

TM 55-1740-203-13&P

TECHNICAL MANUAL

**OPERATOR'S, AVIATION UNIT AND INTERMEDIATE
MAINTENANCE MANUAL
WITH
REPAIR PARTS AND SPECIAL TOOLS LIST**

**TRANSPORTER, AIRMOBILE, MODEL D761,
PART NO. 46692-01,
NSN: 1740-01-133-5671**

HEADQUARTERS, DEPARTMENT OF THE ARMY

11 OCTOBER 1984

CHANGE

NO. 2

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 29 July 1994

Operator's Aviation Unit and Intermediate
Maintenance Manual
With
Repair Parts and Special Tools List
TRANSPORTER, AIRMOBILE, MODEL D761
PART NO. 1674A
NSN: 1740-01-133-5671

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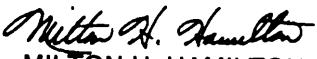
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Operator's, Aviation Unit and Intermediate
Maintenance Manual
With
Repair Parts and Special Tools List
TRANSPORTER, AIRMOBILE, MODEL D761

PART NO. 16747A

NSN: 1740-01-133-5671

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WARNING

To prevent injury to personnel, a minimum of two persons are required to disconnect front and rear transporter assemblies.

WARNING

To prevent injury to personnel caused by a falling container, use extreme caution when connecting safety cable.

WARNING

Cleaning solvent, Federal Specification P-D-680, is toxic and flammable, Use solvent in a well-ventilated area. Avoid prolonged breathing of vapors. Keep solvent swag from open frame. Do not use in excessive amounts.

OPERATOR'S, AVIATION UNIT, and INTERMEDIATE
MAINTENANCE MANUAL
with
Repair Parts and Special Tools List

TRANSPORTER, AIRMOBILE, MODEL D761, PART NO. 16747A

NSN: 1740-01-133-5671

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual, direct to Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished directly to you.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE.

- a. *Type of Manual.* Operator's, Aviation Unit and Intermediate Maintenance Manual Including Repair Parts and Special Tools List.
- b. *Model Number and Equipment Name.* Transporter, Airmobile, Model D761, Part Number 16747A. NSN 1740-01-133-5671.
- c. *Purpose of Equipment.* To provide mobility to Airmobile Couse Shelter or X-4 Field Container.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-751, The Army Maintenance Management System - Aviation.

1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

Procedures for destroying Army materiel to prevent enemy use are listed in TM 740-244-3.

1-4. PREPARATION FOR STORAGE OR SHIPMENT.

Instructions are provided in Chapter 4 and in TM 1-1500-204-23 (Series).

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs).

EIRs can and must be submitted by anyone who is aware of an unsatisfactory condition with the equipment design or use. It is not necessary to show a new design or list a better way to perform a procedure, just simply tell why the design is unfavorable or why a procedure is difficult. EIRs may be submitted on SF 368 (Quality Deficiency Report) in accordance with DA PAM 738-751. Mail directly to: Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798.

Section II. EQUIPMENT DESCRIPTION AND DATA

1-6. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.

- a. Highly Mobile
- b. Lightweight
- c. Air Transportable
- d. Towable
- e. Couples to Airmobile Couse Shelter or X-4 Field Containers

1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

(Refer to Figures 1-1 thru 1-3).

- a. TOWBAR . Connects transporter to tow vehicle.
- b. SURGE BRAKE ACTUATOR. Applies hydraulic pressure to transporter brakes when tow vehicle slows down.
- c. SAFETY CHAIN . Secures transporter to tow vehicle if lunette eye separates from tow vehicle pintle. Restricts turning radius to prevent damage to front transporter assembly.
- d. DETENT PIN . Locks towbar in up position.
- e. BRAKE ASSEMBLIES . Located on front wheels only. Activated by hand parking brake linkage or hydraulic pressure from the brake actuator.
- f. SHOCK-ABSORBING SPRING ASSEMBLIES. Located on front wheels only. Cushion and absorb road shocks at front wheels.
- g. FRONT TRANSPORTER FRAME. Connects front end of transporter to shelter or field container. Used with rear transporter frame to provide a fixed cargo platform.

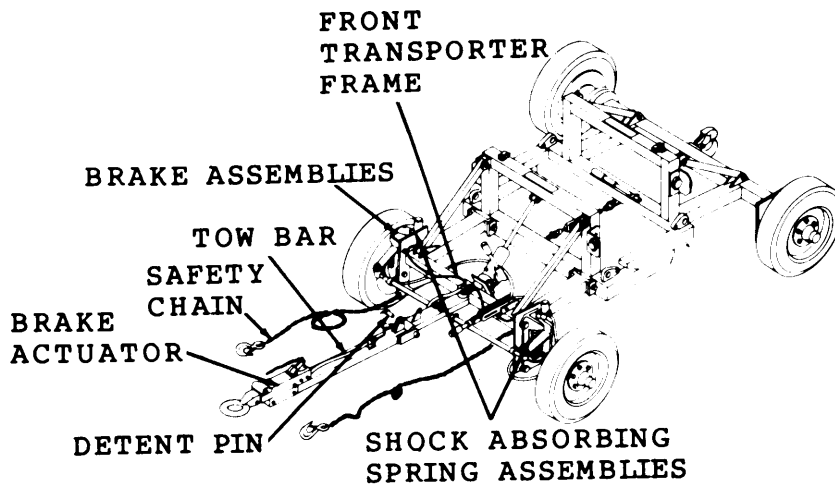


Figure 1-1. Major Components (Front).

**1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS -
Continued.**

- h. HYDRAULIC LINES. Direct hydraulic pressure from brake actuator to brake assemblies.
- i. HYDRAULIC JACKS. Two hydraulic jacks apply force to front and rear transporter assemblies. Used to raise shelter or containers to road clearance level.
- j. COUPLING HARDWARE. Connects front and rear transporter assemblies. Allows towing of transporter when shelter or container is not attached. Hardware consists of two bolts, two flat washers, two lockwashers and two nuts. Hardware stored in two quick clamps when not in use.
- k. JACK HANDLE STORAGE. Two quick clamps provide secure storage for jack handle when not in use. Storage areas located on front and rear transporter assemblies.
- l. SAFETY CABLE. Connects front and rear transporter assemblies to prevent accidental separation when shelter or container is attached. Adjusted by turnbuckle.
- m. BANJO SUSPENSION SPRING ASSEMBLIES. Cushion and absorb road shock at rear wheels. Located on rear transporter frame only.
- n. PINTLE HOOK. Allows connection of second transporter.
- o. LOCKOUT STRUTS. Four lockout struts support front and rear transporter frames in raised (road clearance) position.
- p. REAR TRANSPORTER FRAME. Connects rear end of transporter to shelter or field container. Used with front transporter frame to provide a fixed cargo platform.

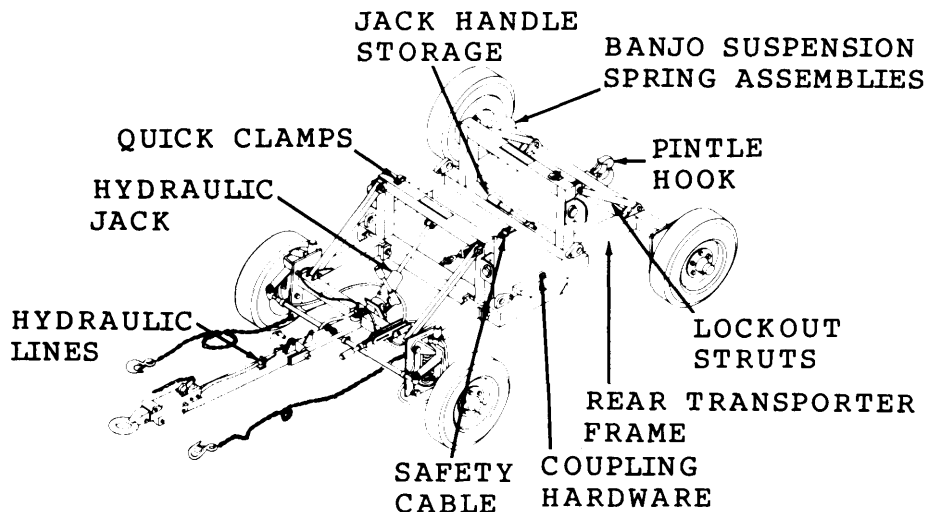


Figure 1-2. Major Components (Rear).

**1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS -
Continued.**

- q. DATA PLATES. Located on front and rear transporter frame.
- r. PARKING BRAKE. Prevents movement of transporter when disconnected from tow vehicle.

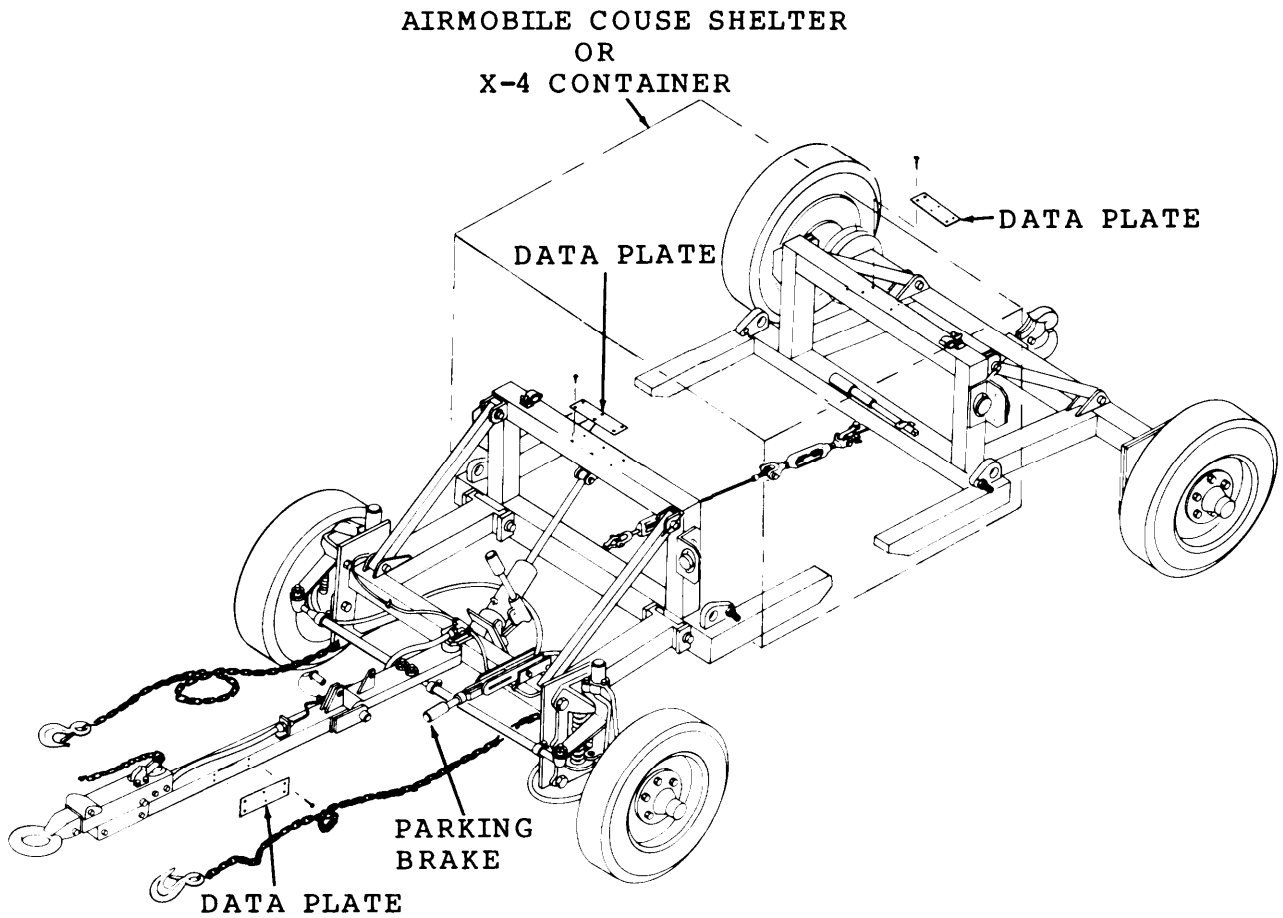


Figure 1-3. Major Components (Top).

1-8. DIFFERENCES BETWEEN MODELS.

No model differences exist on Airmobile Transporter Model D761, Part No. 16747A.

1-9. EQUIPMENT DATA.

Table 1-1 summarizes specific capabilities, limitations, and critical data for the transporter. This data is needed by the operator, aviation unit, and aviation intermediate maintenance unit to operate, maintain and repair the transporter.

