1049, Shield Assembly - Dust (See figures 92 & 93)	2
Consists of:	
16T-1081, Shield - Upper dust	1
16T-1082, Shield - Lower dust	1
16T-1073, Shoe & Lining Assembly - Front Brake (See figures 92 & 93)	4
Includes:	
16T-1074, Lining - Brake shoe, drilled cam end	1
16T-1075, Lining - Brake shoe, drilled anchor end	1
16T-1083, Rivet - Brake shoe lining	16
16T-1039, Roller - Brake shoe cam	1
16T-1040, Shaft - Brake shoe cam roller	1
16T-1041, Screw - Brake shoe cam roller shaft	1
16T-1044, Bushing - Anchor pin	2
16T-1541, Connector Assembly - Tubing (See figure 63)	1
Consists of:	
16T-1542, Body	1
16T-1543, Sleeve	1
16T-1544, Nut	1
16T-1545, Connector Assembly - Tubing (See figure 64)	1
Consists of:	
16T-1546, Body	1
16T-1547, Sleeve	1
16T-1548, Nut	1
16T-1549, Hose Assembly (See figure 57)	2
Consists of:	
16T-1550, Coupling - Hose	2
16T-1557, Connector - Hose	2
16T-1564, Hose	1
16T-1550, Coupling Assembly - Hose (See figure 62)	6
Consists of:	
16T-1551, Body	1
16T-1552, Plunger	1
16T-1553, Plug - Spring	1
16T-1554, Spring	1
16T-1555, Pin	1
16T-1556, Ring - Packing	1

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16T-1557, Connector Assembly - Hose (See figure 60)	6
Consists of:	
16T-1558, Gasket	1
16T-1559, Guide	1
16T-1560, Sleeve	1
16T-1561, Spring	1
16T-1562, Nut	1
16T-1563, Body	1
16T-1565, Union - Tubing (See figure 67)	2
Consists of:	
16T-1566, Body	1
16T-1547, Sleeve	1
16T-1548, Nut	1
16T-1568, Bracket - Reservoir (See figure 75)	2
Consists of:	
16T-1569, Bracket	2
16T-2970, Bolt - Square hd, 3/8 x 6" USS	1
16T-2971, Nut - Hex, 3/8 USS	1
16T-2965, Washer - Lock, 3/8 SAE	2
16T-1579, Connector Assembly - Hose (See figure 61)	6
Consists of:	
16T-1558, Gasket	1
16T-1559, Guide	1
16T-1560, Sleeve	1
16T-1561, Spring	1
16T-1562, Nut	1
16T-1580, Body	1
16T-1583, Stud - Clamping (See figure 70)	2
Consists of:	
16T-1584, Body	1
16T-1585, Washer	1
16T-2973, Nut	1
16T-1586, Connector Assembly - Tubing (See figure 65)	6
Consists of:	
16T-1587, Body	1
16T-1547, Sleeve	1
16T-1548, Nut	1
16T-1588, Elbow - Tubing (See figure 68)	5
Consists of:	
16T-1589, Body	1
16T-1547, Sleeve	1
16T-1548, Nut	1
16T-1590, Valve Assembly - Quick Release (See figure 69)	1
Consists of:	
16T-1591, Body	1
16T-1592, Cover	1
16T-1593, Dampener	1
16T-1594, Spring	1
16T-1595, Diaphragm	1
16T-1596, Seat - Spring	1
16T-1600, Filter Assembly - Type E (See figure 73)	2
Consists of:	
16T-1601, Flange	2

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16T-1602, Support - Strainer	1
16T-1603, Body	1
16T-1604, Strainer	1
16T-1605, Gasket - Flange	2
16T-1606, Gasket - Body	1
16T-1607, Chamber - Dirt	1
16T-1608, Plug - Pipe	1
16T-3013, Bolt - Hex head	2
16T-1610, Coupling Assembly - Dummy (See figure 75)	2
Consists of:	
16T-1611, Body	1
16T-1612, Chain	1
16T-1649, Valve Assembly - Relay Emergency (See figure 52)	1
Consists of:	
16T-1654, Valve Assembly - Relay	1
Consists of:	
16T-1650, Nut - Cap	1
16T-1641, Spring	1
16T-1652, Valve - Supply	1
16T-1655, Body - Valve, Complete	1
Consists of:	
16T-1653, Seat - Valve	1
16T-1656, Body	1
16T-1657, Bushing - Guide	1
16T-1658, Guide - Ring	1
16T-1659, Gasket - Cover	1
16T-1660, Guide - Diaphragm	1
16T-1661, Diaphragm	1
16T-1662, Seat - Spring	1
16T-1663, Cover - Top	1
16T-1724, Pin - Cotter	1
16T-1664, Screw - Diaphragm	1
16T-1722, Nut - Hex	1
16T-1665, Washer - Diaphragm	1
16T-1666, Spring	1
16T-1667, Gasket	1
16T-1670, Valve Assembly - Emergency	1
Consists of:	
16T-1668, Nut - Cap	1
16T-1669, Stem - Valve	1
16T-1671, Valve - Emergency	1
Consists of:	
16T-1672, Body - Emergency	1
16T-1673, Bushing - Valve	1
16T-1674, Support - Diaphragm	1
16T-1675, Spring - Emergency	1
16T-1676, Gasket - Bottom cover	1
16T-1677, Diaphragm - Emergency	1
16T-1678, Washer	1
16T-1679, Nut - Lock	1
16T-1680, Spring	1
16T-1681, Strainer - Air	1
16T-1682, Cover Assembly	1

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Consists of:	
16T-1683, Cover - Complete	1
Consists of:	
16T-1684, Body - Cover	1
16T-1693, Pin	1
16T-1698, Seat	1
16T-1685, Diaphragm Assembly	1
Consists of:	
16T-1686, Diaphragm	2
16T-1687, Follower - Lower	1
16T-1688, Nut - Lock	1
16T-1694, Follower - Upper	1
16T-1695, Ball & Stem Assembly	1
Consists of:	
16T-1696, Stem	1
16T-1697, Ball	1
16T-1689, Shim	As req.
16T-1690, Spring	1
16T-1691, Cap	1
16T-1692, Ring	1
16T-1699, Seat - Spring	1
16T-1723, Screw - Cap	4
16T-1725, Washer - Lock	4
16T-1700, Valve Assembly - Exhaust Check (See figure 59)	1
Consists of:	
16T-1701, Body	1
16T-1702, Diaphragm	1
16T-1704, Screw - Machine	1
16T-1705, Washer - Diaphragm	1
16T-1703, Washer	1
16T-1726, Tee - Tubing, 1/8" x 3/8" x 1/4" (See figure 66)	1
Consists of:	
16T-1727, Body	1
16T-1547, Sleeve	2
16T-1548, Nut	2
16T-1811, Socket Assembly - Coupling (See figure 77)	1
Consists of:	
16T-1812, Case - Socket	1
16T-1813, Insulator	1
16T-1814, Washer - Socket terminal bolt	4
16T-1815, Nut - Terminal bolt, brass, #10-32 SAE	4
16T-1816, Washer - Plain brass	4
16T-1817, Washer - Shakeproof #10	4
16T-1818, Washer - Terminal cup	4
16T-1819, Bolt - Socket terminal	4
16T-1820, Cap Assembly - Socket	1
16T-1821, Nut - Hex jam, 1/4" SAE	1
16T-1822, Bolt - Cap	1
16T-1823, Washer - Shakeproof 1/4"	1
16T-1824, Nut - Hex #10 SAE	8
16T-1825, Blade - Contact	4
16T-1826, Insert - Socket Bakelite	1
16T-1827, Cover	1

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16T-2987, Nut - 1/4" - 28	1
16T-1855, Lamp Assembly - Amber Clearance (See figure 80)	2
Consists of:	
16T-1866, Pad - Felt	1
16T-1869, Nipple	1
16T-1862, Plate - Back	1
16T-1868, Gasket	1
16T-1867, Bulb	1
16T-1863, Lens - Amber	1
16T-1861, Housing	1
16T-1865, Clip	2
16T-1864, Screw - Body	2
16T-1870, Wire	1
16T-1856, Lamp Assembly - Combination Blackout Stop - Blackout Tail (See figure 78)	1
Consists of:	
16T-1881, Plug & Wire Assembly	1
16T-1877, Body	1
16T-1876, Screw	2
16T-1875, Door	1
16T-1873, Unit - Blackout stop	1
16T-1874, Unit - Blackout tail	1
16T-1857, Lamp Assembly - Combination Service Stop & Tail - Blackout Tail (See figure 79)	1
Consists of:	
16T-1880, Plug & Wire Assembly	1
16T-1877, Body	1
16T-1876, Screw	2
16T-1879, Door	1
16T-1874, Unit - Blackout tail	1
16T-1878, Unit - Blackout stop	1
16T-1858, Lamp Assembly - Red Blackout (See figure 80)	2
Consists of:	
16T-1866, Pad - Felt	1
16T-1869, Nipple	1
16T-1862, Plate - Back	1
16T-1868, Gasket	1
16T-1867, Bulb	1
16T-1882, Lens - Red Filter	1
16T-1861, Housing	1
16T-1865, Clip	2
16T-1864, Screw - Body	2
16T-1870, Wire	1
16T-1859, Lamp Assembly - Red Clearance (See figure 80)	2
Consists of:	
16T-1866, Pad - Felt	1
16T-1869, Nipple	1
16T-1862, Plate - Back	1
16T-1868, Gasket	1
16T-1867, Bulb	1
16T-1883, Lens - Ruby	1
16T-1861, Housing	1
16T-1865, Clip	2

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16T-1864, Screw - Body	2
16T-1870, Wire	1
16T-1860, Lamp Assembly - Blue Blackout (See figure 80)	2
Consists of:	
16T-1866, Pad - Felt	1
16T-1869, Nipple	1
16T-1862, Plate - Back	1
16T-1868, Gasket	1
16T-1867, Bulb	1
16T-1884, Lens - Blue Filter	1
16T-1861, Housing	1
16T-1865, Clip	2
16T-1864, Screw - Body	2
16T-1870, Wire	1
20T-4002, Axle Assembly, Complete Front (See figure 92)	1
Includes:	
20T-4069, Pin, Cotter	2
20T-4231, Nut, Axle	2
20T-4316, Seat, Spring	2
20T-4003, Beam and Bar Assembly Trunnion Axle (See figure 93)	1
Includes:	
20T-4039, Bushing Cam Shaft	2
16T-1055, Washer, Tongue	2
16T-1056, Nut Wheel Bearing Adjusting	2
16T-1057, Nut Axle Jam	2
20T-4025, Bearing Assembly, Cross Shaft, Inner (See figure 87)	2
Includes:	
20T-4040, Bushing, Cross Shaft, Inner Bearing	1
20T-4037, Bracket, Trunnion with Bushing (See figure 93)	4
Includes:	
16T-1158, Bushing, Trunnion with Bushing (See figure 93)	2
20T-4060, Cable & Chain Assembly (See figure 87)	1
Consists of:	
20T-5133, Cable	1
20T-4063, Chain	
20T-5131, Chain	1
20T-4350, Thimble	2
20T-5132, Cold Shut	2
20T-4066, Cable Clamp	4
20T-4068, Dust Collar (Figure 88)	2
Includes:	
20T-4140, Felt, Dust Collar	1
20T-4138, Hub & Cup Assembly, Front (See figure 88)	2
Includes:	
20T-4027, Cup, Bearing	2
20T-4189, Hub & Cup Assembly, Rear (See figure 90)	4
Includes:	
16T-1015, Cup, Inner Bearing	1
16T-1017, Cup, Outer Bearing	1
20T-4284, Rod, Torque with Bushing (See figure 83)	2
Includes:	
16T-1307, Bushing, Torque Rod	1
20T-4285, R. H. Cross Shaft Assembly (See figure 87)	1