Table 1-1. Equipment Data

Model number	D761
Part number	16747A
Weight	
Transporter empty	1250 pounds (544 kg)
Transporter capacity	4000 pounds (1814 kg)
Dimensions	
Width	72 inches (1.8 m)
Height (tow bar up)	75 inches (1.9 m)
Height (tow bar down)	37 3/4 inches (95.89 cm)
Length (tow bar up)	108 inches (2.75 m)
Maximum towing speed	
Paved roads	50 mph (31.1 km/hr)
Unimproved roads	15 mph (9.32 km/hr)
Tires	
Type	MS35338-9
Size	7:00-16
Tire pressure	
Paved roads	45 psi (3163.8 gm/cm ²)
Unimproved roads	25 psi (1757.7 gm/cm ²)

Section III. TECHNICAL PRINCIPLES OF OPERATION
1-10. FUNCTIONAL DESCRIPTION.

This section contains a functional description of the Transporter. The transporter is made up of five groups:

- a. *Suspension Frame Group*. The suspension frame group (Refer to **Figure 1-4**) consists of the following parts:

1-10. FUNCTIONAL DESCRIPTION - Continued.

a. Suspension Frame Group-Continued.

- (1) Suspension Frame. Airmobile Couse Shelter or X-4 Field Container can be mounted to front and rear suspension frames. Tines on each assembly are coupled when a load is not being transported.
- (2) Hydraulic Jacks. Hydraulic jacks on front and rear suspension frame are used to lift transporter and its load to travel configuration.
- (3) Lockout Struts. Two lockout struts on each transporter support the transporter and its load after being jacked up to transport configuration.
- (4) Reflector Brackets. Two reflector brackets on front suspension frame support two reflectors each. Two reflector brackets on rear suspension frame support two reflectors each.
- (5) Safety Cable. Safety cable connects to front and rear suspension frame shackles, except when transporting without payload.

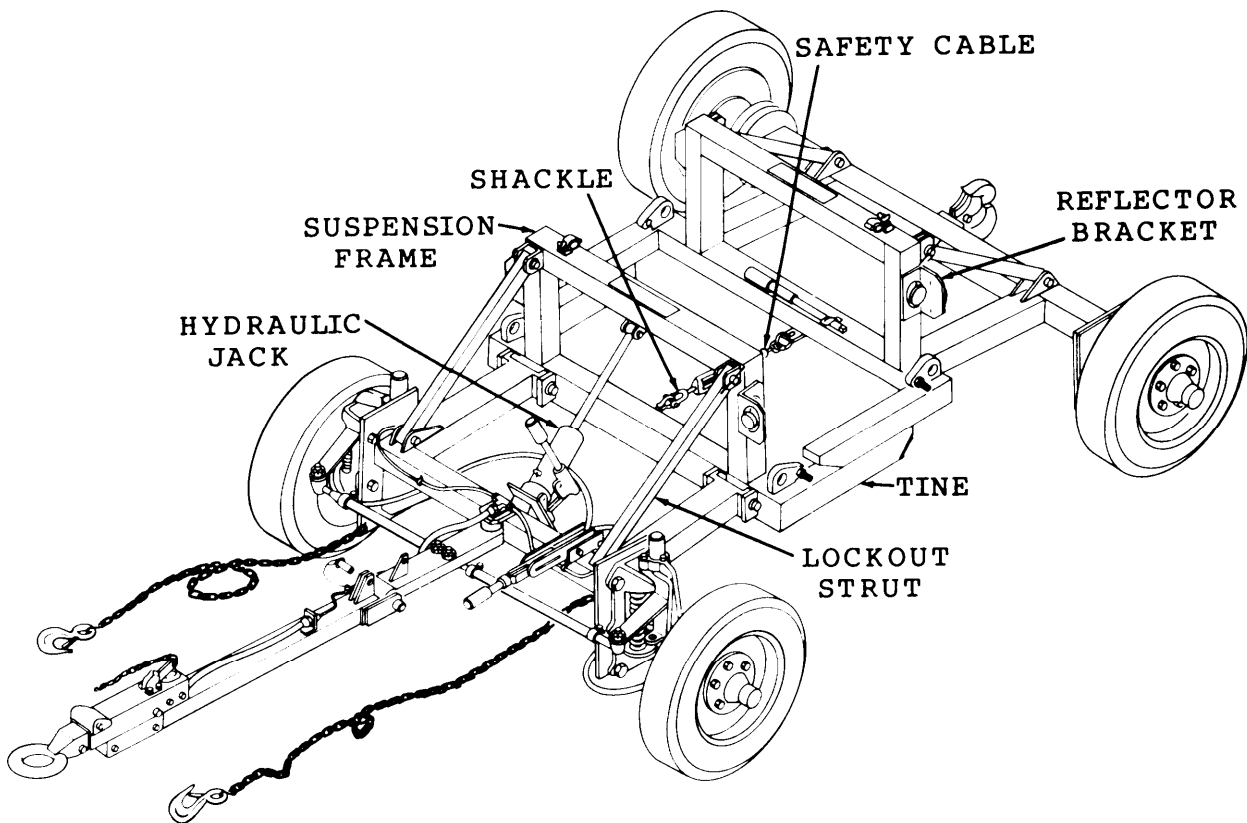


Figure 1-4. Suspension Frame Group Components.

1-10. FUNCTIONAL DESCRIPTION - Continued.

b. *Front Axle Group.* The front axle group (Refer to Figure 1-5) includes the following parts:

- (1) Axle Frame. Wheel mount shock-absorbing assemblies, brake system and towbar mount to axle frame.
- (2) Wheel Mount Shock-Absorbing Spring Assemblies. Wheels are mounted on these assemblies. Each assembly contains six springs that absorb road shock; a kingpin as the steering pivot; and hydraulic/mechmicd brakes.
- (3) Tie Rod Assemblies. Tie rods connect each wheel mount shock absorbing assembly to center steering arm.
- (4) Towbar. Towbar connects to center steering arm with hinge pin. Brake master cylinder mounts on towbar.
- (5) Safety Chains. Safety chains are connected between suspension frame and towbar. They also limit turning radius.

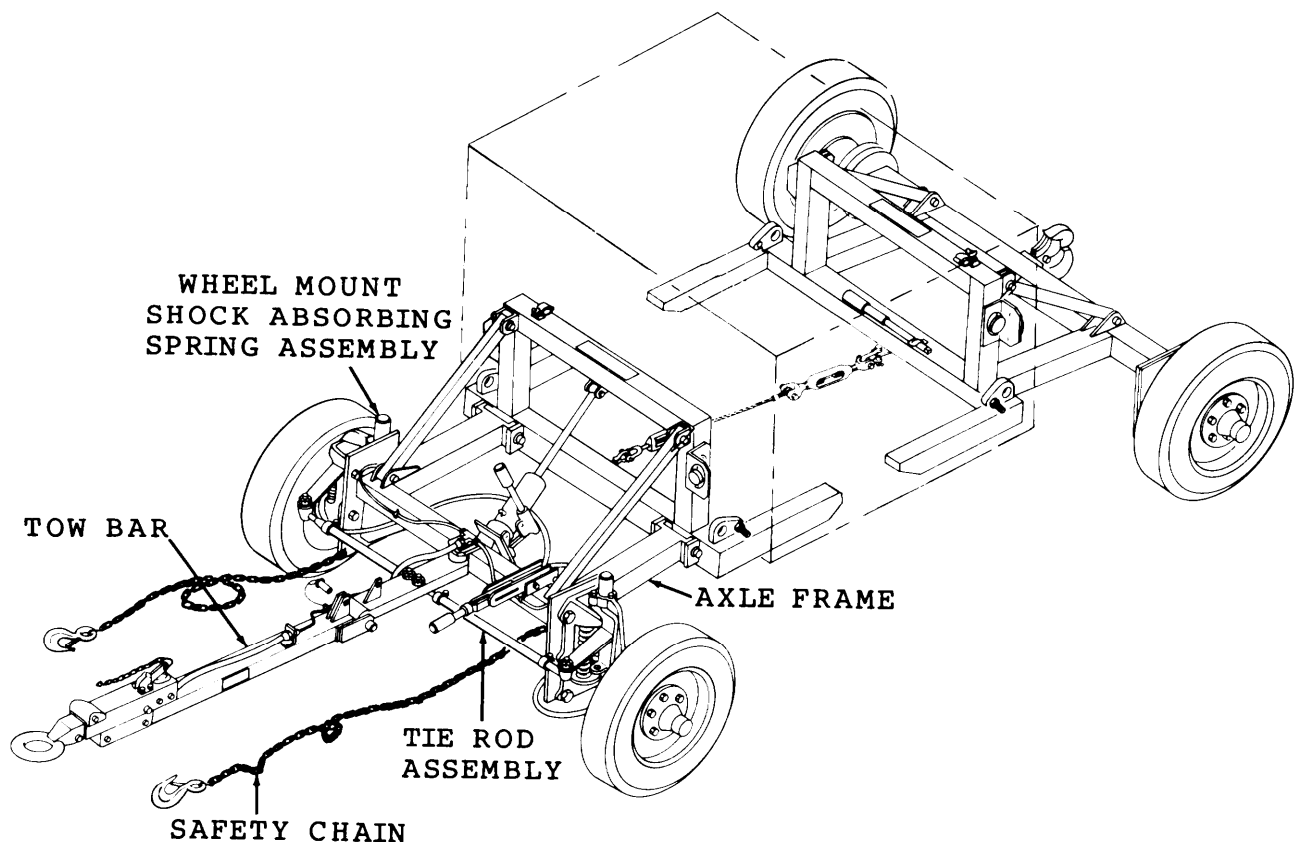


Figure 1-5. Front Axle Group Components.

1-10. FUNCTIONAL DESCRIPTION -Continued

c. *Rear Axle Group.* The rear axle group (Refer to Figure 1-6) includes the following parts:

- (1) Axle Frame. Banjo spring suspension assemblies are mounted to the frame. Pintle hook also mounts to frame.
- (2) Banjo Suspension Spring Assemblies. Each banjo suspension spring assembly contains seven springs that absorb road shock.
- (3) Pintle Hook. Provides a means to tow another trailer in tandem.

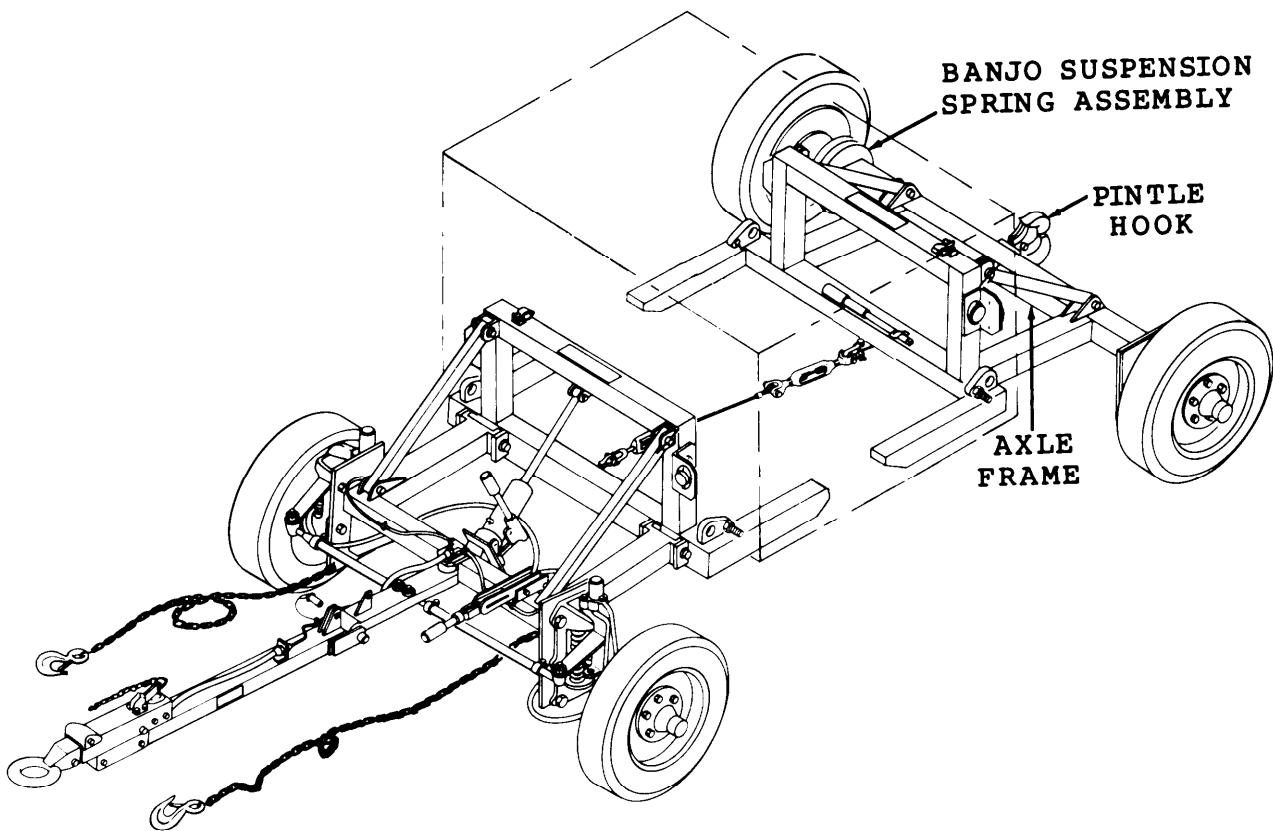


Figure 1-6. Rear Axle Group Components.

1-10. FUNCTIONAL DESCRIPTION - Continued.

d. *Brake Group.* The brake group (Refer to Figure 1-7), located on the front transporter assembly, consists of the following parts.

- (1) Mechanical Parking Brake Lever and Linkage. Links to hydraulic brake shoes and lining.
- (2) Surge Brake Actuator. Actuator is mounted on towbar. When brakes on tow vehicle are applied, trailer pushes against tow vehicle causing actuator to compress and exert a force on master cylinder that supplies hydraulic pressure to front brakes.
- (3) Wheel Cylinders and Brake Shoes. Wheel cylinders apply pressure to brake shoes.

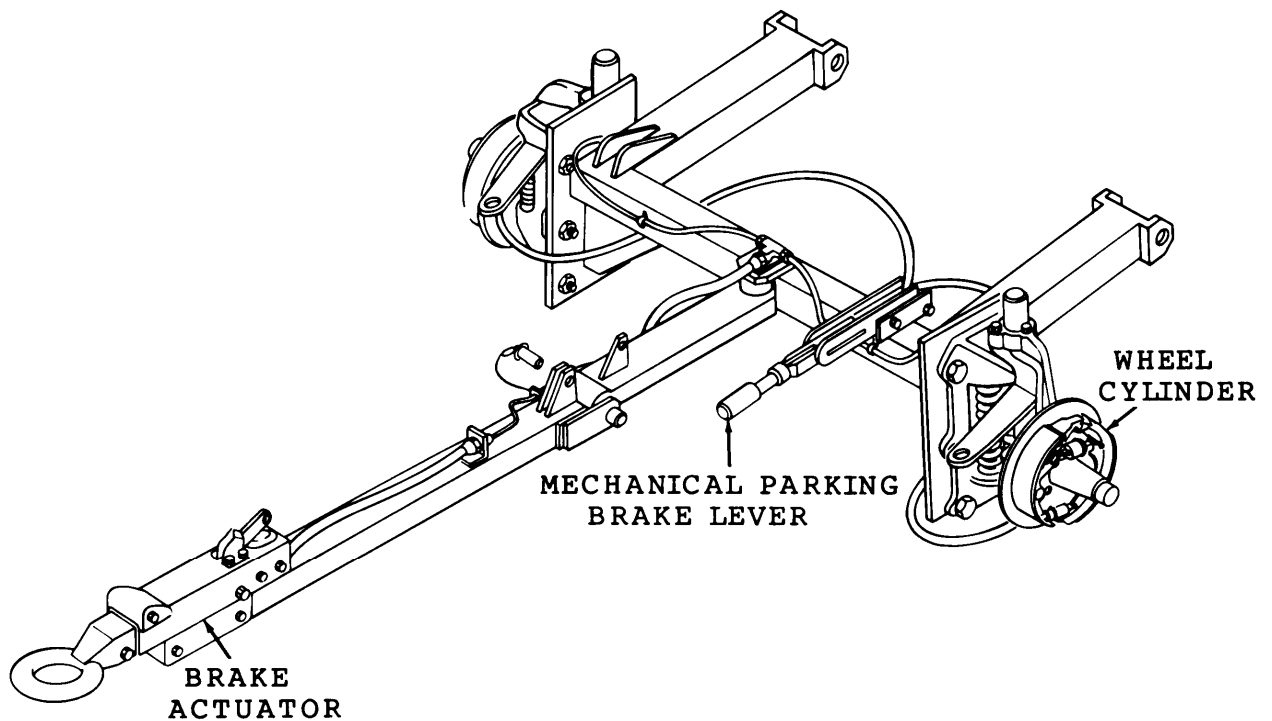


Figure 1-7. Brake Group Components.

1-10. FUNCTIONAL DESCRIPTION - Continued.

e. *Wheel Group.* The wheel group (Refer to Figure 1-8) consists of the following parts:

- (1) Tires and Tubes.
- (2) Wheels.
- (3) Hub Assemblies (rear) or drum and hub assemblies (front).

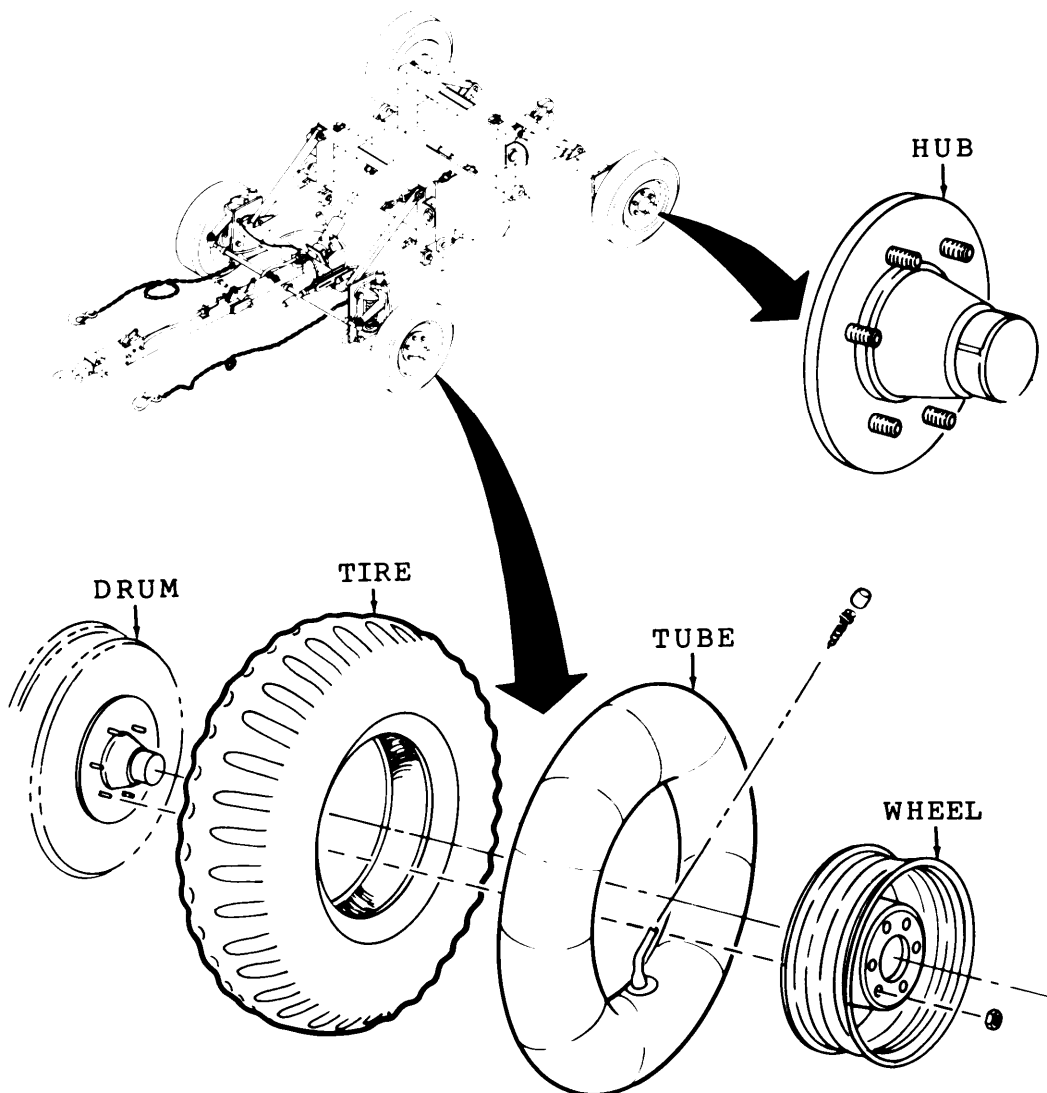


Figure 1-8. Wheel Group Components.

CHAPTER 2

OPERATING INSTRUCTIONS

Section I. DESCRIPTION AND USE OF OPERATORS CONTROLS AND INDICATORS

2-1. SCOPE.

This chapter describes, illustrates and furnishes the operator with information pertaining to the various controls provided for operation of the transporter.

2-2. CONTROLS AND INDICATORS. (Refer to Figure 2-1).

- a. Safety cable (1) Figure 2-1 attaches to Shackles (2) on transporter assetilies and is tightened by adjusting both turnbuckles (3) .
- b. Eye brackets (4) hold Airmobile Couse Shelter in place using bolt and lanyard assembly on Airmobile Couse Shelter.
- c. Parking brake lever (5) controls brakes on front transporter.
- d. Safety chains (6) attach to towing vehicle.
- e. Lunette eye (7) on towbar (8) attaches to pintle hook of towing vehicle.
- f. Hydraulic jack handles (9) are used to pump jacks to raise shelter to travel configuration.
- g. Clamps (10) on frame are used to stow the hardware used to connect the front and rear frames together when not carrying a payload.
- h. Brake safety chain (11) is attached to towing vehicle.

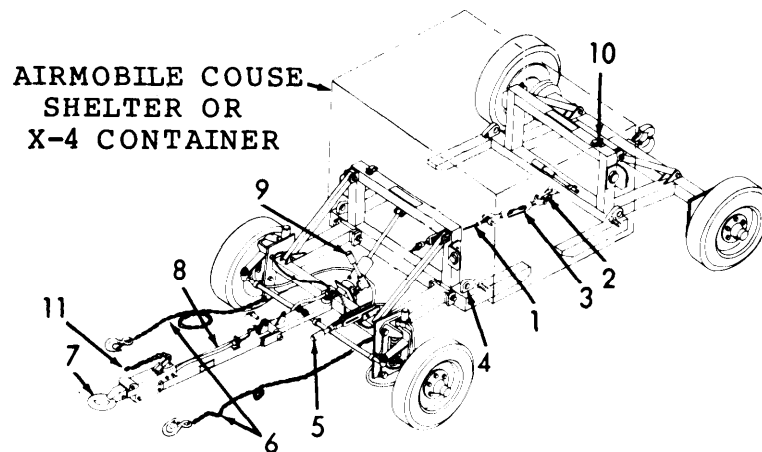


Figure 2-1. Controls and Indicators.

Section II. OPERATOR'S PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

2-3. GENERAL.

- a. Before You Operate. Always keep in mind the WARNINGS and CAUTIONS. Perform your before (B) PMCS.
- b. While You Operate. Always keep in mind the WARNINGS and CAUTIONS. Perform your during (D) PMCS.
- c. After You Operate. Be sure to perform your after (A) PMCS.
- d. If Transporter Fails to Operate. Troubleshoot in accordance with Table 3-2. Report any deficiencies using the proper forms. See TM 38-750.

2-4. PMCS PROCEDURES.

- a. The PMCS table lists those required checks and services to be performed by personnel who operate the transporter.
- b. PMCS Columnar Entries. Columns in table 2-1 are identified as follows:
 - (1) Item Number. The item number column shall be used as a source of item numbers for the TM Number column on DA Form 2404, Equipment Inspection and Maintenance Worksheet, in recording results of PMCS.
 - (2) Interval. This column indicates the required time when checks are to be performed.
 - (3) Item To Be Inspected. Contains the name of item to be checked.
 - (4) Procedures. Provides brief description of procedure by which check is to be performed.
 - (5) Equipment Is Not Ready/Available If: Lists reason that will cause transporter to be classified as not ready/available.

Table 2-1. Operator Preventive Maintenance Checks and Services

NOTE: Within designated interval these checks are to be performed in the order-listed below.

B-Before

D-During

A-After

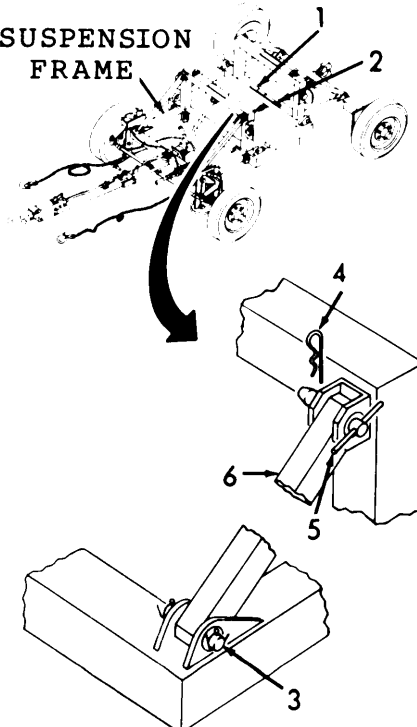
item No.	Interval			Item to be Inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment Is Not Ready/ Available If:
	B	D	A			
1	•		•	Front Framee Assembly	Check that jack handle (1) is stowed in quick clamps (2).	
				Suspension Frame		
2		•		Lockout Struts	Check that lower strut straight pins (3) are securely installed. Check that upper strut locking pins (4) are installed in tee pins (5). Inspect front lockout struts (6) for damage.	Lockout struts damaged or missing.
				<p>SUSPENSION FRAME</p>  <p>LEFT FRONT LOCKOUT STRUT SHOWN. RIGHT LOCKOUT STRUT IS SIMILAR.</p>		

Table 2-1. Operator Preventive Maintenance Checks and Services - Continued

Item No.	Interval			Item to be Inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment Is Not Ready/ Available If:
	B	D	A			
3	●			Turnbuckle	Inspect for cracks and damage.	Turnbuckle is broken.
4	●			Safety Cable	Inspect safety cable for damage and corrosion.	Safety cable is damaged or missing.