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20T-4286, L. H. Cross Shaft Assembly	1
Includes:	
20T-4041, Bushing, Cross Shaft Outer Bearing	1
20T-4610, Cable & Plug Assembly (See figure 76)	1
Consists of:	
20T-4611, Cable	1
16T-1837, Plug -	2
Consists of:	
16T-1848, Plug Accessory	1
Consists of:	
16T-1847, Nut - Hex #6-32	2
16T-1849, Terminal - Wire	4
16T-1850, Insulator - Wire	4
16T-1851, Separator - Wire	1
16T-1852, Clamp - Wire	1
16T-1853, Screw - Wire clamp	1
16T-1854, Washer - #6	1
16T-1838, Terminal Assembly - Plug	1
Consists of:	
16T-1839, Terminal - Plug	1
16T-1840, Clip - Contact	4
16T-1841, Bolt - Contact clip	4
16T-1843, Nut - Contact clip	4
16T-1844, Handle - Plug	1
16T-1845, Screw - Rd. hd. mach. #6-32 x 1-3/4	2
16T-1846, Washer - Lock #6	2
16T-1847, Nut - Hex #6-32	2
20T-4900, Slack Adjuster Assembly, Front Axle (See figure 55)	2
Consists of:	
20T-4921, Body	1
16T-1628, Plug - Pipe	1
16T-1629, Shaft - Worm	1
16T-1630, Lock	1
16T-1631, Spring	1
16T-1632, Plug - Screw	1
16T-1633, Worm	1
16T-1634, Plug - Welsh	1
16T-1635, Cover	2
16T-1636, Rivet	5
16T-1637, Bushing	3
16T-1742, Gear - Worm	1
20T-4901, Slack Adjuster Assembly, Rear Axle (See figure 56)	4
Consists of:	
20T-4922, Body	1
16T-1628, Plug - Pipe	1
16T-1629, Shaft - Worm	1
16T-1630, Lock	1
16T-1631, Spring	1
16T-1632, Plug - Screw	1
16T-1633, Worm	1
16T-1634, Plug - Welsh	1
16T-1635, Cover	2
16T-1636, Rivet	5

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16T-1637, Bushing	3
16T-1742, Gear - Worm	1
20T-4940, Chamber - Type B Brake, Front Axle (See figure 53)	2
Consists of:	
20T-4961, Rod - Push	1
20T-4981, Stud	2
16T-1641, Plate - Pressure	1
16T-1642, Diaphragm	1
16T-1643, Spring - Inner	1
16T-1644, Spring - Outer	1
16T-1645, Plate - Scraper	1
16T-1646, Spring - Scraper	1
16T-1716, Bolt	18
16T-1717, Nut - Knurled	18
16T-1718, Washer	2
16T-1719, Nut - Hex	2
16T-1720, Nut - Hex	1
16T-1721, Pin - Cotter	2
16T-1 647, Plate - Non-pressure	1
16T-1640, Yoke Assembly	1
Includes:	
16T-1648, Pin - Clevis	1
16T-2961, Pin - Cotter	1
20T-4941, Chamber - Type F Brake, Rear Axle (See figure 54)	2
Consists of:	
20T-4980, Rod - Push	1
20T-4980, Spring - Seal	1
16T-1616, Washer - Seal	1
16T-1617, Plate - Pressure	1
16T-1618, Diaphragm	1
16T-1619, Spring - Proportional	1
16T-1620, Washer - Lock	2
16T-1621, Yoke Assembly	1
Includes:	
16T-1625, Pin - Clevis	1
16T-2961, Pin - Cotter	1
16T-1622, Plate - Non-pressure	1
16T-2953, Nut - Jam hex	1
20T-4982, Stud	2
16T-1711, Bolt	19
16T-1712, Washer - Lock	19
16T-1714, Nut - Hex	19
16T-1713, Nut - Mounting Stud Hex	2
20T-5008, Pintle Hook Assembly (See figure 94)	1
Consists of:	
20T-5009, Hook, Forged	1
20T-5010, Lock, Pintle	1
20T-5011, Latch, Pintle	1
20T-5012, Pin 7/8 x 2 1/2	1
20T-5013, Screw, Cap 5/16 -24 x 1¼	1
20T-5014, Spring, Latch	1
20T-5015, Bolt 1" x 3 7/8	1
20T-5016, Nut, Jam 1" SAE	1

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20T-5017, Pin, Cotter 1/4 x 3"	2
20T-5018, Sleeve	2
20T-5019, Spring 2 3/8 I.D. x 7½	1
20T-5020, Nut, Slotted Hex 1½-6	1
20T-5021, Chain, 16 Links	1
20T-5022, Link "S"	1
20T-5023, Screw, Drive #10 x 1/2"	1
20T-5037, Fifth Wheel Assembly (See figure 86)	1
Consists of:	
20T-5038, Plate	1
20T-5039, Lever	1
20T-5040, Spring	1
20T-5041, Spring	1
20T-5042, Hinged Lock Pin	1
20T-5043, Hinged Lock	1
20T-5044, Sliding Lock	1
20T-5045, Plunger Lock	1
20T-5046, Rubber Cushion (Lever)	1
20T-5047, Rivet	1
16T-2843, Zerk	2
16T-3012, Cap Screw	1
16T-3003, Cotter Pin	1
16T-2962, 1/2" Plain Washer	3
16T-3000, 3/8" Plain Washer	1
16T-2947, 1/2" SAE Nut	1
20T-5059, Drawbar Assembly (See figure 85)	1
Consists of:	
20T-5065, Bushing Hinge Pin	2
20T-5063, Drawbar Lock Pin	2
20T-5064, Lock Pin Handle	2
20T-5066, Hose Assembly (See figure 58)	1
Consists of:	
16T-1550, Coupling - Hose	1
16T-1579, Connector - Hose	1
16T-1557, Connector - Hose	1
16T-1564, Hose	1
20T-5074, Hand Wheel and Shaft Assembly (See figure 87)	1
Consists of:	
16T-1447, Hand Wheel	1
16T-1448, Shaft	1
16T-1449, Ratchet Wheel	1
16T-1450, Key	1
20T-5076, Carrier Assembly - Tire (See figure 95)	1
Consists of:	
20T-5077, Frame, Main Member	1
Includes:	
20T-5079, Bolt, Securing with Locknuts	2
16T-2624, Pawl and Plate	1
16T-2629, Shaft with Ratchet	1
16T-2630, Cable 7'0"	1
20T-5080, Nut Safety	2
20T-5081, Pick up	1
16T-2634, "U" Bolt with Nuts	2

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16T-1316, Washer, 1" Plain	1
20T-5082, Pin, Cotter	1
20T-5138, Filter Assembly - Type "E" (See figure 74)	2
Consists of:	
16T-1602, Support, Strainer	1
16T-1604, Strainer	1
20T-5139, Cover	2
20T-5140, Plug	2
20T-5141, Cover, Gasket	2
16T-3013, Screw	2
16T-2965, Washer	2

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NUMERICAL PARTS LIST

Manufacturers' Identification Symbols

BBB Bunting Brass & Bronze, Toledo, Ohio

BX Bendix Products Division, South Bend, Ind.

BWE Bendix-Westinghouse Automotive Air Brake Co., Elyria, Ohio

BW Budd Wheel Company, Detroit, Mich.

CHC Cleveland Hardware & Forging Co., Cleveland, Ohio

JH C. R. Jahn Co., Chicago, Ill.

DM H. A. Douglas Mfg. Co., Bronson, Mich.

HW Hein Werner Co., Waukesha, Wis.

HER Herbrand Co., Fremont, Ohio

HLH Holland Hitch Co., Holland, Mich.

IIB Illinois Iron & Bolt Co., Carpentersville, Ill.

KD K D Lamp Co., Cincinnati, Ohio

NAS L. B. Nash Bros., Chicago, Ill.

MKP McKissick Prod., Tulsa, Okla.

SAC Shuler Axle Co., Louisville, Ky.

TD Timken-Detroit Axle Co., Detroit, Mich.

TIM Timken Roller Bearing Co., Canton, Ohio

WEB Warner Electric Brake Manufacturing Co., Beloit, Wis.

NOTE: Give trailer serial and model numbers when ordering parts. All prices are F. O. B. Chicago before processing and packing, and are subject to change without notice. Prices of items marked with an asterisk (*) may be had on application. Weights are given in pounds. Items marked with a double asterisk (**) are standard hardware.

Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
16T-1005	Stud - Hub & Drum R.H. (Budd)	BW	13988	30	106, 107	.50#	.18
16T-1006	Stud - Hub & Drum L.H. (Budd)	"	13989	30	106, 107	.50#	.18
16T-1007	Double Cap Nut - Inner - R.H. (Budd)	"	10708	30	106, 107	.333#	.28
16T-1008	Double Cap Nut - Inner - L.H. (Budd)	"	10709	30	106, 107	.333#	.28

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
16T-1009	Double Cap Nut - Outer - R. H. (Budd)	BW	37891	30	106-107	.20	.16
16T-1010	Double Cap Nut - Outer - L. H. (Budd)	"	37892	30	106-107	.20	.16
16T-1014	Cone - Inner	TIM	T-580	4	109	3.00	5.61
16T-1015	Cup - Bearing - Inner	TIM	T-572	4	107	2.25	3.39
16T-1016	Cone - Outer	TIM	T-560	4	109	2.50	4.26
16T-1017	Cup - Bearing - Outer	TIM	T-553-X	4	107	1.70	3.18
16T-1019	Pan -Front Splash	SAC	UB-1120	2	107	1.625	2.00
16T-1028	Spider & Needle Bearing Assembly (See page 114 for details of assembly)	TD	T-A-3211-A-833	6	108-109	11.3	17.26
16T-1031	Cam Shaft Washer	TD	T-1229-E-837	6	108-109	.25	.13
16T-1032	Cam Shaft Felt Retainer	TD	T-1229-J-868	12	108-109	.018	.05
16T-1033	Cam Shaft Washer	TD	T-1229-R-122	A/R	108-109	.03	.06
16T-1034	Cam Shaft Felt	TD	T-5X-433	12	108-109	.001	.09
16T-1035	Elbow	TD	T-X-740	6	108-109	.062	.15
16T-1039	Roller - Brake Shoe	TD	T-1199-A-625	12	108-109	.20	.88
16T-1040	Pin - Brake Shoe	TD	T-1246-S-227	12	108-109	.25	.50
16T-1041	Set Screw - Shoe Pin	TD	T-1199-B-626	12	108-109	.003	.15
16T-1042	Shoe Spring	TD	T-2258-P-354	6	108-109	.50	.31
16T-1043	Anchor Pin	TD	T-1259-L-90	12	108-109	1.30	1.08
16T-1044	Bushing - Brake Shoe	TD	T-1225-F-266	24	108-109	.05	.16
16T-1045	Anchor Pin Lock Screw	TD	T-2X-26	12	108-109	.008	.09
16T-1046	Anchor Pin Felt	TD	T-5X-180	24	108-109	.00068	.06
16T-1047	Anchor Pin Felt Retainer	TD	T-1205-K-193	24	108-109	.01	.07
16T-1048	Anchor Pin Felt Retainer Spring	TD	T-1218-M-13	24	108-109	.009	.07
16T-1049	Shield - Dust (See page 114 for details of assembly)	SF	UB-1025	6	108-109	6.25	5.08
16T-1050	Bearing - Spider needle	TD	T-1228-A-53	6	108-109	.25	.70