Table 2-1. Operator Preventive Maintenance Checks and Services - continued

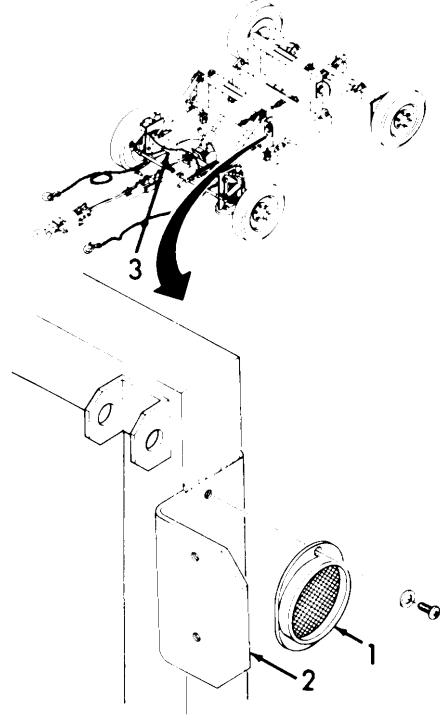
Item No.	Interval			item to be Inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment Is Not Ready/ Available If:
	B	D	A			
5	•			Reflectors	Inspect for cracked or missing reflectors (1).	Damaged axle frame.
6			e	Reflector Brackets Front Axle Assembly	Inspect for cracked or damaged reflector brackets (2).	
7	•			Axle Frame	Inspect axle frame (3) for cracks, broken welds, and damaged or missing parts.	
						
<p>LEFT FRONT REFLECTOR AND BRACKET SHOWN. RIGHT FRONT IS SIMILAR.</p>						

Table 2-1. Operator Preventive Maintenance Checks and Services - Continued

Item No.	Interval			Item to be Inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment Is Not Ready/ Available If:
	B	D	A			
8	●			Left and Right Shock Absorbing Assemblies	Inspect for cracks, damaged springs (1), and security of mounting hardware.	Springs are broken.
9	●			Left and Right Tie Rod Ends	Inspect tie rod ends (2) for damage, wear, and out of adjustment condition.	Tie rod ends are badly damaged.
10	●		●	Steering Center Arm Pin.	Check pin (3) for security.	Pin missing or broken.
11	●		●	Front Wheels	a. Inspect front tires (4) for deep cuts, excessive wear, correct inflation pressure, and cord damage. b. Inspect front wheels (5) for damage.	Tires damaged. Wheels damaged.

Table 2-1. Operator Preventive Maintenance Checks and Services - continued

Item No.	Interval			item to be Inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment Is Not Ready/ Available If:
	B	D	A			
12	•			Master Cylinder	Inspect master cylinder (1) for damage and fluid leakage.	Master cylinder leaks.
13			•	Damper	Inspect damper (2) for security and damage.	
14	•		•	Hydraulic Jack	Inspect jack (3) for leakage.	Jack leaks excessively.
15	•	•		Parking Brake	<p>a. Inspect parking brake handle (4) for damage.</p> <p>b. Set parking brake (4). Brake must prevent transporter from rolling.</p>	

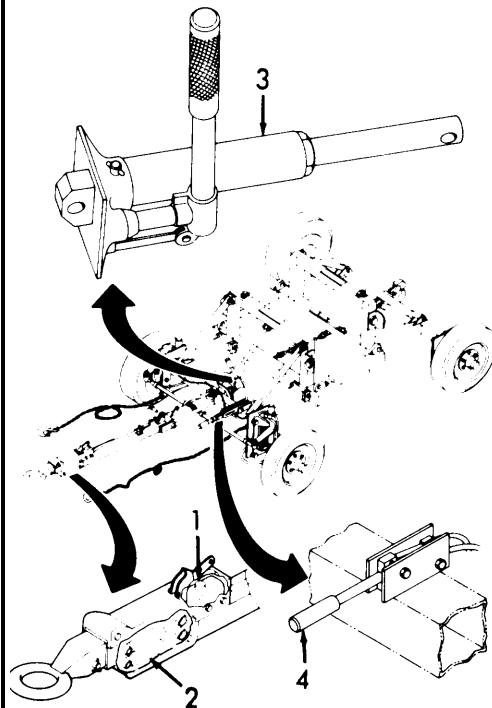
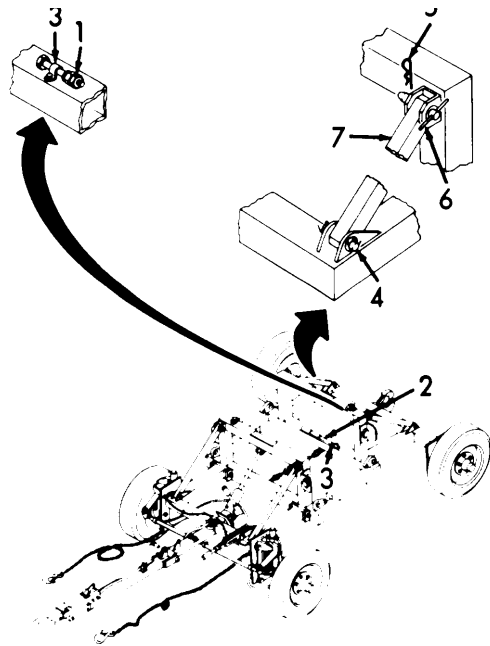


Table 2-1. Operator Preventive Maintenance Checks and Service8 - continued

Item No.	Interval			Item to be Inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment Is Not Ready/ Available If:
	B	D	A			
16	●		●	Rear Frame Assembly	Check that coupling hardware (1) and jack handle (2) are stowed in quick clamps (3).	
				Suspension Frame		
17	●		●	Lockout Struts	Check that lower struts straight pins (4) are securely installed. Check that upper strut locking pins (5) are installed in tee pins (6). Inspect rear lockout struts (7) for damage.	Lockout struts damaged or missing.



RIGHT REAR LOCKOUT STRUT SHOWN. LEFT REAR IS SIMILAR.

Table 2-1. Operator Preventive Maintenance Checks and Services - Continued

Item No.	Interval			item to be Inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment Is Not Ready/ Available If:
	B	D	A			
18	●			Reflector	Inspect for cracked or missing reflectors (1).	
19			●	Reflector Brackets Rear Axle Assembly	Inspect for cracked or missing reflector brackets (2).	
20	●			Axle Frame	Inspect rear axle frame (3) for cracks, broken welds, and damaged or missing parts.	

LEFT REAR REFLECTOR AND BRACKET SHOWN. RIGHT REAR IS SIMILAR.

Table 2-1. Operator Preventive Maintenance Checks and Services - Continued

Item No.	Interval			Item to be Inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment Is Not Ready/ Available If:
	B	D	A			
21	●			Banjo Suspension	Inspect rear banjo suspension (1) for damage.	Damaged suspension.
22	●			Wheels and Tires	a. Inspect rear tires (2) for deep cuts, excessive wear, correct inflation pressure, and cord damage. b. Inspect rear wheels (3) for damage.	Damaged tires. Damaged wheels.
23	●			Hydraulic Jack	Inspect rear hydraulic jack (4) for leakage.	Jack leaks excessively.

RIGHT REAR BANJO SUSPENSION SHOWN. LEFT REAR IS SIMILAR.

Section III. OPERATION UNDER USUAL CONDITIONS

2-5. GENERAL.

This section contains instructions for operating the transporter under usual conditions. Instructions for operating the transporter under unusual conditions are found in Chapter 2, Section IV.

2-6. ASSEMBLY AND PREPARATION FOR USE.

Before operating the transporter, perform the before preventive maintenance checks and services listed in table 2-1.

2-7. TOWING TRANSPORTER AS A UNIT.

- a. Connect the front and rear transporter assemblies together by first aligning holes in tines on rear transporter over holes in tines in front transporter. Insert bolt and flat washer through tines and then install flat washer, lockwasher, and nut as shown in Figure 2-2

CAUTION

TRANSPORTER MUST NOT BE BACKED UP. When tow vehicle attempts to back up with transporter attached; braking action occurs. Backing up will damage the transporter.

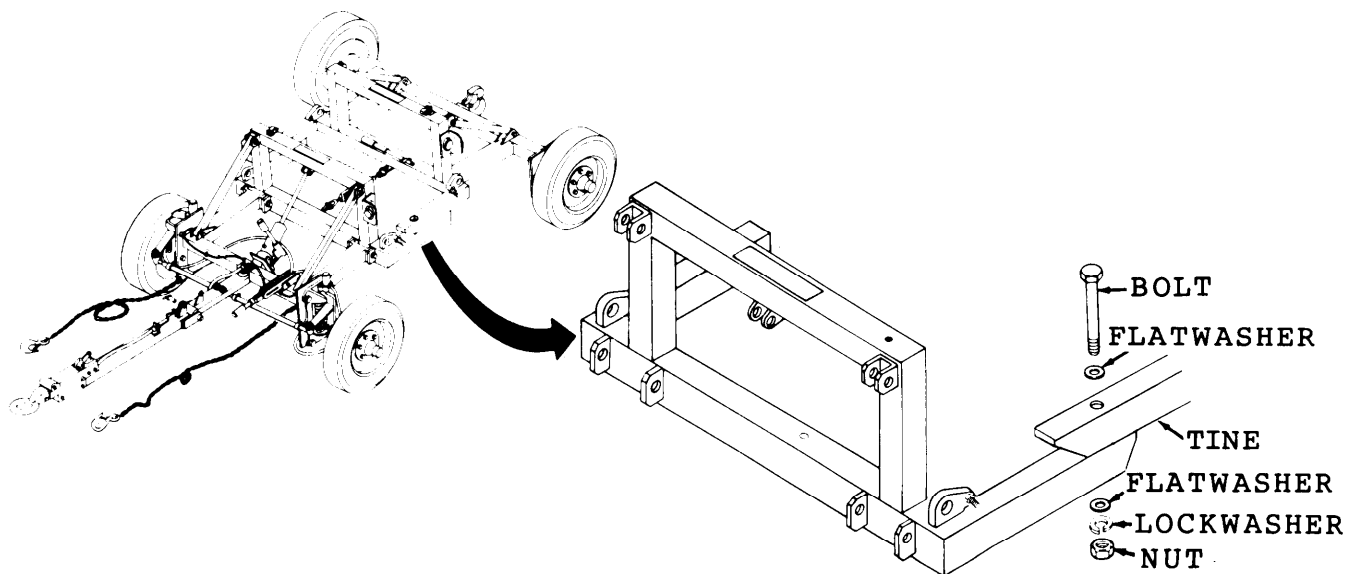


Figure 2-2. Front and Rear Assemblies Connection.

2-7. TOWING TRANSPORTER AS A UNIT - Continued.

- b. Attach safety cable to rear transporter shackle (Refer to Figure 2-3).
- c. Wind safety cable around rear transporter frame to prevent cable from dragging on ground.
- d. Attach other end of safety cable to front transporter assembly.
- e. Connect lunette eye of towbar into pintle hook of tow vehicle and lock pintle hook.
- f. Secure pintle hook safety chain.
- g. Connect two towing safety chains and brake safety chain to tow vehicle.
- h. Release hand parking brake on front transporter.