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
16T-1055	Washer Lug	TD	T-3840	4	109	.33	.34
16T-1056	Nut - Bearing Adj.	TD	TA-1227-M-169	4	109	0.63	1.38
16T-1057	Jam Nut - Bearing Adj.	TD	T-T-3564	4	109	.33	.82
16T-1067	Felt - Wheel Bearing Oil Seal	TD	T-5X-265	4	109	.0665	.54
16T-1068	Retainer - Outer - Oil Seal	TD	T-1205-L-272	4	109	.25	.15
16T-1069	Retainer - Inner-Oil Seal	TD	T-1205-K-271	4	109	.50	.22
16T-1070	Washer - Oil Seal Felt	TD	T-1229-K-713	4	109	.25	.12
16T-1071	Cam Shaft Assembly R. H. Front	TD	T-2210-U-1451	1	108	13.60	11.96
16T-1072	Cam Shaft Assembly L. H. Front	TD	T-2210-T-1450	1	108	13.60	11.96
16T-1073	Shoe and Lining Assembly (See page 114 for details of assembly)	TD	TA-3222-H-450	12	108-109	27.00	24.50
16T-1074	Lining Cam End	TD	T-2240-Z-910	12	108-109	2.60	4.56
16T-1075	Lining Anchor End	TD	T-2240-A-911	12	108-109	2.60	3.92
16T-1076	Cam Shaft Washer	TD	T-1229-M-559	6	108-109	.10	.08
16T-1077	Cam Shaft Washer	TD	T-1229-Q-771	6	108-109	.026	.06
16T-1078	Cam Shaft Lockwasher	TD	T-1229-H-866	6	108-109	.014	.06
16T-1079	Screw Retainer Washer - Front	TD	T-10X-39	2	108	.02	.03
16T-1080	Retainer Washer - Slack Adj. - Front	TD	T-A-1229-J-166	2	108	.125	.26
16T-1081	Dust Shield Assembly R. H.	TD	T-A1-3236-K-635	6	108-109	4.70	2.54
16T-1082	Dust Shield Assembly L. H.	TD	T-A1-3236-L-636	6	108-109	4.70	2.54
16T-1083	Rivets - Lining	TD	T-17X-177	192	108-109	.0071	.10
16T-1158	Bushing - Trunnion Bracket	SAC	STA-1005	8	108	.50	1.00
16T-1291	Ramp	JH	3MT-1446	2	102	537.	56.00
16T-1306	Bolt - Rear Rad. Rod	JH	1MT-1016-6	2	103	.875	3.00
16T-1307	Bushing - Rad. Rod - Bunting	BBB	EF-350	2	103	41.	.50
16T-1309	Radius Rod Nut 1 1/4 Hex SAE	JH	J-2020	2	103	0.50	.30
16T-1310	Radius Rod Spacer Washer 1-1/8	JH	J-3318	28	103	.05	.05

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
16T-1311	Radius Rod Tongue Washer	JH	1MT-1483	2	103	.091	.20
16T-1313	Radius Rod Rubber Bushing	JH	1MT-1442	4	103	.312	.30
16T-1314	Convection, Torgue Rod	JH	2MT-1314	2	103	3.375	3.20
16T-1315	Bolt - Front Radius Rod	JH	1MT-1316-1	2	103	1.875	.80
16T-1316	Washer - Radius Rod Bolt 1"	JH	J-3316	2	103	.20	.04
16T-1321	Safety Chain 2/Grab Hook & Open Link	JH	1MT-1497-1	2	103	26.	6.00
16T-1325	Lunette	JH	3MT-1430	1	104	20.	8.36
16T-1445	Sheave Assembly	JH	1MT-1518	1	105	3.	3.29
16T-1446	Pin Sheave	JH	1MT-1526-1	1	105	.625	.49
16T-1447	Hand Wheel	JH	3MT-1504-2	1	105	7.50	3.10
16T-1448	Shaft	JH	1MT-1514	1	105	9.50	3.50
16T-1449	Ratchet Wheel	JH	2MT-1508	1	105	3.50	1.80
16T-1450	Key	JH	2MT-1515-1	1	105	.062	.29
16T-1451	Pawl	JH	2MT-1509	1	105	.83	.84
16T-1453	Springs	JH	2MT-1507	6	105	.562	.38
16T-1540	Clamp, Tubing	BWE	202639	17	99	.084	.02
16T-1541	Connector, Tubing (See page 114 for details of assembly)	BWE	217525	2	95	.167	.40
16T-1542	Body	BWE	211982	2	95	.0715	.20
16T-1543	Sleeve	BWE	203754	2	95	.0061	.08
16T-1544	Nut	BWE	203755	2	95	.125	.14
16T-1545	Connector, Tubing (See page 114 for details of assembly)	BWE	205824	1	95	.1111	.26
16T-1546	Body	BWE	202651	1	95	.0625	.12
16T-1547	Sleeve	BWE	200361	18	95-96	.0061	.02
16T-1548	Nut	BWE	200360	18	95-96	.031	.10
16T-1549	Hose, Assembly - Truck to Trailer (See page 114 for	BWE	215604	2	93	5.25	10.58

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
	details of assembly)						
16T-1550	Coupling, Hose (See page 114 for details of assembly)	BWE	220165	5	93-94	1.10	2.80
16T-1551	Body	BWE	212953	8	94	1.05	1.35
16T-1552	Plunger	BWE	212108	8	94	.007	.04
16T-1553	Plug, Spring	BWE	212107	8	94	.031	.10
16T-1554	Spring	BWE	212109	8	94	.005	.04
16T-1555	Pin	BWE	211155	8	94	.0062	.04
16T-1556	Ring, Packing	BWE	213630	8	94	.004	.06
16T-1557	Connector Hose (See page 115 for details of assembly)	BWE	215535	5	93-94	.375	.90
16T-1558	Gasket	BWE	203608	10	94	.0012	.08
16T-1559	Guide	BWE	203609	10	94	.002	.12
16T-1560	Sleeve	BWE	203610	10	94	.02	.20
16T-1561	Spring	BWE	201045	10	94	.125	.20
16T-1562	Nut	BWE	203613	10	94	.125	.48
16T-1563	Body	BWE	215992	5	94	.156	.64
16T-1564	Hose, 3/4 OD x 3/8 ID	BWE	BW-101-M	A/R	93-99	.052 ft.	.30 ft.
16T-1565	Union Tubing (See page 115 for details of assembly)	BWE	205134	2	96	.111	.32
16T-1566	Body	BWE	200365	2	96	.05	.14
16T-1567	Reservoir	BWE	215689	1	99	24.20	9.60
16T-1568	Bracket, Assembly, Reservoir (See page 115 for details of assembly)	BWE	205267	2	99	1.56	.80
16T-1569	Bracket for 7" Dia. Reservoir	BWE	200974	4	99	0.75	.48
16T-1570	Cock, Drain	BWE	215310	1	97	0.40	.80
16T-1577	Plug, Pipe 3/8"	BWE	203098	2	99	.0625	.08

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
16T-1579	Connector, Hose (See page 115 for details of assembly)	BWE	215536	5	93-94	.333	.90
16T-1580	Body (Body includes Guide)	BWE	215993	5	94	.10	.64
16T-1581	Tag, Emergency	BWE	201499	1	99	.036	.10
16T-1582	Tag, Service	BWE	201500	1	99	.036	.10
16T-1583	Stud, Clamping (See page 115 for details of assembly)	BWE	205730	3	97	0.60	1.40
16T-1584	Body	BWE	201945	3	97	0.50	1.34
16T-1585	Washer	BWE	201946	3	97	.02	.06
16T-1586	Connector Tubing (See page 115 for details of assembly)	BWE	205053	6	95	.10	.20
16T-1587	Body	BWE	200359	6	95	.05	.12
16T-1588	Elbow, Tubing	BWE	205102	8	96	.111	.28
16T-1589	Body	BWE	200437	8	96	.059	.18
16T-1590	Valve, Quick Release (See page 115 for details of assembly)	BWE	205000	1	97	1.00	3.50
16T-1591	Body	BWE	204847	1	97	0.75	1.94
16T-1592	Cover	BWE	211028	1	97	.333	1.48
16T-1593	Dampner	BWE	203328	1	97	.166	.07
16T-1594	Spring	BWE	202588	1	97	.033	.42
16T-1595	Diaphragm	BWE	211379	1	97	.333	.62
16T-1596	Seat Spring	BWE	202587	1	97	.02	.14
16T-1598	Reducing Bushing 3/8-1/4	BWE	203497	2	99	.187	.06
16T-1599	Street Elbow 3/8	BWE	214253	2	99	.20	.60
16T-1600	Filter, Type E (See page 115 for details of assembly)	BWE	221022	2	98	6.40	14.20

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
16T-1601	Flange, Pipe	BWE	214134	4	98	.90	.90
16T-1602	Support Strainer	BWE	214171	2	98	.20	1.50
16T-1603	Body	BWE	214169	2	98	4.00	9.40
16T-1604	Strainer	BWE	221053	2	98	1.16	2.38
16T-1605	Gasket, Flange	BWE	214174	4	98	.004	.34
16T-1606	Gasket, Body	BWE	214173	2	98	.008	.26
16T-1607	Chamber, Dirt	BWE	214172	2	98	1.50	3.42
16T-1608	Plug, Pipe	BWE	213530	2	98	.04	.24
16T-1610	Coupling, Dummy (See page 116 for details of assembly)	BWE	220636	3	99	0.50	.52
16T-1615	Spring, Seal	BWE	214845	2	91	.0625	.24
16T-1616	Washer, Seal	BWE	214851	2	91	.04	.10
16T-1617	Plate, Pressure	BWE	211853	2	91	4.90	5.42
16T-1618	Diaphragm	BWE	200630	2	91	1.25	3.90
16T-1619	Spring, Proportional	BWE	213088	2	91	0.90	1.52
16T-1620	Lockwasher 5/8" Shakeproof	BWE	201777	4	91	.005	.10
16T-1621	Yoke Assembly, comp. w/Pin & Cotterp.	BWE	216797	2	91	0.375	1.28
16T-1622	Plate, Non-Pressure	BWE	213081	2	91	11.00	11.40
16T-1625	Pin, Clevis 5/8" dia. x 2 1/8"	BWE	210797	2	91	.20	.20
16T-1628	Plug, Pipe 1/8"	BWE	203680	6	92	.011	.04
16T-1629	Shaft, Worm	BWE	212630	6	92	.20	.30
16T-1630	Lock	BWE	201327	6	92	.005	.04
16T-1631	Spring	BWE	212633	6	92	.033	.04
16T-1632	Plug, Screw	BWE	201326	6	92	.005	.14
16T-1633	Worm	BWE	212628	6	92	.125	1.40
16T-1634	Plug, Welsh 5/8"	BWE	212357	6	92	.005	.02
16T-1635	Cover	BWE	212631	12	92	.333	.24
16T-1636	Rivet	BWE	212632	30	92	.01	.02

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
16T-1637	Bushing 1/2 ID x 5/8OD x 1/2lg.	BWE	201225	6	92	.02	.18
16T-1640	Yoke, complete with Pin & Cotter	BWE	205948	2	91	.375	.96
16T-1641	Plate, Pressure	BWE	202880	2	91	1.90	1.66
16T-1642	Diaphragm	BWE	200001	2	91	.75	2.38
16T-1643	Spring, Inner	BWE	212294	2	91	.0715	.38
16T-1644	Spring, Outer	BWE	212295	2	91	.10	.48
16T-1645	Washer, Seal	BWE	214848	2	91	.0312	.10
16T-1646	Spring, Seal	BWE	214843	2	91	.004	.14
16T-1647	Plate, Non-Pressure	BWE	217269	2	91	4.00	7.60
16T-1648	Pin Clevis 1/2 x 1 3/4	BWE	200054	2	91	.10	.10
16T-1649	Valve, Relay Emergency (See page 116 for details of assembly)	BWE	220353	1	90	10.4	41.00
16T-1650	Nut, Cap	BWE	202692	1	90	.20	.66
16T-1651	Spring	BWE	202699	1	90	.05	.14
16T-1652	Valve, Supply	BWE	202693	1	90	.025	2.04
16T-1653	Seat, Valve	BWE	202690	1	90	.0125	.42
16T-1654	Valve Assembly, Relay - Includes 202692, 202699, 202693, 202690, 204568, 212135, 202869, 211367, 204650, 202695, 202697, 202691, 203016, 204651, 202698, 202696, 203227. (See page 116 for details of assembly)						
16T-1655	Body Comp. Valve includes 202690, 204568, and 212135	BWE	216071	1	90	2.63	12.54
16T-1657	Bushing, Guide	BWE	212135	1	90	.25	.86

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
16T-1658	Ring, Guide	BWE	202869	1	90	.0125	.24
16T-1659	Gasket, Cover	BWE	211367	1	90	.0166	.14
16T-1660	Guide, Diaphragm	BWE	204650	1	90	0.81	1.24
16T-1661	Diaphragm	BWE	202695	1	90	.0588	.34
16T-1662	Seat, Spring	BWE	202697	1	90	.0312	.28
16T-1663	Cover, Top	BWE	202691	1	90	0.39	1.66
16T-1664	Screw, Diaphragm	BWE	204651	1	90	.01	.24
16T-1665	Washer, Diaphragm	BWE	202696	1	90	.0166	.28
16T-1666	Spring	BWE	202698	1	90	.05	.62
16T-1667	Gasket	BWE	202735	1	90	.0166	.14
16T-1668	Nut, Cap	BWE	202741	1	90	.1666	.52
16T-1669	Stem, Valve	BWE	203379	1	90	.0625	1.38
16T-1670	Valve, Assembly, Emergency includes 202741, 203379, 202746, 202736, 202743, 202738, 202747, 202744, 213387, 200029, 204056, 204055, 213225, 213327, 211541, 211542, 213229, 213228, 213230, 213226, 213224, 211595, 211538, 211539, 211537, 202737.	BWE	220829	1	90	4.50	25.60
16T-1671	Valve, Emergency, includes 202746 & 202736 (See page 116 for details of assembly)	BWE	215204	1	90	2.40	7.50
16T-1673	Bushing, Valve	BWE	202736	1	90	.0625	.24
16T-1674	Support, Diaphragm	BWE	202743	1	90	.0166	.24
16T-1675	Spring, Emergency	BWE	202738	1	90	.0166	.28
16T-1676	Gasket, Bottom Cover	BWE	202747	1	90	.0166	.14
16T-1677	Diaphragm	BWE	202744	1	90	.0312	.14

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16T-1678	Washer, 1 1/2" Diameter	BWE	213387	1	90	.0333	.10
16T-1679	Nut, Lock	BWE	200029	1	90	.02	.10
16T-1680	Spring	BWE	204056	1	90	.0125	.20
16T-1681	Strainer, Air	BWE	204055	1	90	.04	.96
16T-1682	Cover Assembly, Includes 213225, 213327, 211541, 211542, 213229, 213228, 213230, 213226, 213224, 211595, 211538, 211539, 211537	BWE	220305	1	90	1.75	4.76
16T-1683	Cover, complete includes, 213225, 213224, and 211537	BWE	220304	1	90	1.30	3.32
16T-1684	Body, Cover	BWE	213225	1	90	1.37	2.00
16T-1685	Diaphragm Assembly, includes 213227, 211541, 211542, 211538, 211539, 211595 (See page 117 for details of assembly)	BWE	221135	1	90	.0625	1.52
16T-1686	Diaphragm	BWE	213227	2	90	.001	.16
16T-1687	Follower, Lower	BWE	211541	1	90	.0166	.38
16T-1688	Nut, Lock	BWE	211542	1	90	.00605	.20
16T-1689	Shim, .0II" Thick (as many as necessary to close valve at 70# 80# pressure)	BWE	213229	A/R	90	.002	.05
16T-1690	Spring	BWE	213228	1	90	.0555	.14
16T-1691	Cap	BWE	213230	1	90	.333	.38
16T-1692	Ring	BWE	213226	1	90	.0312	.14
16T-1693	Pin, .125" dia. x 11/32" Lg.	BWE	213224	1	90	.001	.02
16T-1694	Follower, Upper	BWE	211595	1	90	.02	.38

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16T-1695	Ball & Stem Assembly, includes 211538 & 211539	BWE	221227	1	90	.01428	.80
16T-1696	Stem	BWE	211538	1	90	.005	.48
16T-1697	Ball	BWE	211539	1	90	.00605	.34
16T-1698	Seat	BWE	211537	1	90	.008	.28
16T-1699	Seat, Spring	BWE	202737	1	90	.02	.14
16T-1700	Valve, Exhaust Check (See page 117 for details of assembly)	BWE	221087	1	93	.166	1.76
16T-1701	Body	BWE	214231	1	93	.20	1.76
16T-1702	Diaphragm	BWE	214232	1	93	.002	.08
16T-1703	Washer	BWE	214234	1	93	.0002	.01
16T-1704	Screw, Machine	BWE	214235	1	93	.002	.01
16T-1705	Washer, Diaphragm	BWE	214233	1	93	.005	.04
16T-1706	Tubing, Copper 3/8 O.D.	BWE		A/R	99	0.186 Ft.	.18/'
16T-1708	Loom, 7/16"	BWE		A/R	99	.03 Ft.	.05/'
16T-1709	Tubing, Copper 1/2" O.D.	BWE		A/R	99	.25 Ft.	.30/'
16T-1710	Loom, 9/16"	BWE		A/R	99	.04 Ft.	.07/'
16T-1711	Hex Hd. Bolt - Pressure Plate	BWE	211370	38	91	.01	.02/'
16T-1712	Lockwasher	BWE	201504	38	91	.002	.01
16T-1713	Nut - Mounting Stud	BWE	203007	4	91	.0166	.04
16T-1714	Nut Hex	BWE	203569	38	91	.07	.02
16T-1716	Bolt, Hex Head, pressure Plate	BWE	203151	36	91	.025	.02
16T-1717	Nut Hex - Pressure Plate Bolt	BWE	214152	36	91	.01	.02
16T-1718	Washer, Stud	BWE	203173	4	91	.02	.02
16T-1719	Nut - Stud	BWE	203172	4	91	.0625	.06
16T-1720	Nut - Hex - Jam	BWE	203575	2	91	.0312	.02
16T-1721	Cotter	BWE	203156	4	91	.005	.02
16T-1722	Nut, Hex	BWE	203227	2	90	.00625	.02
16T-1723	Bolt, Hex	BWE	203388	4	90	.0625	.10

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16T-1724	Pin, Cotter	BWE	203016	1	90	.0625	.01
16T-1725	Lockwasher	BWE	202982	4	90	.00625	.01
16T-1726	Tee Tubing 3/8 x 3/8 x 1/4 (See page 117 for details of assembly)	BWE	205104	1	96	.166	.48
16T-1727	Body	BWE	200436	1	96	.0715	.24
16T-1737	Tubing Clamp	BWE	200406	2	99	.10	.02
16T-1742	Worm Gear	BWE	212629	6	92	0.88	2.42
16T-1811	Socket Assembly (See page 117 for details of assembly)	WEB	W 3529	1	100	1.50	2.25
16T-1812	Case Socket	WEB	W 20102	1	100	0.85	.66
16T-1813	Insulator	WEB	W 110417	1	100	.25	.15
16T-1814	Washer, Socket Terminal Bolt	WEB	W 110346	4	100	.005	.01
16T-1815	Nut, Terminal Bolt #10-32 SAE Brass	WEB	W 110477-A	4	100	.00312	.04
16T-1816	Washer, Plain, Brass	WEB	W 110110	4	100	.0033	.01
16T-1817	Washer, Shakeproof #10	WEB	W 110334	4	100	.002	.01
16T-1818	Washer, Terminal Cup	WEB	W 110242	4	100	.00625	.05
16T-1819	Bolt, Socket Terminal	WEB	W 110243	4	100	.0125	.06
16T-1820	Assembly Socket Cap	WEB	W 110634	1	100	.20	.18
16T-1821	Nut, Jam Hex 1/4" SAE	WEB	W 110638	1	100	.0166	.02
16T-1822	Bolt, Cap	WEB	W 110589	1	100	.0181	.04
16T-1823	Washer, Shakeproof 1/4"	WEB	W 110335	1	100	.0025	.01
16T-1824	Nut, Hex - 1/4 - 28 Brass	WEB	W 110006	1	100	.00312	.02
16T-1825	Blade, Socket Contact	WEB	W 110247	4	100	.0166	.04
16T-1826	Insert, Socket Bakelite	WEB	W 3528	1	100	.005	.40
16T-1827	Cover, Socket Assembly	WEB	W 11935-B	1	100	4.	.34
16T-1855	Lamp, Amber Clearance (See page 118 for details of assembly)	KD	KD 541-OD-6	2	102	0.90	.84