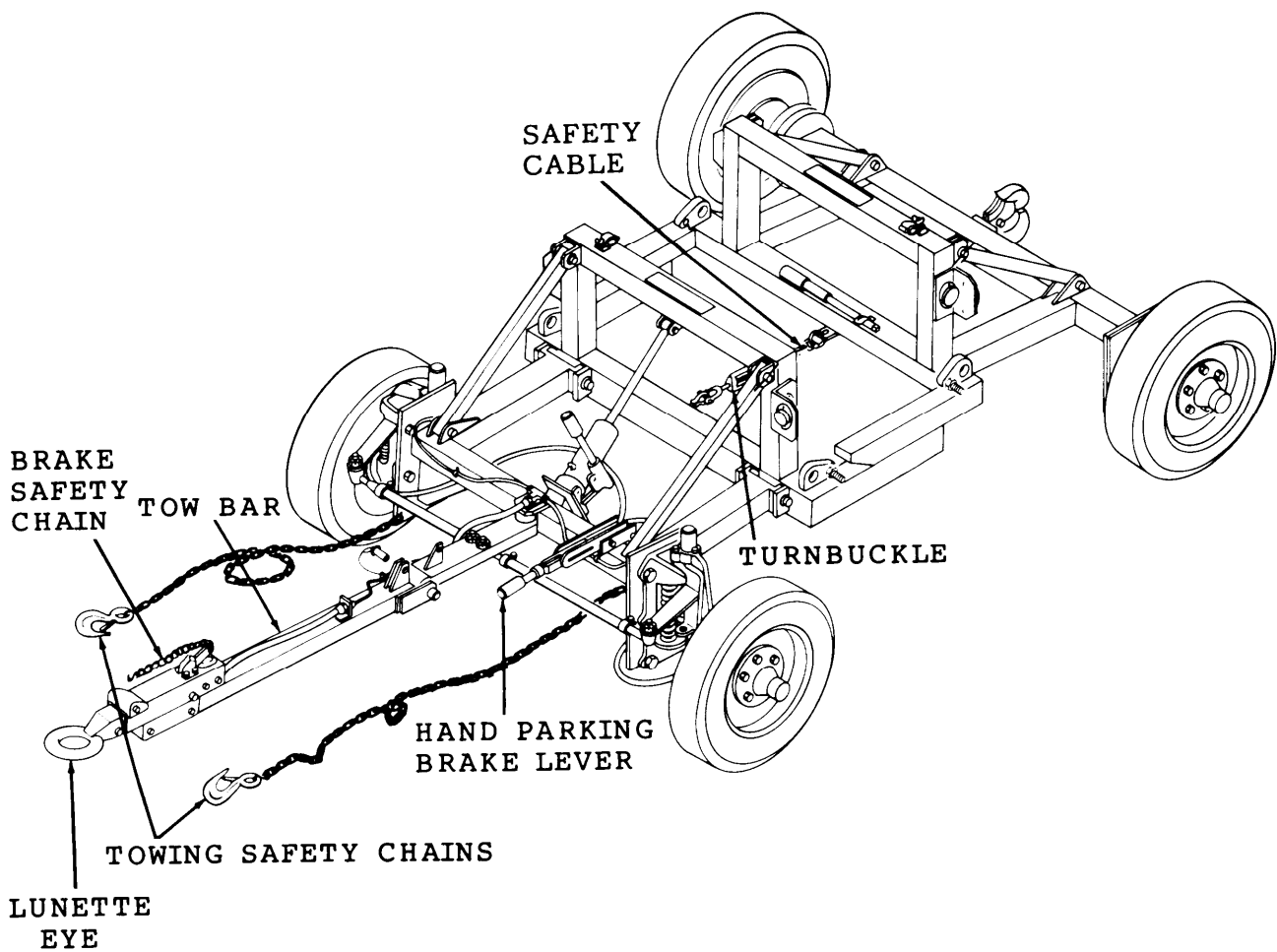


Figure 2-3. Safety Chain Connection.

2-8. ATTACHING TRANSPORTER ASSEMBLIES TO SHELTER OR CONTAINER. (Refer to Figure 2-4).

Attach the front and rear transporter assemblies to a shelter or container as follows:

- a. Uncouple transporter from tow vehicle and apply hand brake.

WARNING

To prevent injury to personnel a minimum of two persons are required to disconnect front and rear transporter assemblies.

- b. Disconnect the safety cable from the rear transporter assembly, making sure safety cable remains attached to front transporter assembly.
- c. Block wheels of rear transporter assembly to prevent rolling.
- d. Disconnect front and rear assemblies by removing two nuts, six washers, and two bolts from tine assemblies.
- e. Align transporter assemblies so that their front tines are directly in line with the outer tine brackets of the shelter or container.
- f. Disconnect lockout struts by removing T-pins from top of strut.
- g. Pivot lockout struts away from transporter tines.

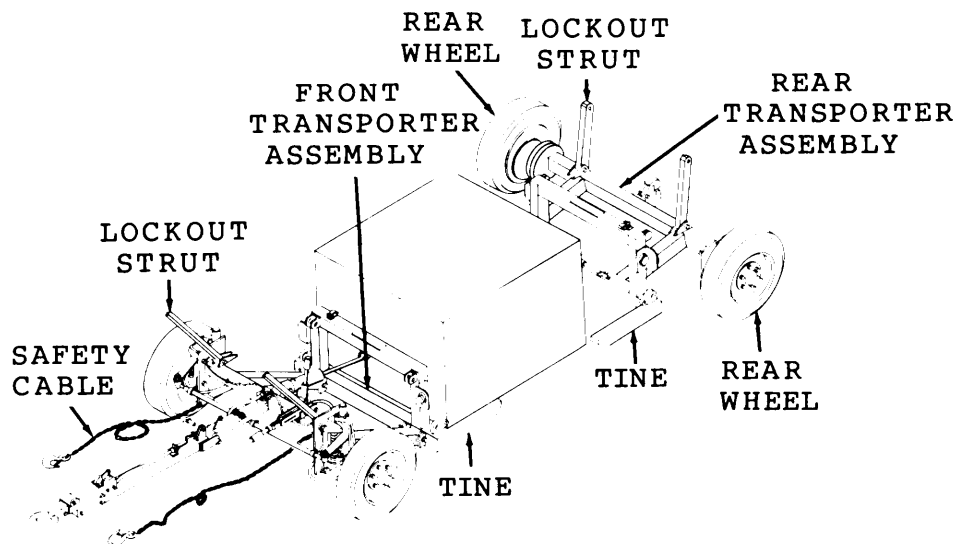


Figure 2-4. Attaching Transporter to Container or Shelter.

2-8. ATTACHING TRANSPORTER ASSEMBLIES TO SHELTER OR CONTAINER - Continued.

- h. Bleed hydraulic jacks to fully retracted position, by turning bleed screw at base of jack counterclockwise (left).
- i. Position transporter assembly tines in tine brackets of shelter on container base.
- j. Aline hole in shelter mounting bracket with hole in transporter shelter mounting bracket.
- k. Install locking device to secure shelter to transporter.

2-9. LIFTING TRANSPORTER AND SHELTER OR CONTAINER TO TRAVEL CONFIGURATION.

After securing shelter or container to transporter assembly; refer to Figure 2-5 and proceed as follows:

- a. Remove hydraulic jack handles from quick clamps on front and rear suspensions frames.
- b. Close bleed valves and insert handles in jacks.
- c. Pump each jack until cylinder exerts a lifting pressure on transporter assembly. When each jack has reached this point, the shelter is ready for lifting.
- d. Position one person at each jack and raise shelter evenly by pumping jacks at the same time.
- e. Pump jacks until lockout struts can be pivoted into place without striking shelter or container. Continue pumping jacks until T-pins can be inserted into brackets and through lockout struts on transporter assembly.
- f. Insert locking pins into T-pins.
- g. Apply the parking brake.

WARNING

To prevent injury to personnel caused by falling container, use extreme caution when connecting safety cable.

- h. Using extreme caution, attach the safety cable to the rear transporter assembly and tighten turnbuckle.

2-9. LIFTING TRANSPORTER AND SHELTER OR CONTAINER TO TRAVEL CONFIGURATION - Continued.

- i. Remove jack handles from jacks and stow in quick clamp front and rear suspension frames.
- j. Connect lunette eye of towbar pintle assembly on tow vehicle.
- k. Lock pintle hook and secure pintle hook safety chain.
- l. Connect two towing safety chains and brake safety chain to tow vehicle.
- m. Release parking brake on transporter. Transporter can now be towed.

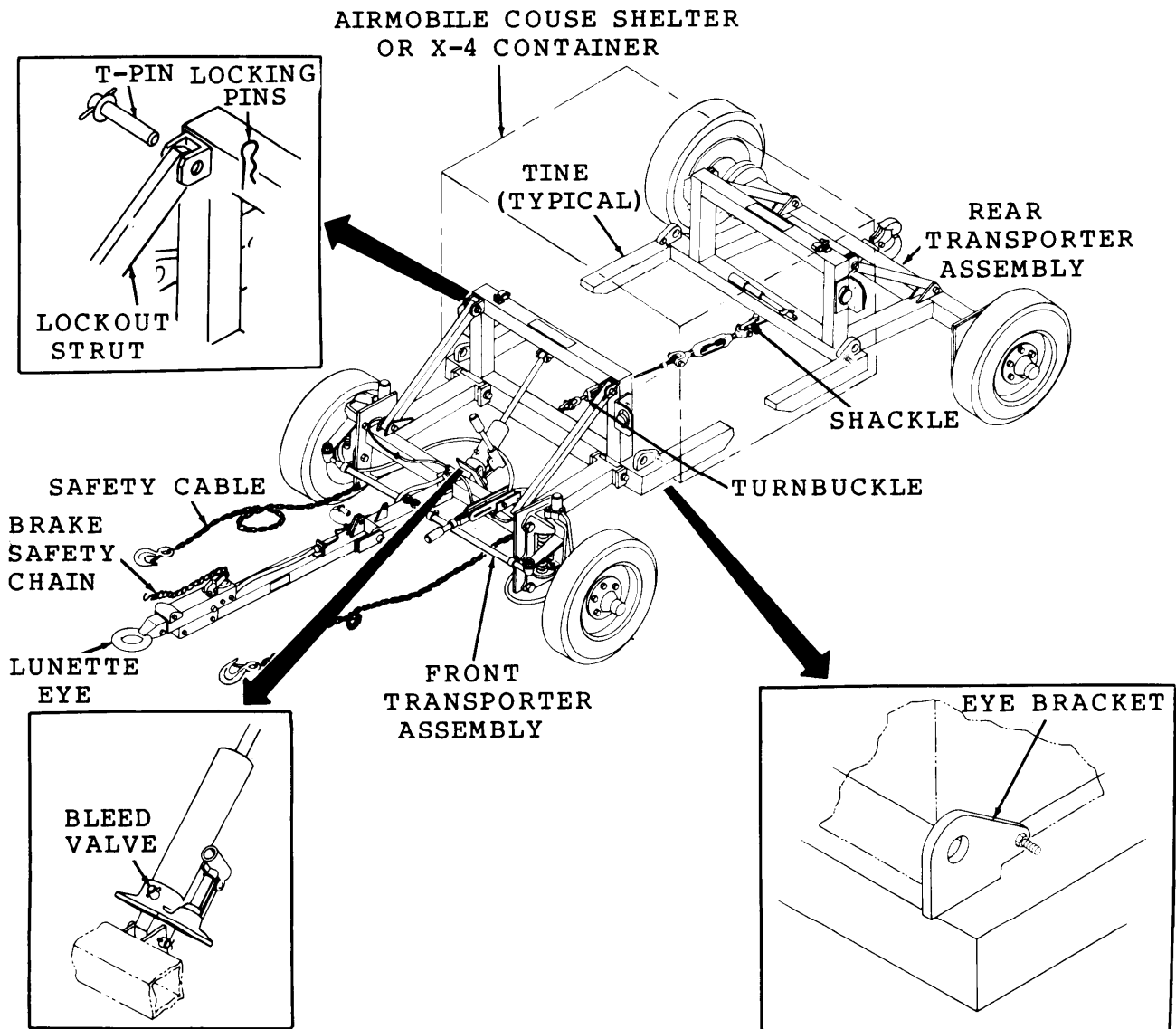


Figure 2-5. Lifting Transporter to Travel Configuration.

Section IV. OPERATION UNDER UNUSUAL CONDITIONS

2-10. GENERAL.

This section contains instructions for operating transporter under unusual conditions.

2-11. OPERATION IN RAINY OR HUMID CONDITIONS.

Frequently inspect, clean, and lubricate equipment to prevent rust and fungus accumulation.

2-12. OPERATION IN WATER.

- a. Salt water will cause metal parts to rust and corrode. Clean, inspect, and lubricate frequently.
- b. Clean, inspect, and lubricate immediately after fording or when tactical situation permits.

2-13. OPERATION IN SNOW.

Refer to FM 21-305 for special instructions on operation in snow.

2-14. OPERATION IN MUD.



When operating with reduced tire pressure, do not exceed 5 mph. Do not drive for a long distance. Tire damage will result.

- a. For maximum mobility in mud, reduce tire pressure to 25 psi.
- b. If one or more wheels sink into the mud, it may be required to jack up the mired wheel and insert planking or matting beneath it.
- c. Clean off all mud as soon as possible after operation.

2-15. OPERATION IN DUSTY OR SANDY AREAS.

When operating with reduced tire pressure, do not exceed 5 mph. Do not drive for a long distance. Tire damage will result.

- a. For maximum mobility in sand, reduce tire pressure to 25 psi.
- b. Frequently clean, inspect, and lubricate the transporter.

CHAPTER 3

AVIATION UNIT MAINTENANCE- MAINTENANCE INSTRUCTIONS

Section I. REPAIR PARTS, SPECIAL TOOLS, TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT, (TMDE), AND SUPPORT

3-1. COMMON TOOLS AND EQUIPMENT.

For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment (MTOE) applicable to your unit.

3-2. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT.

No special tools, TMDE, or support equipment is required for the Air-mobile Transporter.

3-3. REPAIR PARTS.

Repair parts are listed and illustrated in Appendix C of this manual.

Section II. SERVICE UPON RECEIPT

3-4. GENERAL

This section contains instructions for service to be performed by the using organization upon receipt of a new or overhauled airmobile transporter. These services include checking, unpacking, and servicing the transporter.

3-5. CHECKING AND UNPACKING EQUIPMENT.