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page.	Unit Weight	Price
16T-1856	Lamp Assembly, Blackout Stop & Blackout Tail (See page 118 for details of assembly)	KD	KD 951-1-6	1	101	1.25	2.16
16T-1857	Lamp Ass'y, Service Stop & Tail & Blackout Tail (QMC-08242-X) (See page 118 for details of assembly)	KD	KD 950-1-6	1	101	1.25	2.08
16T-1858	Lamp, Red Blackout (See page 118 for details of assembly)	KD	KD 541-BO-6	2	102	0.90	1.12
16T-1859	Lamp, Red Clearance (See page 118 for details of assembly)	KD	KD 541-CD-6	2	102	0.90	.84
16T-1860	Lamp, Blue Blackout (See page 119 for details of assembly)	KD	KD 541-BO-6	2	102	0.90	1.12
16T-1861	Housing	KD	KD 1135	8	102	0.60	.70
16T-1862	Back Plate	KD	KD 9526	8	102	.166	.16
16T-1863	Lens, Amber	KD	KD 4393	2	102	.125	.22
16T-1864	Screw - 3/16x3/4 Lg.R.H.Stove	KD	KD 6641	16	102	.008	.04
16T-1865	Clip	KD	KD 1996	16	102	.0033	.04
16T-1866	Pad, Felt	KD	KD 5140	8	102	.0111	.04
16T-1867	Bulb, 1 1/2 CP. 6-8 Volt	KD	KD 1555	8	102	.005	.10
16T-1868	Gasket	KD	KD 2878	8	102	.0142	.04
16T-1869	Nipple	KD	KD 4684	8	102	.01	.06
16T-1870	Wire	KD	KD 7136	8	102	.005	.08
16T-1871	Reflector, Red	KD	KD 333 Oval	4	102	0.35	.44
16T-1872	Reflector, Amber	KD	KD 333 Oval	6	102	0.35	.44
16T-1873	Unit, Upper RH (Blackout	KD	KD 8041-6V	1	101	.20	.72

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
	Stop)						
16T-1874	Unit, Lower RH (Blackout Tail)	KD	KD 8040-6V	2	101	.25	.78
16T-1875	Door, B.O. Stop & Tail	KD	KD 2460	1	101	.20	.26
16T-1876	Screw, Lamp Door	KD	KD 6798	4	101	.008	.03
16T-1877	Body Assembly	KD	KD 8045	2	101	.20	.50
16T-1878	Unit, Upper LH (Service Stop & Tail)	KD	KD 8039-6V	1	101	.25	.64
16T-1879	Door, Service Stop & Tail & B.O.")	KD	KD 2461	1	101	.20	.26
16T-1880	Plug & Wire Assembly, Service Stop & Tail	KD	KD 4786	1	101	.01	.16
16T-1881	Plug & Wire Assembly, Blackout Tail & Blackout Stop	KD	KD 4785	1	101	.01	.16
16T-1882	Lens with Red Filter	KD	KD 8013	2	102	.125	.64
16T-1883	Lens, Ruby	KD	4392	2	102	.125	.22
16T-1884	Lens, with Blue Filter	KD	KD 8014	2	102	.125	.64
16T-1887	Clip, Wire	BX	B.P. 10824	32	xx	.0166	.05
16T-1888	Switch, Blackout	DM	Doug. 5976	1	102	0.50	1.10
16T-1889	Washer - Brass	WEB	W 110887	8		.0117	.01
16T-2095	Lash Rings	JH	2MT-1036-1	15	103	3.312	1.20
16T-2096	Lash Ring Brackets	JH	2MT-1036-2	15	103	1.062	.36
16T-2200	Wheel Assembly - Rear (Budd) 20 x 8 Rim	BW	B 44470	9	107	90.	17.62
16T-2406	Bar - Leverage	HER	1150-C	1	112	3.00	1.65
16T-2407	Wrench - Universal Rim	HER	1150-A	1	112	4.60	2.50
16T-2409	12 Ton Hyd. Jack - With Handle	HW	E129A	1	112	29.00	19.70
16T-2410	Padlock & Keyes			1	112	0.40	1.56
16T-2412	Screw Driver 10"			1	112	0.60	1.08
16T-2413	Pair Combination Pliers 6"			1	112	0.60	.60

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Weight	Price
16T-2414	One Pound Ball Pein Hammer			1	112	1.30	1.60
16T-2415	Crescent Wrench 10"			1	112	1.00	1.34
16T-2417	Load Binders - Complete w/Hook on side of Clevis	MKP	32	3	113	21.00	10.60
16T-2418	Chains 1/2 x 18'-0"			3	113	45.00	11.40
16T-2419	Spindle Nut Wrench Rear (Timken)	JN	2MT-1704	1	112	1.437	3.00
16T-2423	Grease Gun				112	1.14	6.00
16T-2624	Pawl Plate Assembly	NAS	T-17	1	111	2.50	1.30
16T-2629	Shaft w/Ratchet welded in Place	NAS	T-648	1	111	8.50	2.20
16T-2630	Cable - 7'-0" Lg.	NAS	T-5	1	111	.562	2.20
16T-2634	U- Bolt & Nuts	NAS	T-11	2	111	.0832	.20
16T-2738	Tire 9.00/20 - 10 Ply			9	107	111.	*
	(*) Prices on Application						
16T-2739	Tube Inner 9.00/20			9	107		
16T-2740	Flap - Tire - 900120			9	107	10.437	*
16T-2742	Cap Valve	SV	880	13	**	.0025	.04
16T-2743	Core Valve	SV	4000	13	**	.00164	.05
16T-2842	Drive Screws #6 x 3/8"	JH	J-1766	8		.00138	.04
16T-2843	Alemite Fitting Straight 1/8 P.T.		1610	8	103,4,8,9	.025	.04
16T-2844	Alemite Fitting 67½ - 1/8 P.T.		1612	6	103,5,8,9	.025	.08
16T-2946	Bolt Spider Adapter 1/2 x 1 5/8 SAE	TDA	T-15X-79	96	**	.25	.05
16T-2947	Nut - Spider Adapter Bolt ½"	JH	J-208	111	**	.0625	.02
16T-2948	Lockwasher - 1/2" SAE	JH	J-318	112	**	.01316	.01
16T-2951	Lockwasher - 5/16"	JH	J-315	5	**	.003	.01
16T-2953	Nut - Hex 5/8" SAE	JH	J-2010	40	**	.125	.04
16T-2954	Lockwasher 5th Wheel 5/8" SAE	JH	J-3110	22	**	.025	.02

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16T-2955	Washer Plain 5/8"	JH		4	**	.08	.02
16T-2956	Nuts - Hex 3/4 SAE	JH	J-2012	72	**	.111	.05
16T-2957	Lockwasher 3/4 SAE	JH	J-3112	64	**	.0434	.03
16T-2958	Castle Nut - Rear Rad. Rod 7/8 SAE	JH	J-2114	2	**	.200	.12
16T-2959	Castle Nut - Rad. Bolt 1" SAE	JH	J-2116	2	**	0.40	.17
16T-2960	Cotter Pin 1/8 x 1 1/2 Rad. Rod Bolt	JH	J-4046	22	**	.0046	.01
16T-2961	Cotter Pin - Clevis Pin 1/8x1	JH	J-4044	47	**	.002	.01
16T-2962	Plain Washer 1/2	JH	J-338	3	**	.002	.01
16T-2963	Carriage Bolt & Nut - Brake Shaft 3/8 x 2 1/4" Lg.	JH	J-16622	1	**	.20	.06
16T-2965	Lockwasher 3/8" SAE	JH	J-316	157	**	.005	.03
16T-2966	Nut - 5/8" Sq. U.SS	JH		8	**	.1428	.04
16T-2970	Bolt - 3/8 x 6" Sq.Hd.U.SS		214884	2	99	.20	.08
16T-2971	Nut - 3/8" U.SS.			2	**	.023	.02
16T-2973	Nut - 1" Hex Jam SAE		204000	2	97	.143	.12
16T-2979	Nut - Hex 3/8 SAE	JH	J-206	6	**	.0135	.01
16T-2987	Nut - 1/4" Hex. SAE			6	**	.016	.01
16T-2993	Lockwasher 1/4 SAE	JH	J-314	17	**	.00187	.01
16T-2995	Nuts - 1/2 Sq. US.S	JH	J-268	2	**	.0625	.03
16T-2996	Bolt - Hex Head 1/2 x 1 SAE	JH	J-10810	4	**	.0666	.05
16T-2997	Carriage Bolts & Nuts 3/8 x 3 1/4"	JH	J-16626	120	**	.111	.03
16T-3000	Plain Washer 3/8	JH	J-336	1	**	.0135	.01
16T-3001	Cap Screw - Hub Cap 7/16 x 3/4 USS	TDA	T-2X-9	24	**	.0526	.03
16T-3002	Washer Hub Cap 7/16" L.W.	JH	J-317	24	**	.0107	.01
16T-3003	Cotter Pin - Brake Wheel Shaft 1/4 x 2 1/2	JH	J-40810	1	**	.04	.01
16T-3012	Cap Screw 1/2 x 1 3/4 SAE	JH	J-10816	1	**	.125	.10

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Government Part No.	Part Name	Primary Manufacturer Code	Part Number	Quan.	Page	Unit Weight	Price
16T-3013	Cap Screw - Hub Cap & 3/8 x 3/4 USS	JH	J-1166	24	**	.034	.03
16T-3015	Stove Bolt & Nut 1/4 x 1" Lg.	JH	J-15410	17	**	.0143	.02
16T-3016	Cap Screw 3/8 x 1 1/4 Lg.SAE	JH	J-10612	4	**	.0525	.02
16T-3020	Cotter Pin 3/16 x 2	JH	J-4068	4	**	.0146	.01
16T-3022	Nut 5/8" - 18 Jam	JH	J-2210	26	**	.10	.04
16T-3036	Nut Castle, Pawl Pin 3/4-16 SAE	JH	J-2112	1	**	.10	.08
16T-3041	Washer 1-1/2" Plain	JH		5	**	.0833	.04
20T-4002	Axle Member Assembly (See page 119 for details of assembly)	SAC	FA-3½-72½	1	108	200.000	83.39
20T-4003	Axle Bar - Trunnion Beam w/ Nuts & Bushing (See page 119 for details of assembly)	SAC		2	109	221.125	94.60
20T-4024	Bearing Ass'y - Cross Shaft outer	JH	4MT-1399-9	2	105	3.50	2.50
20T-4025	Bearing Ass'y - Cross Shaft Center (See page 119 for details of assembly)	JH	4MT-1399-8	2	105	1.50	7.69
20T-4026	Cone - Bearing	TIM	T-748-S	4	108	5.437	8.01
20T-4027	Cup - Bearing	TIM	T-742	4	106	2.312	4.07
20T-4028	U-Bolt	JH	2MT-1439	4	103	3.687	.56
20T-4029	Centerbolt - & Nut Helper	JH		2	103	.4	.10
20T-4030	Center bolt - & Nut Main	JH		2	103	.5	.19
20T-4033	Bolt-Chamber Bracket 5/8x5½USS	JH	J-111044	8	108	.656	.18
20T-4034	Bolt-Rear Spring Hanger ½x4½ Sq. Hd. USS	JH	J-12844	2	103	.25	.06

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-4035	Bracket - Cam Shaft	JH	3MT-1503	2	108	11.75	9.44
20T-4037	Bracket - Trunnion with Bushing (See page 119 for details of assembly)	SAC	TA-1010-1	4	109	21.250	18.00
20T-4038	Bushing - Cam Shaft Bracket	SAC	BCB20	2	108	.431	3.22
20T-4039	Bushing - Cam Shaft	SAC	CSB-20	4	109	.062	1.60
20T-4040	Bushing - Cross Shaft Inner Brg. - Bunting	BBB	H-2732	2	105	1.562	1.64
20T-4041	Bushing Cross Shaft Outer Brg. - Bunting	BBB	E-840	2	105	.312	.60
20T-4060	Cable 1/4 x 11'3" w/1/4 x 18 Lg. Chains and Cold Shut Thimble & Cable Clamp. (See page 119 for details of assembly)	BBB		1	105	1.538	1.98
20T-4061	Hub Cap	SAC	HC-75	2	106	2.062	2.40
20T-4062	Hub Cap	SAC	T-3262-E-56	4	107	1.	1.00
20T-4063	Chain 1/4 x 44" Lg.	JH	4MT-1516-6	1	105	3.	.68
20T-4066	Cable Clamp Ass'y for 1/4" Cable	JH	4MT-1516-5	4	105	.125	.16
20T-4067	Lower Tie Clip - Spring	JH	1MT-1405	2	103	6.937	4.76
20T-4068	Dust Collar (See page 119 for details of assembly)	JH		2	106	1.4	1.70
20T-4069	Cotter Pin - Axle Nut	JH	J-401216	2	108	.125	.05
20T-4071	Cover - Inspection Hole	SAC	T-1107-C-29	6	106-107	.042	.09
20T-4092	Brake Drum	SAC	UB-1106-1	2	106	93.062	23.07
20T-4093	Brake Drum	SAC	TA-3219-R-1318	4	107	94.	29.60
20T-4120	Equalizer - Brake Lever	JH	2MT-1511	2	105	1.687	1.46
20T-4140	Felt - Dust Collar	SAC	D-F-$\frac{1}{2}$-4	2	106	.062	.48
20T-4160	Gasket - Hub Cap	SAC	G-7$\frac{1}{2}$-5-7/8	2	106	.0062	.18

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-4161	Gasket - Hub Cap	SAC	T-2208-Y-77	4	107	.0062	.09
20T-4180	Half Sphere	JH	1MT-1510	4	105	.125	.40
20T-4181	Bracket - Brake Chamber	JH	2MT-1502	2	108	10.75	7.14
20T-4185	Rear Hanger - Spring	JH	2MT-1404	2	103	12.125	5.83
20T-4188	Hub & Cup Ass'y. (See page 119 for details of assembly.)	SAC	H-20	2	106	48.75	47.00
20T-4189	Hub & Cup Assembly (See page 119 for details of assembly.)	SAC	TA-333-E-447	4	107	51.	28.44
20T-4210	Lever	JH	4MT-1399-2	1	105	15.	3.77
20T-4211	Anchor Pin Lock Screw Wire	TD	T-11725	6	108	.0062	.01
20T-4231	Nut - Axle	SAC	K-10340-M	2	108	2.375	1.50
20T-4233	Nut - Hex Jam 3/4 SAE	JH	J-2212	10	105	.0525	.05
20T-4251	King Pin (Holland)	HLH	T-400	1	103	12.687	4.80
20T-4252	Pin-Lever Bracket	JH	1MT-1526-2	1	105	.281	.40
20T-4253	Yoke Pin (less Cotterpins)5/8	JH	4MT-1516-9	8	105	.165	.06
20T-4254	Yoke Pin (less Cotterpins)3/4	JH	4MT-1516-10	6	105	.25	.07
20T-4259	Serial Number Plate	JH	2MT-1309	1	107	.312	.64
20T-4280	Brake Rod - Compression	JH	1MT-1512	1	105	8.50	2.80
20T-4281	Brake Rod	JH	1MT-1494-2	4	105	3.25	1.32
20T-4282	Link - Long	JH	4MT-1399-7	2	105	5.	3.34
20T-4283	Link - Short	JH	4MT-1399-6	2	105	2.625	3.21
20T-4284	Radius Rod (See page 119 for details of assembly.)	JH	1MT-1437	2	103	8.875	9.00
20T-4285	Cross Shaft Ass'y R.H. (See page 119 for details of assembly.)	JH	4MT-1399-13	1	105	19.	16.31
20T-4286	Cross Shaft Ass'y L.H. (See page 120 for details of assembly.)	JH	4MT-1399-12	1	105	19.	16.31

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-4310	Bolts - Trunnion Bracket 5/8 x 2SAE	JH	J-101020	16	109	.25	.10
20T-4311	Brg. Mounting 1-1/2 x 1/2 SAE-Bolts	JH	J-10814	12	**	.125	.05
20T-4312	Bolts - Brg. Mounting ½ x 1 1/4 SAE	JH	J-10812	12	105	.111	.05
20T-4313	Cap Screw 3/8 x 1½ Lg. SAE	JH	J-10614	2	**	.0586	.02
20T-4315	Cap Screw - Inspection Hole Cover 3/8 x 1/2 USS	SAC	T-2X-19	6	106-107	.01694	.03
20T-4316	Spring Seat	JH	1MT-1406	2	103	7.625	6.88
20T-4317	Cam Shaft Assembly L.H.Rear	SAC	UB-5006-L1	2	109	4.750	11.90
20T-4318	Cam Shaft Assembly R.H.Rear	SAC	UB-5006-R1	2	109	4.750	11.90
20T-4324	Spring Spacer	JH	1MT-1440	2	103	2.125	1.32
20T-4325	Upper Tie Clip - Spring	JH	"MT-1454	2	103	3.50	2.00
20T-4327	Helper Spring	JH	2MT-1419	2	103	29.50	6.46
20T-4329	Main Spring	JH	3MT-1420	2	103	98.	13.80
20T-4350	Thimble for 1/4 Cable	JH	4MT-1516-2	2	105	.031	.10
20T-4351	Tire 12.00/20 - 14 Ply FL			4	106	183.25	*
20T-4352	Tube Inner 12.00/20			4	106	21.062	*
20T-4371	Wheel Assembly - Front (Budd) 20 x 9-10 Rim	BW	B-45530	4	106	90.	25.20
20T-4373	Spindle Nut Wrench - Front	WW	W-1545	1	112	5.50	1.44
20T-4390	Yoke End - Adjustable 5/8	JH	4MT-1516-7	4	105	.75	.48
20T-4391	Yoke End - Adjustable 3/4	JH	4MT-1516-8	2	105	1.50	.60
20T-4610	Cable & Plug Assembly (See page 120 for details of assembly)	WEB	W-3737	1	100	3.125	9.96
20T-4900	Slack Adjuster - Front Axle (See page 120 for details of assembly)	BWE	217900	2	92-108	4.887	7.40
20T-4901	Slack Adjuster - Rear Axle	BWE	221533	4	92-109	4.125	7.40

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
	(See page 120 for details of assembly)						
20T-4921	Body - Slack Adjuster	BWE	212704	2	92	2.5	5.22
20T-4922	Body - Slack Adjuster	BWE	230147	4	92	2.5	5.00
20T-4923	Bushing 5/8 ID x 3/4 OD x 1/2 Lg.	BWE	211573	4	92	.021	.12
20T-4940	Chamber, Brake Type B (Front Axle) (See page 121 for details of assembly)	BWE	221464	2	91	9.50	12.90
20T-4941	Chamber, Brake, Type F Rear (See page 121 for details of assembly)	BWE	220241	2	91	22.25	21.60
20T-4960	Rod, Push Type B Front	BWE	205347	2	91	1.50	2.32
20T-4961	Rod, Push Type F Rear	BWE	220274	2	91	2.00	3.38
20T-4981	Stud Type B-Front	BWE	202941	4	91	.187	.24
20T-4982	Stud Type F-Rear	BWE	201954	4	91	.187	.34
20T-5001	Tail Light Bracket (Export)	JH	1MT-1532	2		1.	1.00
20T-5002	Pins - Screw Jack	JH	1MT-1431	2	112	3.50	2.13
20T-5003	Screw Jack	IIB	2-x-18	2	112	43.50	17.50
20T-5004	Top Brg. Screw Jack	JH	2MT-1522	2	112	6.50	7.83
20T-5005	Half Collar	JH	1MT-1523	4	112	.50	2.17
20T-5006	Cap Screw 3/8 x 7/8 SAE	JH	J-1067	8	112	.0415	.02
20T-5007	Chains with Snap-Jack Screw 1/4 x 9½ Lg. ¼ x 9½	JH	1MT-1675-1	2	112	1.312	1.10
20T-5008	Assembly, Pintle Hook, Complete (See page 121 for details of assembly)	HLH	110	1	110	47.25	19.40
20T-5009	Hook, Forged	HLH	111	1	110	21.844	13.91
20T-5010	Lock, Pintle	HLH	112	1	110	5.063	4.10
20T-5011	Latch, Pintle	HLH	113	1	110	1.656	1.63
20T-5012	Pin, 7/8" x 2 1/2"	HLH	114	1	110	.405	.32
20T-5013	Capscrew, 5/16" - 24 x 1¼"	HLH	115	1	110	.0342	.11

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-5014	Spring, Latch	HLH	117	1	110	.028	.42
20T-5015	Bolt, 1" x 3 7/8"	HLH	118	1	110	1.75	1.68
20T-5016	Nut, Slotted, Jam, 1" SAE 1120	HLH	120	1	110	.143	.12
20T-5017	Pin, Cotter, 1/4" x 3"	HLH	121	2	110	.0382	.11
20T-5018	Sleeve	HLH	122	2	110	4.000	4.04
20T-5019	Spring, 2 3/8" ID x 7 1/4"	HLH	123	1	110	7.250	2.36
20T-5020	Nut, Slotted Hex, 1 1/2" - 6	HLH	T-9N	1	110	.562	.74
20T-5021	Chain, 16 Links	HLH	126	1	110	.062	.11
20T-5022	Link, "S"	HLH	127	1	110	.010	.01
20T-5023	Screw, Drive #10 x 1/2"	HLH	128	1	110	.0525	.01
20T-5028	Bearing Plate - Pintle Hook	JH	2MT-1528	1		.0586	4.27
20T-5029	Bolts - Hex Hd. 3/4x2"Lg.SAE	JH	J-101220	4	**	.0466	.13
20T-5030	Handles - Screw Jack	JH		2	112	4.375	1.65
20T-5031	Front Hanger R.H. - Spring	JH	4MT-1476-2	1	103	29.50	16.43
20T-5032	Front Hanger L.H. - Spring	JH	4MT-1476-1	1	103	29.50	16.43
20T-5033	Bolt - Drawbar Hinge	JH	1MT-1521	2	104	2.	4.15
20T-5034	Nuts - Castle, 1 1/4" SAE	JH	J-2120	2	104	.50	.31
20T-5035	Cotter Pin 1/8 x 2" Lg.	JH	J-4048	2	104	.0064	.01
20T-5036	Spacer - Rear Spring Hanger	JH	1MT-1493-3	2	103	.187	.20
20T-5037	Fifth Wheel Assembly (See page 122 for details of assembly)	HLH	1226-36	1	104	225.00	51.60
20T-5038	Wheel Plate	HLH	1227-36	1	104	211.75	48.75
20T-5039	Lever - Forged	HLH	1005-FL	1	104	3.25	3.68
20T-5040	Spring - Sliding Lock	HLH	1006	1	104	.312	.21
20T-5041	Spring - Plunger Lock	HLH	1007	1	104	.125	.42
20T-5042	Hinge Lock Pin	HLH	1016	1	104	.937	1.26
20T-5043	Hinged Lock	HLH	1102-A	1	104	2.875	3.94
20T-5044	Sliding Lock	HLH	1103-B	1	104	3.125	3.94
20T-5045	Plunger Lock	HLH	1104	1	104	3.250	2.31
20T-5046	Rubber Cushin Lever	HLH	1101	1	104	.0156	.05