- a. Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on SF 364, Reports of Discrepancies.
- b. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with the instructions of TM 38-750.
- c. Check to see whether the equipment has been modified.
- d. Remove strapping, tapes, seals, and other protective shipping materials.

3-5. CHECKING AND UNPACKING EQUIPMENT - Cont inued.

e. Refer to Figure 3-1 and connect safety cable to front and rear transporter frames as follows:

- (1) Position turnbuckle (1, Figure 3-1) and shackle (2) on rear transporter frame eye (5).
- (2) Install pin (3) and cotter pin (4).
- (3) Position turnbuckle (6) and shackle (7) on front transporter frame eye (10).
- (4) Install pin (8) and cotter pin (9).

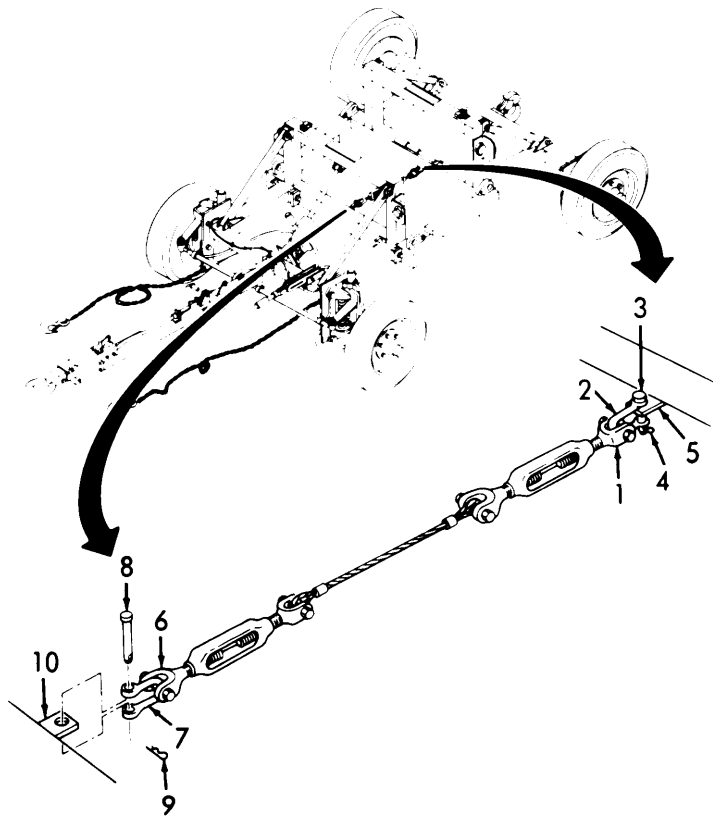


Figure 3-1. Safety Cable Connection.

3-6. SERVICING THE EQUIPMENT.

Perform preventive maintenance checks and services contained in tables 2-1 and 3-1.

Section III. AVIATION UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

3-7. PMCS PROCEDURES.

- a. PMCS in table 3-1 lists those required checks and services to be performed by personnel who service and maintain the transporter. PMCS in this section shall be performed on a monthly and quarterly basis.
- b. PMCS Columnar Entries. Columns in table 3-1 are identified as follows :
 - (1) Item Number. The item number column shall be used as a source of item numbers required for the TM Number column on DA Form 2404, Equipment Inspection and Maintenance Worksheet, in recording results of PMCS.
 - (2) Interval. This column indicates the required time which checks are to be performed.
 - (3) Item To Be Inspected. Contains the name of item to be inspected.
 - (4) Procedures. Provides brief description of procedure by which checks are to be performed.

Table 3-1. Aviation Unit Preventive Maintenance Checks and Service8

NOTE: Within designated interval, these checks are to be performed in the order listed.

M-Monthly

Q-Quarterly

Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
			Front Frame Assembly	
1		•	Suspension Frame	Inspect front suspension frame (1) for cracks, damage, or defects.
2	•		Front Wheel Bearing Seals	Inspect wheel bearing seals (2) and dust caps (3) for evidence of lubrication leakage.
3		•	Master Cylinder	Raise towbar (4) until level with ground. Remove cap (5) from master cylinder (6). Add brake fluid (MIL-B-46176) to cylinder, as required. Replace cap and lower towbar.

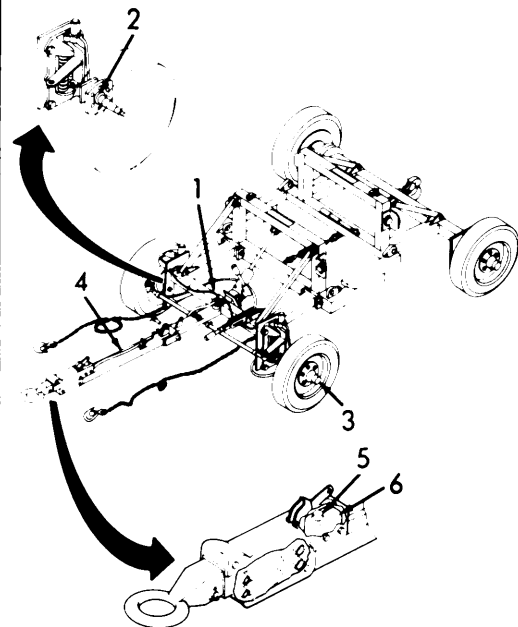


Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - continued

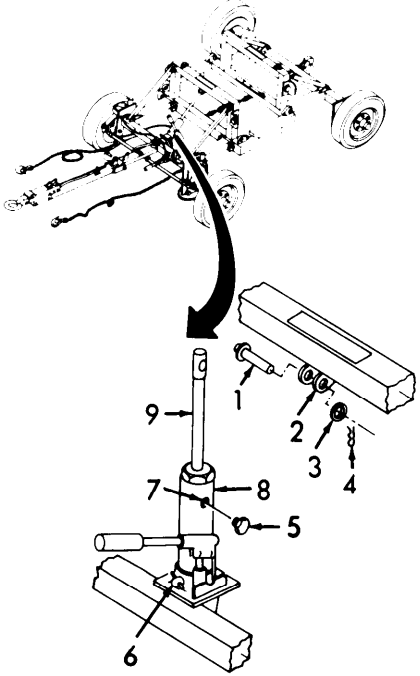
Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
4		•	Hydraulic Jack	<p>a. Remove cotter pin (4), washer (3), and straight pin (1). Place hydraulic jack (8) in a vertical position, loosen bleed valve (6) and fully retract cylinder (9). Remove plug (5) and add hydraulic fluid (MIL-H-5606) until fluid level is even with bottom of filler hole (7).</p> <p>b. Replace plug (5). Close bleed valve (6) and pump hydraulic jack (8) until cylinder (9) can be alined with bracket (2). Install straight pin (1), washer (3), and new cotter pin (4).</p> 

Table 3-1. Aviation Unit preventive Maintenance Checks and Services - Continued

Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
			Rear Frame Assembly	
5		●	Suspension	Inspect rear suspension frame (1) for cracks, damage, or defects.
6		●	Rear Wheel Bearing Seals	Inspect wheel bearing seals (2) and dust caps (3) for evidence of lubrication leakage.

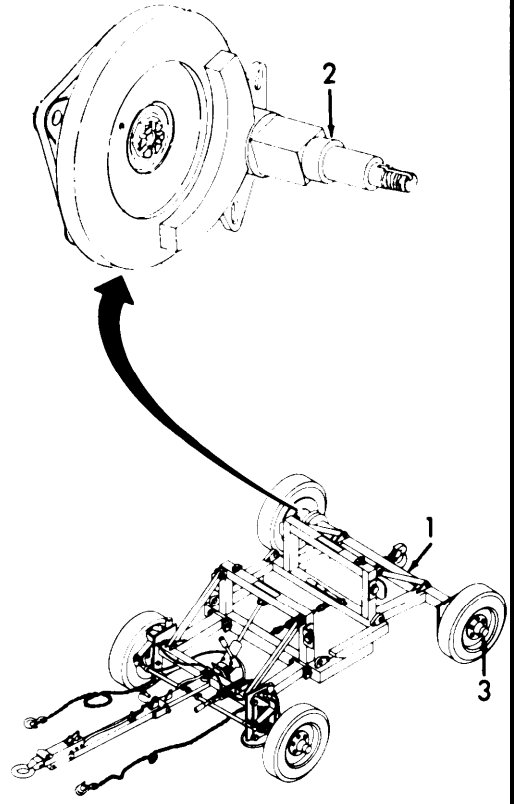


Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - Continued

Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
7		●	Hydraulic Jack	<p>a. Remove cotter pin (1), washer (2), and straight pin (3). Place hydraulic jack (5) in a vertical position, loosen bleed valve (8) and fully retract cylinder (4). Remove plug (7) and add hydraulic fluid (MIL-H-5606) until fluid level is even with bottom of filler hole (6).</p> <p>b. Replace plug (7). Close bleed valve (8) and pump hydraulic jack (5) until cylinder (4) can be aligned with bracket (9). Install straight pin (3), washer (2), and new cotter pin (1).</p>

Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - continued

Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
8		•	Transporter	<p>Lubricate transporter with grease (GAA) as follows:</p> <ol style="list-style-type: none"> Clean all fittings to remove dirt buildup. Lubricate transporter at points shown. Wipe off excess grease. <p>*WHEEL MOUNT SHOCK ABSORBING SPRING ASSEMBLY (2 PLACES) (GF)</p> <p>STEERING CENTER ARM (GF)</p> <p>*TIE ROD ENDS (GF)</p> <p>*BANJO SPRING ASSEMBLY REAR THRUST BEARING (GF)</p> <p>*PINTLE HOOK</p> <p>*BANJO (2 PLACES) (GF)</p> <p>SUSPENSION SPRING ASSEMBLY (GF)</p> <p>NOTES: (GF) DENOTES GREASE FITTING. * DENOTES LUBRICATION POINTS ON BOTH SIDES OF TRANSPORTER.</p>
			All	

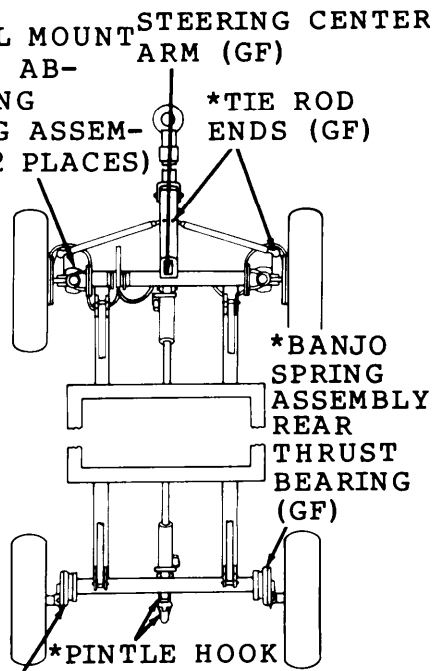


Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - Continued

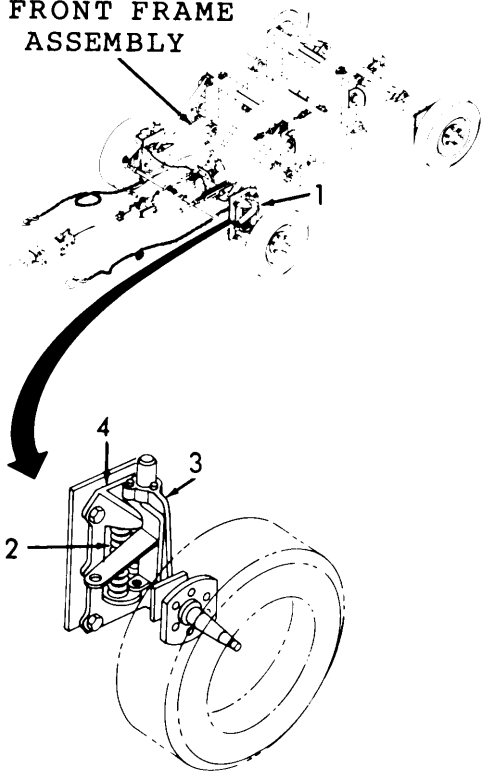
Item No.	interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
9	●		Front Frame Assembly	<p>a. Inspect shock absorbing assemblies (1) for broken, distorted, or corroded springs (2).</p> <p>b. Inspect knuckles (3) and brackets (4) for damage.</p> <p>c. Check security of all attaching hardware.</p> <p>FRONT FRAME ASSEMBLY</p> 
			Left and Right Shock Absorbing Assemblies	

Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - Continued

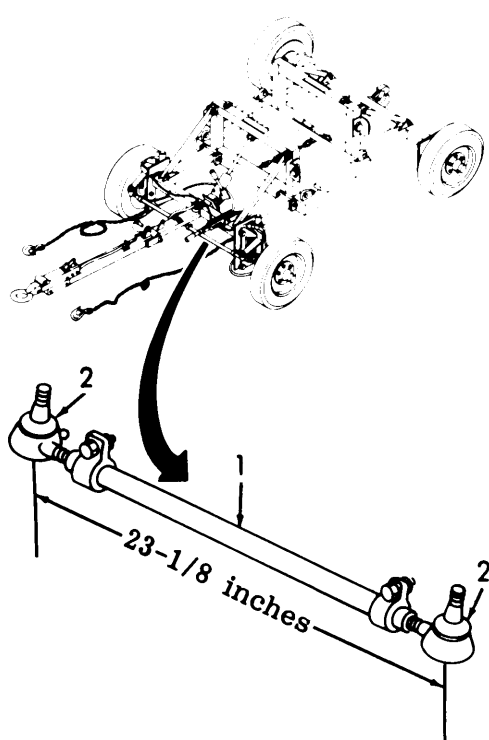
Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
10	•		Left and Right Tie Rods	<p>a. Inspect tie rods (1) for cracks, and evidence of bending.</p> <p>b. Check tie rod ends (2) for damage and excessive play.</p> <p>c. Check tie rods (1) over-all length. Length should be 23-1/8 inches as measured from center to center of tie rod ends.</p> 

Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - Continued


Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
11	●		Left and Right Tires	<p>a. Inspect tires (1 and 2) for sidewall damage.</p> <p>b. Check tire pressure.</p> <p>c. Service tires (1 and 2) with air to the pressure listed below, as applicable.</p> <p>Paved roads - 45 psi (3163.8 gm/cm²)</p> <p>Unimproved roads - 25 psi (1757.7 gm/cm²).</p> 

Table 3-1. Aviation Unit Preventive Maintenance Checks and services - Continued

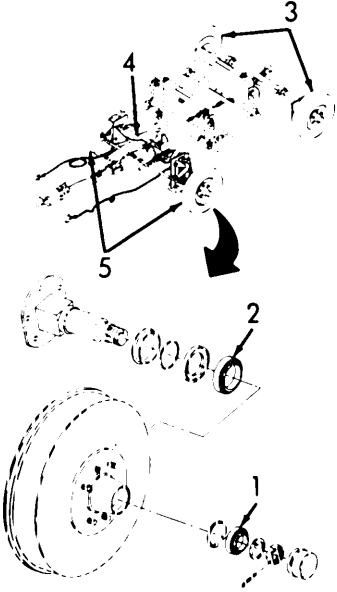
Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
12	●		Front Wheel Bearings	<p>Lubricate left and right wheel bearings (1 and 2) with grease (GAA) as follows:</p> <ol style="list-style-type: none"> Position transporter on a level surface. Block rear wheels (3) and jack up front axle assembly (4) until front wheels (5) clear the ground. Remove left and right front wheels. Paragraph 3-21. Remove left and right front wheel bearings and seals.  <p>LEFT FRONT WHEEL BEARINGS SHOWN, RIGHT FRONT WHEEL BEARINGS ARE SIMILAR.</p>

Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - Continued

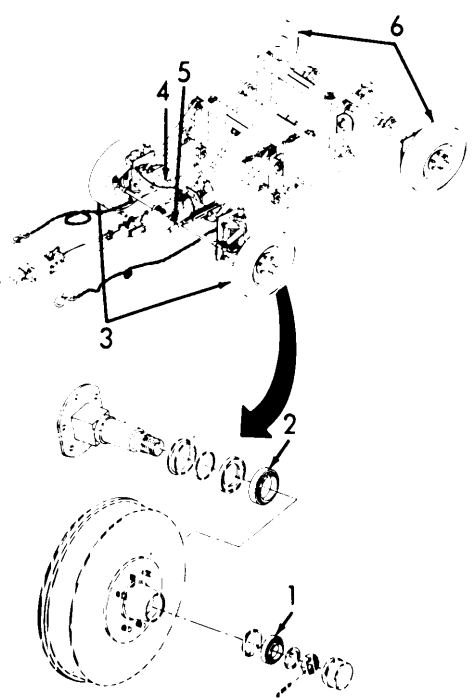
Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
12	●		Front Wheel Bearings (Cent.)	<p>e. Clean, inspect, and repack bearings (1 and 2) with grease (GAA).</p> <p>f. Reinstall left and right front wheel bearings and seals. Paragraph 3-22.</p> <p>g. Reinstall left and right front wheels (3). Paragraph 3-21.</p> <p>h. Lower front axle (4) to ground and set parking brake (5).</p> <p>i. Remove blocks from rear wheels (6).</p> 

Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - Continued

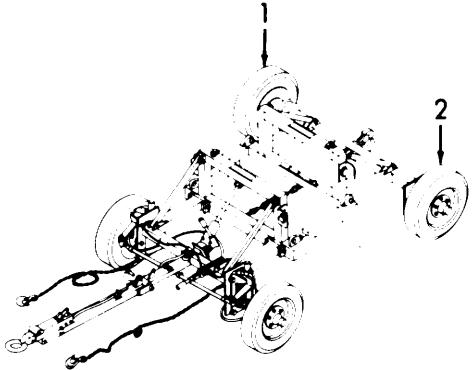
Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
13	●		Rear Axle Assembly	<p>a. Inspect tires (1 and 2) for sidewall damage.</p> <p>b. Check tire pressure.</p> <p>c. Service tires (1 and 2) with air to the pressure listed below, as applicable.</p> <p>Paved roads - 45 psi (3163.8 gm/cm²).</p> <p>Unimproved roads - 25 psi (1757.7 gm c m²).</p> 
			Left and Right Tires	

Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - Continued

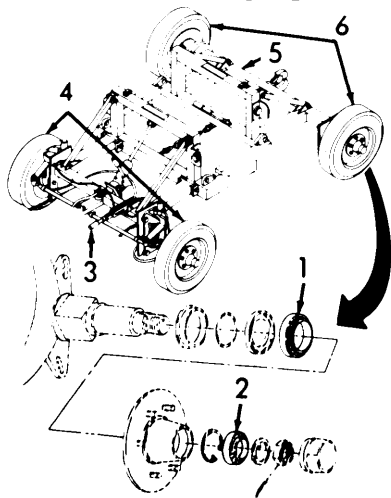
Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
14	•		Rear Wheel Bearings	<p>Lubricate left and right rear wheel bearings (1 and 2) with grease (GAA) as follows:</p> <ol style="list-style-type: none"> Position transporter on a level surface. Set parking brake (3) and block front wheels (4). Jack up rear axle assembly (5) until rear wheels (6) clear the ground. Remove left and right rear wheels (6). Paragraph 3-21. Remove left and right rear wheel bearings (1 and 2). Paragraph 3-23.  <p>LEFT REAR WHEEL BEARINGS SHOWN. RIGHT REAR WHEEL BEARINGS ARE SIMILAR.</p>

Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - Continued

Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
14	•		Rear Wheel Bearings (Cont.)	<p>f. Clean, inspect, and repack bearings (1 and 2) with grease (GAA).</p> <p>g. Reinstall left and right rear wheel bearings (1 and 2). Paragraph 3-23.</p> <p>h. Reinstall left and right rear wheels (6). paragraph 3-21.</p> <p>i. Lower rear axle assembly (5) to the ground.</p> <p>j. Remove blocks from front wheels (4).</p> <p>LEFT REAR WHEEL BEARINGS ARE SHOWN. RIGHT REAR WHEEL BEARINGS ARE SIMILAR .</p>

Table 3-1. Aviation Unit preventive Maintenance Checks and Services - Continued

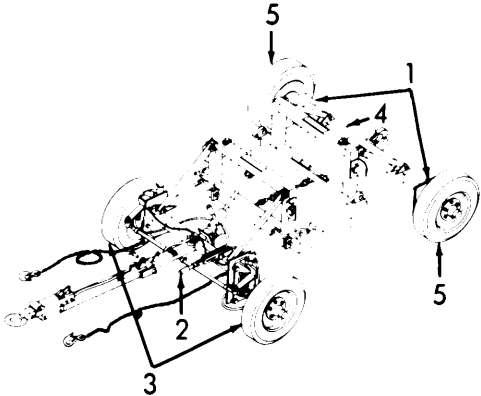
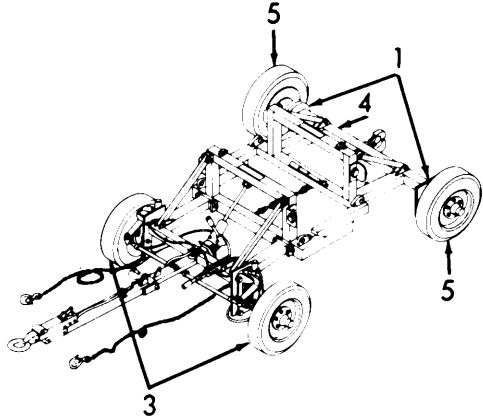
Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
15	•		Banjo Suspension Spring Assemblies	<p>Lubricate left and right rear banjo suspension assemblies (1) as follows:</p> <ol style="list-style-type: none"> a. Position transporter on a level surface. b. Set parking brake (2) and block front wheels (3). c. Jack up rear axle assembly (4) until rear wheels (5) clear the ground. d. Remove left and right rear wheels (5). Paragraph 3-21. e. Remove left and right rear bearings and seals. Paragraph 3-23. 

Table 3-1. Aviation Unit preventive Maintenance Checks and Services - Continued

Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
15	•		Banjo Suspension Spring Assemblies (Cont.)	<p>f. Remove left and right rear banjo suspension spring assemblies (1). Paragraph 3-18.</p> <p>g. Clean, inspect for damage, and repack bearings (6 and 7) with grease (GAA).</p> <p>h. Clean, inspect for damage, and apply-grease (GAA) liberally to springs (8).</p> <p>LEFT REAR BANJO SUSPENSION SPRING ASSEMBLY IS SHOWN. RIGHT REAR BANJO SUSPENSION SPRING ASSEMBLY IS SIMILAR.</p>

Table 3-1. Aviation Unit Preventive Maintenance Checks and Services - continued

Item No.	Interval		Item to be Inspected	Procedures Check for and have repaired or adjusted as required
	M	Q		
15	●		Banjo Suspension Spring Assemblies (Cont.)	<p>i. Install left and right rear banjo suspension spring assemblies (l). paragraph 3-18.</p> <p>j. Install left and right rear bearings and seals. Paragraph 3-23.</p> <p>k. Install left and right rear wheels (5). Paragraph 3-21.</p> <p>l. Lower rear axle assembly (4) to the ground.</p> <p>m. Remove blocks from front wheels (3).</p> 

Section IV. TROUBLESHOOTING PROCEDURES

	Para.
Symptom Index	3-9
Troubleshooting Table	3-10

3-8. GENERAL.

- a. The table in this section lists the common malfunctions which may occur during the operation or maintenance of the transporter or components. The troubleshooting should be performed in the order given in each malfunction.
- b. This manual cannot list all malfunctions that may occur nor all tests inspections or corrective actions. If a malfunction is not listed or it is not corrected by the listed corrective actions, notify your supervisor.

3-9. SYMPTOM INDEX.

<u>SYMPTOM</u>	<u>Page No.</u>
Handbrake will not hold	3-21
Handbrake will not operate	3-22
Brakes will not operate when actuated	3-23
Brakes pull transporter to one side when applied	3-24
Brakes make noise when applied	3-25
Brakes will not release	3-26
Transporter pulls to one side	3-27
Excessively worn tires	3-28
Wheel bearings noisy or binding	3-29
Faulty steering	3-30
Jacks will not maintain load	3-31

3-10. AVIATION UNIT TROUBLESHOOTING.