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-5047	Rivet 3/8 x 1	HLH	1107	1	104	.0586	.05
20T-5057	Bolts - Hex Hd. 5th Wheel 5/8 x 1 1/2 SAE	JH	J-101014	14	104	.20	.08
20T-5058	Name Plate - Dolly	JH	2MT-1520	1	113	.25	.64
20T-5059	Drawbar Assembly (See page 122 for details of assembly)	JH	4MT-1501	1	104	142.125	46.81
20T-5060	Hinge - L.H.	JH	2MT-1477-1	1	104	8.937	7.53
20T-5061	Hinge - R.H.	JH	2MT-1477-2	1	104	8.937	7.53
20T-5063	Draw Bar Lock Pin	JH	1MT-1434	2	104	2.75	3.38
20T-5064	Lock Pin Handle	JH	1MT-1435	2	104	.25	1.16
20T-5065	Bushing - Hinge Pin	BBB	EC-839	2	104	.187	.94
20T-5066	Hose, Assembly (See page 122 for details of assembly)	BWE	215592	1	93	3.75	7.48
20T-5067	Cut Out Cock	BWE	217799	1	97	1.812	2.46
20T-5068	Hose Suspension Spring	BWE	200661	1		.25	.26
20T-5069	Bracket	BWE	212227	1		.50	.46
20T-5070	Stove Bolts & Nuts 5/16 x 7/8 Lg.	JH	J-1557	2	**	.037	.02
20T-5071	Cap Screw 5/16 x 1 1/8 Lg.SAE	JH	J-10511	2	**	.0555	.02
20T-5072	Nut - Hex 5/16 SAE	JH	J-205	2	**	.0086	.01
20T-5073	Cap Screw 3/8 x 3/4 Lg. SAE	JH	J-1066	4	**	.0357	.02
20T-5074	Hand Wheel & Shaft Ass'y w/Ratchet (See page 122 for details of assembly.)	JH	2MT-1515	1	105	22.000	14.80
20T-5075	Bolt - Hex Hd. Brg. Brk. Mount. 1/2 x 4 SAE	JH	J-10840	2	105	.250	.08
20T-5076	Spare Tire Carrier - L.B. Nash (See page 126 for details of assembly.)	NAS	SWA-T-12-10-JT	1	111	41.625	13.40

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-5077	Main Member Unit	NAS	UAS-10	1	111	28.75	8.22
20T-5078	Pawl Plate	NAS	T-7-C	1	111	1.50	.70
20T-5079	Securing Stud with Locknuts	NAS	T-9-W	4	111	.468	.36
20T-5080	Safety Nut	NAS	T-10	4	111	.437	.30
20T-5081	Pick-Up Member	NAS	T-4W-10	1	111	2.125	1.60
20T-5082	Cotter Pin	NAS	T-15	1	111	.0156	.02
20T-5083	Snap Terminal	DM	51322 Douglas	26		.008	.01
20T-5084	Sleeve Connector	DM	2208 Douglas	13		.0049	.02
20T-5085	Rim Tool	BW	37891	1		1.50	.64
20T-5087	Equalizer - Long	JH	4MT-1399-1	1	105	8.875	3.74
20T-5116	Flap - 12.00 x 20				106	4.0	*
20T-5117	Pan - Rear Splash	SFA	UB-1135	4	106	1.6	1.20
20T-5130	Nipple - Close 1/2" Galv.	BWE	212324	1		.02	.12
20T-5131	Chain - 1/4" x 18"	JH		1	105	2.	.50
20T-5132	Cold Shut - 1/4" Chain	JH		1	105	.25	.12
20T-5133	Cable 1/4" x 11'3"	JH		1	105	2.5	1.20
20T-5134	Washer, Plain 3/16"	JH		32	**	.01	.05
20T-5135	Washer Plain, 1 1/4 ID x 2 1/4 OD x 1/8"	JH		A/R			
20T-5136	Washer, Plain, 1 1/4 ID x 3" OD x 5/32"						
20T-5138	Filter - Type 'E' (See page 123 for details of assembly.)	BWE	22174	2	98	4.5	5.
20T-5139	Cover - Filter	BWE	230108	2	98	1.06	.80
20T-5140	Plug - Drain	BWE	230111	2	98	.06	.16
20T-5141	Gasket - Cover	BWE	230109	2		.008	.04

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-4310	Bolts - Trunnion Bracket 5/8 x 2SAE	JH	J-101020	16	109	.25	.10
20T-4311	Brg. Mounting 1-1/2 x 1/2 SAE-Bolts	JH	J-10814	12	**	.125	.05
20T-4312	Bolts - Brg. Mounting ½ x 1 1/4 SAE	JH	J-10812	12	105	.111	.05
20T-4313	Cap Screw 3/8 x 1½ Lg. SAE	JH	J-10614	2	**	.0586	.02
20T-4315	Cap Screw - Inspection Hole Cover 3/8 x 1/2 USS	SAC	T-2X-19	6	106-107	.01694	.03
20T-4316	Spring Seat	JH	1MT-1406	2	103	7.625	6.88
20T-4317	Cam Shaft Assembly L.H.Rear	SAC	UB-5006-L1	2	109	4.750	11.90
20T-4318	Cam Shaft Assembly R.H.Rear	SAC	UB-5006-R1	2	109	4.750	11.90
20T-4324	Spring Spacer	JH	1MT-1440	2	103	2.125	1.32
20T-4325	Upper Tie Clip - Spring	JH	"MT-1454	2	103	3.50	2.00
20T-4327	Helper Spring	JH	2MT-1419	2	103	29.50	6.46
20T-4329	Main Spring	JH	3MT-1420	2	103	98.	13.80
20T-4350	Thimble for 1/4 Cable	JH	4MT-1516-2	2	105	.031	.10
20T-4351	Tire 12.00/20 - 14 Ply FL			4	106	183.25	*
20T-4352	Tube Inner 12.00/20			4	106	21.062	*
20T-4371	Wheel Assembly - Front (Budd) 20 x 9-10 Rim	BW	B-45530	4	106	90.	25.20
20T-4373	Spindle Nut Wrench - Front	WW	W-1545	1	112	5.50	1.44
20T-4390	Yoke End - Adjustable 5/8	JH	4MT-1516-7	4	105	.75	.48
20T-4391	Yoke End - Adjustable 3/4	JH	4MT-1516-8	2	105	1.50	.60
20T-4610	Cable & Plug Assembly (See page 120 for details of assembly)	WEB	W-3737	1	100	3.125	9.96
20T-4900	Slack Adjuster - Front Axle (See page 120 for details of assembly)	BWE	217900	2	92-108	4.887	7.40
20T-4901	Slack Adjuster - Rear Axle	BWE	221533	4	92-109	4.125	7.40

* Prices on application

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
	(See page 120 for details of assembly)						
20T-4921	Body - Slack Adjuster	BWE	212704	2	92	2.5	5.22
20T-4922	Body - Slack Adjuster	BWE	230147	4	92	2.5	5.00
20T-4923	Bushing 5/8 ID x 3/4 OD x 1/2 Lg.	BWE	211573	4	92	.021	.12
20T-4940	Chamber, Brake Type B (Front Axle) (See page 121 for details of assembly)	BWE	221464	2	91	9.50	12.90
20T-4941	Chamber, Brake, Type F Rear (See page 121 for details of assembly)	BWE	220241	2	91	22.25	21.60
20T-4960	Rod, Push Type B Front	BWE	205347	2	91	1.50	2.32
20T-4961	Rod, Push Type F Rear	BWE	220274	2	91	2.00	3.38
20T-4981	Stud Type B-Front	BWE	202941	4	91	.187	.24
20T-4982	Stud Type F-Rear	BWE	201954	4	91	.187	.34
20T-5001	Tail Light Bracket (Export)	JH	1MT-1532	2		1.	1.00
20T-5002	Pins - Screw Jack	JH	1MT-1431	2	112	3.50	2.13
20T-5003	Screw Jack	IIB	2-x-18	2	112	43.50	17.50
20T-5004	Top Brg. Screw Jack	JH	2MT-1522	2	112	6.50	7.83
20T-5005	Half Collar	JH	1MT-1523	4	112	.50	2.17
20T-5006	Cap Screw 3/8 x 7/8 SAE	JH	J-1067	8	112	.0415	.02
20T-5007	Chains with Snap-Jack Screw 1/4 x 9½ Lg. ¼ x 9½	JH	1MT-1675-1	2	112	1.312	1.10
20T-5008	Assembly, Pintle Hook, Complete (See page 121 for details of assembly)	HLH	110	1	110	47.25	19.40
20T-5009	Hook, Forged	HLH	111	1	110	21.844	13.91
20T-5010	Lock, Pintle	HLH	112	1	110	5.063	4.10
20T-5011	Latch, Pintle	HLH	113	1	110	1.656	1.63
20T-5012	Pin, 7/8" x 2 1/2"	HLH	114	1	110	.405	.32
20T-5013	Capscrew, 5/16" - 24 x 1¼"	HLH	115	1	110	.0342	.11

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-5014	Spring, Latch	HLH	117	1	110	.028	.42
20T-5015	Bolt, 1" x 3 7/8"	HLH	118	1	110	1.75	1.68
20T-5016	Nut, Slotted, Jam, 1" SAE 1120	HLH	120	1	110	.143	.12
20T-5017	Pin, Cotter, 1/4" x 3"	HLH	121	2	110	.0382	.11
20T-5018	Sleeve	HLH	122	2	110	4.000	4.04
20T-5019	Spring, 2 3/8" ID x 7 1/4"	HLH	123	1	110	7.250	2.36
20T-5020	Nut, Slotted Hex, 1 1/2" - 6	HLH	T-9N	1	110	.562	.74
20T-5021	Chain, 16 Links	HLH	126	1	110	.062	.11
20T-5022	Link, "S"	HLH	127	1	110	.010	.01
20T-5023	Screw, Drive #10 x 1/2"	HLH	128	1	110	.0525	.01
20T-5028	Bearing Plate - Pintle Hook	JH	2MT-1528	1		.0586	4.27
20T-5029	Bolts - Hex Hd. 3/4x2"Lg.SAE	JH	J-101220	4	**	.0466	.13
20T-5030	Handles - Screw Jack	JH		2	112	4.375	1.65
20T-5031	Front Hanger R.H. - Spring	JH	4MT-1476-2	1	103	29.50	16.43
20T-5032	Front Hanger L.H. - Spring	JH	4MT-1476-1	1	103	29.50	16.43
20T-5033	Bolt - Drawbar Hinge	JH	1MT-1521	2	104	2.	4.15
20T-5034	Nuts - Castle, 1 1/4" SAE	JH	J-2120	2	104	.50	.31
20T-5035	Cotter Pin 1/8 x 2" Lg.	JH	J-4048	2	104	.0064	.01
20T-5036	Spacer - Rear Spring Hanger	JH	1MT-1493-3	2	103	.187	.20
20T-5037	Fifth Wheel Assembly (See page 122 for details of assembly)	HLH	1226-36	1	104	225.00	51.60
20T-5038	Wheel Plate	HLH	1227-36	1	104	211.75	48.75
20T-5039	Lever - Forged	HLH	1005-FL	1	104	3.25	3.68
20T-5040	Spring - Sliding Lock	HLH	1006	1	104	.312	.21
20T-5041	Spring - Plunger Lock	HLH	1007	1	104	.125	.42
20T-5042	Hinge Lock Pin	HLH	1016	1	104	.937	1.26
20T-5043	Hinged Lock	HLH	1102-A	1	104	2.875	3.94
20T-5044	Sliding Lock	HLH	1103-B	1	104	3.125	3.94
20T-5045	Plunger Lock	HLH	1104	1	104	3.250	2.31
20T-5046	Rubber Cushin Lever	HLH	1101	1	104	.0156	.05

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-5047	Rivet 3/8 x 1	HLH	1107	1	104	.0586	.05
20T-5057	Bolts - Hex Hd. 5th Wheel 5/8 x 1 1/2 SAE	JH	J-101014	14	104	.20	.08
20T-5058	Name Plate - Dolly	JH	2MT-1520	1	113	.25	.64
20T-5059	Drawbar Assembly (See page 122 for details of assembly)	JH	4MT-1501	1	104	142.125	46.81
20T-5060	Hinge - L.H.	JH	2MT-1477-1	1	104	8.937	7.53
20T-5061	Hinge - R.H.	JH	2MT-1477-2	1	104	8.937	7.53
20T-5063	Draw Bar Lock Pin	JH	1MT-1434	2	104	2.75	3.38
20T-5064	Lock Pin Handle	JH	1MT-1435	2	104	.25	1.16
20T-5065	Bushing - Hinge Pin	BBB	EC-839	2	104	.187	.94
20T-5066	Hose, Assembly (See page 122 for details of assembly)	BWE	215592	1	93	3.75	7.48
20T-5067	Cut Out Cock	BWE	217799	1	97	1.812	2.46
20T-5068	Hose Suspension Spring	BWE	200661	1		.25	.26
20T-5069	Bracket	BWE	212227	1		.50	.46
20T-5070	Stove Bolts & Nuts 5/16 x 7/8 Lg.	JH	J-1557	2	**	.037	.02
20T-5071	Cap Screw 5/16 x 1 1/8 Lg.SAE	JH	J-10511	2	**	.0555	.02
20T-5072	Nut - Hex 5/16 SAE	JH	J-205	2	**	.0086	.01
20T-5073	Cap Screw 3/8 x 3/4 Lg. SAE	JH	J-1066	4	**	.0357	.02
20T-5074	Hand Wheel & Shaft Ass'y w/Ratchet (See page 122 for details of assembly.)	JH	2MT-1515	1	105	22.000	14.80
20T-5075	Bolt - Hex Hd. Brg. Brk. Mount. 1/2 x 4 SAE	JH	J-10840	2	105	.250	.08
20T-5076	Spare Tire Carrier - L.B. Nash (See page 126 for details of assembly.)	NAS	SWA-T-12-10-JT	1	111	41.625	13.40

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-5014	Spring, Latch	HLH	117	1	110	.028	.42
20T-5015	Bolt, 1" x 3 7/8"	HLH	118	1	110	1.75	1.68
20T-5016	Nut, Slotted, Jam, 1" SAE 1120	HLH	120	1	110	.143	.12
20T-5017	Pin, Cotter, 1/4" x 3"	HLH	121	2	110	.0382	.11
20T-5018	Sleeve	HLH	122	2	110	4.000	4.04
20T-5019	Spring, 2 3/8" ID x 7 1/4"	HLH	123	1	110	7.250	2.36
20T-5020	Nut, Slotted Hex, 1 1/2" - 6	HLH	T-9N	1	110	.562	.74
20T-5021	Chain, 16 Links	HLH	126	1	110	.062	.11
20T-5022	Link, "S"	HLH	127	1	110	.010	.01
20T-5023	Screw, Drive #10 x 1/2"	HLH	128	1	110	.0525	.01
20T-5028	Bearing Plate - Pintle Hook	JH	2MT-1528	1		.0586	4.27
20T-5029	Bolts - Hex Hd. 3/4x2"Lg.SAE	JH	J-101220	4	**	.0466	.13
20T-5030	Handles - Screw Jack	JH		2	112	4.375	1.65
20T-5031	Front Hanger R.H. - Spring	JH	4MT-1476-2	1	103	29.50	16.43
20T-5032	Front Hanger L.H. - Spring	JH	4MT-1476-1	1	103	29.50	16.43
20T-5033	Bolt - Drawbar Hinge	JH	1MT-1521	2	104	2.	4.15
20T-5034	Nuts - Castle, 1 1/4" SAE	JH	J-2120	2	104	.50	.31
20T-5035	Cotter Pin 1/8 x 2" Lg.	JH	J-4048	2	104	.0064	.01
20T-5036	Spacer - Rear Spring Hanger	JH	1MT-1493-3	2	103	.187	.20
20T-5037	Fifth Wheel Assembly (See page 122 for details of assembly)	HLH	1226-36	1	104	225.00	51.60
20T-5038	Wheel Plate	HLH	1227-36	1	104	211.75	48.75
20T-5039	Lever - Forged	HLH	1005-FL	1	104	3.25	3.68
20T-5040	Spring - Sliding Lock	HLH	1006	1	104	.312	.21
20T-5041	Spring - Plunger Lock	HLH	1007	1	104	.125	.42
20T-5042	Hinge Lock Pin	HLH	1016	1	104	.937	1.26
20T-5043	Hinged Lock	HLH	1102-A	1	104	2.875	3.94
20T-5044	Sliding Lock	HLH	1103-B	1	104	3.125	3.94
20T-5045	Plunger Lock	HLH	1104	1	104	3.250	2.31
20T-5046	Rubber Cushin Lever	HLH	1101	1	104	.0156	.05

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-5047	Rivet 3/8 x 1	HLH	1107	1	104	.0586	.05
20T-5057	Bolts - Hex Hd. 5th Wheel 5/8 x 1 1/2 SAE	JH	J-101014	14	104	.20	.08
20T-5058	Name Plate - Dolly	JH	2MT-1520	1	113	.25	.64
20T-5059	Drawbar Assembly (See page 122 for details of assembly)	JH	4MT-1501	1	104	142.125	46.81
20T-5060	Hinge - L.H.	JH	2MT-1477-1	1	104	8.937	7.53
20T-5061	Hinge - R.H.	JH	2MT-1477-2	1	104	8.937	7.53
20T-5063	Draw Bar Lock Pin	JH	1MT-1434	2	104	2.75	3.38
20T-5064	Lock Pin Handle	JH	1MT-1435	2	104	.25	1.16
20T-5065	Bushing - Hinge Pin	BBB	EC-839	2	104	.187	.94
20T-5066	Hose, Assembly (See page 122 for details of assembly)	BWE	215592	1	93	3.75	7.48
20T-5067	Cut Out Cock	BWE	217799	1	97	1.812	2.46
20T-5068	Hose Suspension Spring	BWE	200661	1		.25	.26
20T-5069	Bracket	BWE	212227	1		.50	.46
20T-5070	Stove Bolts & Nuts 5/16 x 7/8 Lg.	JH	J-1557	2	**	.037	.02
20T-5071	Cap Screw 5/16 x 1 1/8 Lg.SAE	JH	J-10511	2	**	.0555	.02
20T-5072	Nut - Hex 5/16 SAE	JH	J-205	2	**	.0086	.01
20T-5073	Cap Screw 3/8 x 3/4 Lg. SAE	JH	J-1066	4	**	.0357	.02
20T-5074	Hand Wheel & Shaft Ass'y w/Ratchet (See page 122 for details of assembly.)	JH	2MT-1515	1	105	22.000	14.80
20T-5075	Bolt - Hex Hd. Brg. Brk. Mount. 1/2 x 4 SAE	JH	J-10840	2	105	.250	.08
20T-5076	Spare Tire Carrier - L.B. Nash (See page 126 for details of assembly.)	NAS	SWA-T-12-10-JT	1	111	41.625	13.40

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Government Part No.	Part Name	Primary Code	Manufacturer Part Number	Quan.	Page	Unit Weight	Price
20T-5077	Main Member Unit	NAS	UAS-10	1	111	28.75	8.22
20T-5078	Pawl Plate	NAS	T-7-C	1	111	1.50	.70
20T-5079	Securing Stud with Locknuts	NAS	T-9-W	4	111	.468	.36
20T-5080	Safety Nut	NAS	T-10	4	111	.437	.30
20T-5081	Pick-Up Member	NAS	T-4W-10	1	111	2.125	1.60
20T-5082	Cotter Pin	NAS	T-15	1	111	.0156	.02
20T-5083	Snap Terminal	DM	51322 Douglas	26		.008	.01
20T-5084	Sleeve Connector	DM	2208 Douglas	13		.0049	.02
20T-5085	Rim Tool	BW	37891	1		1.50	.64
20T-5087	Equalizer - Long	JH	4MT-1399-1	1	105	8.875	3.74
20T-5116	Flap - 12.00 x 20				106	4.0	*
20T-5117	Pan - Rear Splash	SFA	UB-1135	4	106	1.6	1.20
20T-5130	Nipple - Close 1/2" Galv.	BWE	212324	1		.02	.12
20T-5131	Chain - 1/4" x 18"	JH		1	105	2.	.50
20T-5132	Cold Shut - 1/4" Chain	JH		1	105	.25	.12
20T-5133	Cable 1/4" x 11'3"	JH		1	105	2.5	1.20
20T-5134	Washer, Plain 3/16"	JH		32	**	.01	.05
20T-5135	Washer Plain, 1 1/4 ID x 2 1/4 OD x 1/8"	JH		A/R			
20T-5136	Washer, Plain, 1 1/4 ID x 3" OD x 5/32"						
20T-5138	Filter - Type 'E' (See page 123 for details of assembly.)	BWE	22174	2	98	4.5	5.
20T-5139	Cover - Filter	BWE	230108	2	98	1.06	.80
20T-5140	Plug - Drain	BWE	230111	2	98	.06	.16
20T-5141	Gasket - Cover	BWE	230109	2		.008	.04

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