Table 3-2. Troubleshooting

TRUBLE SHOOTING PROCEDURE 1. HANDBRAKE WILL NOT HOLD

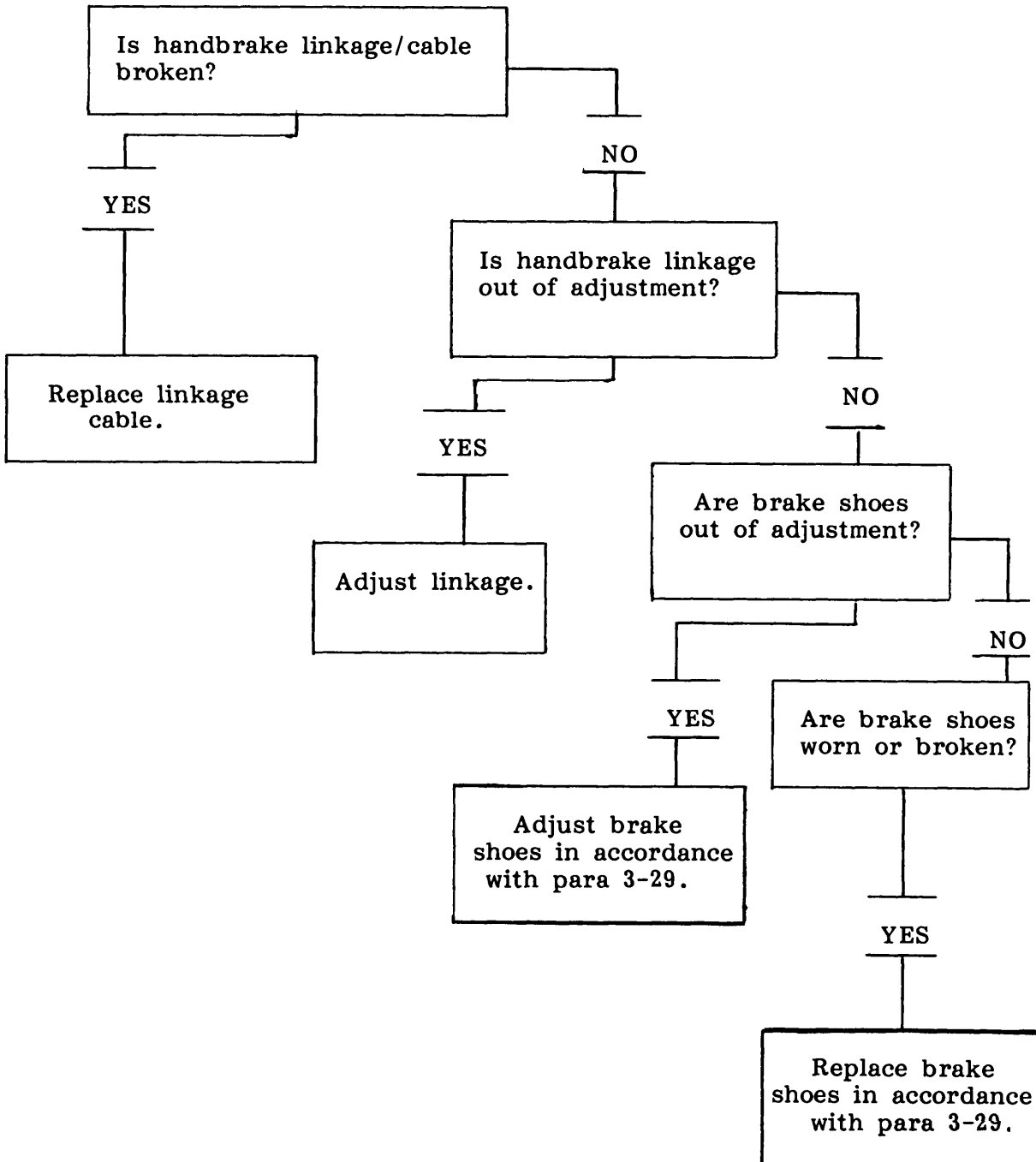


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 2. HANDBRAKE WILL NOT OPERATE.

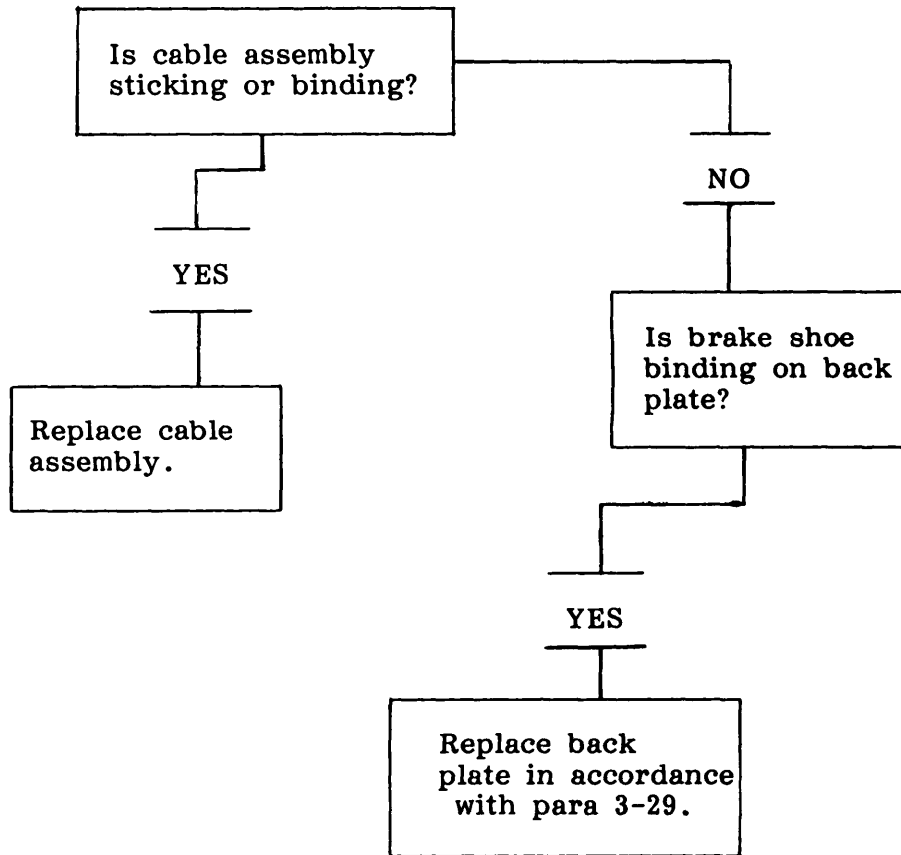


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 3. BRAKES WILL NOT OPERATE WHEN ACTIATED

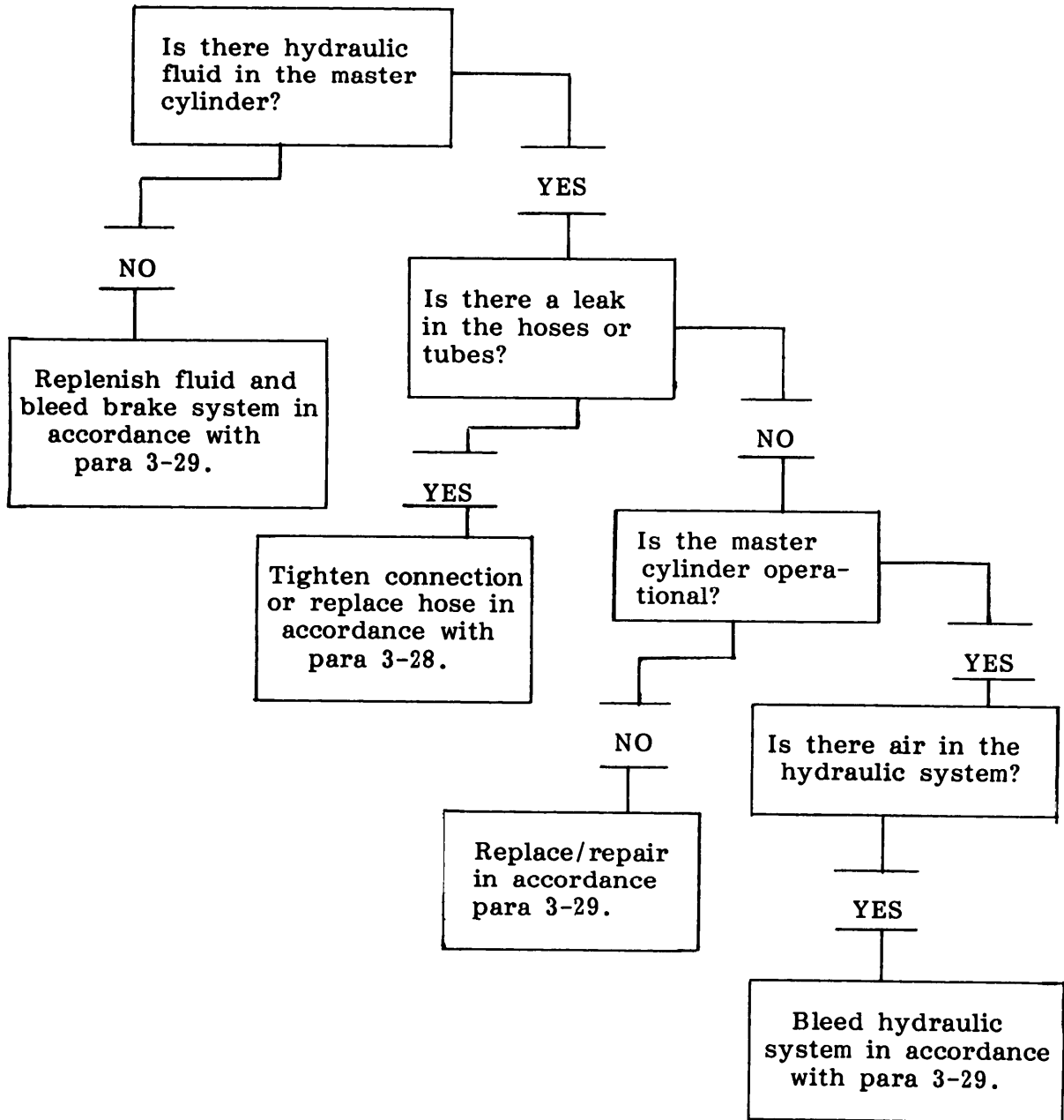


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 4. BRAKES PULL TRANSPORTER TO ONE SIDE WHEN APPLIED.

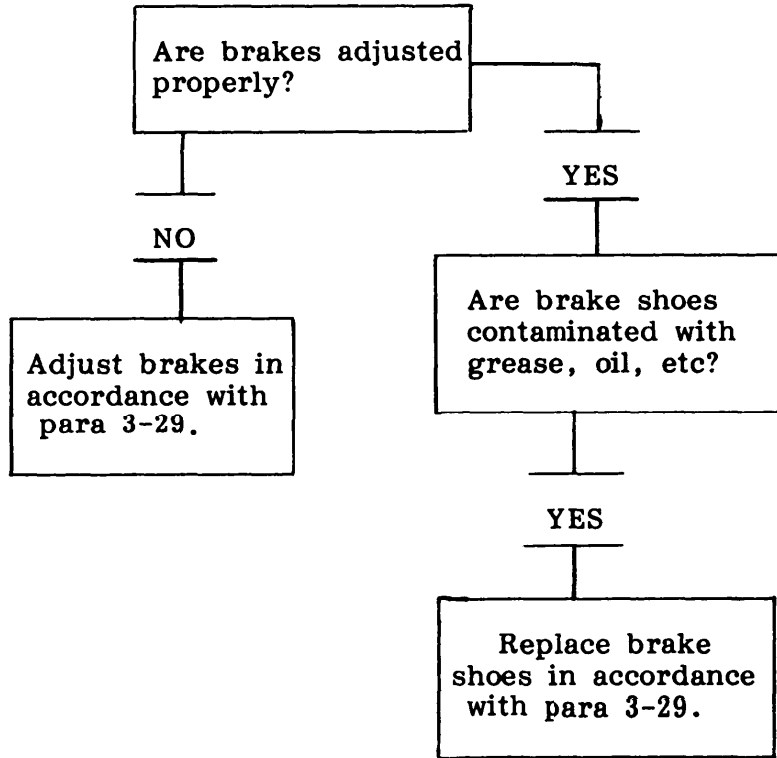


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 5. BRAKES MAKE NOISE WHEN APPLIED.

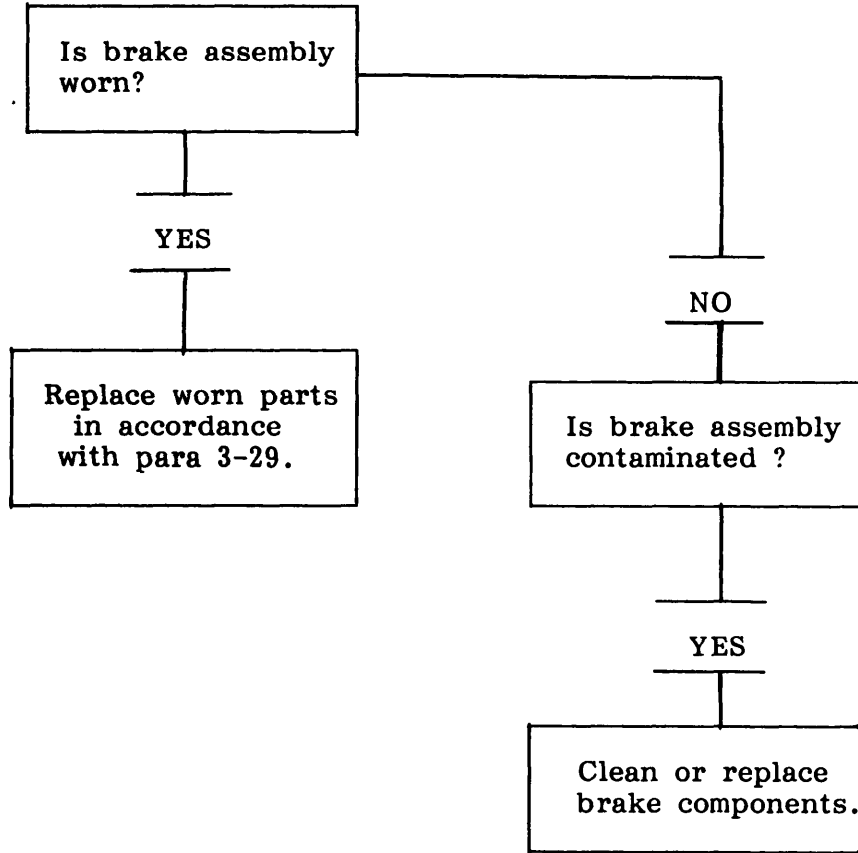


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 6. BRAKES WILL NOT RELEASE.

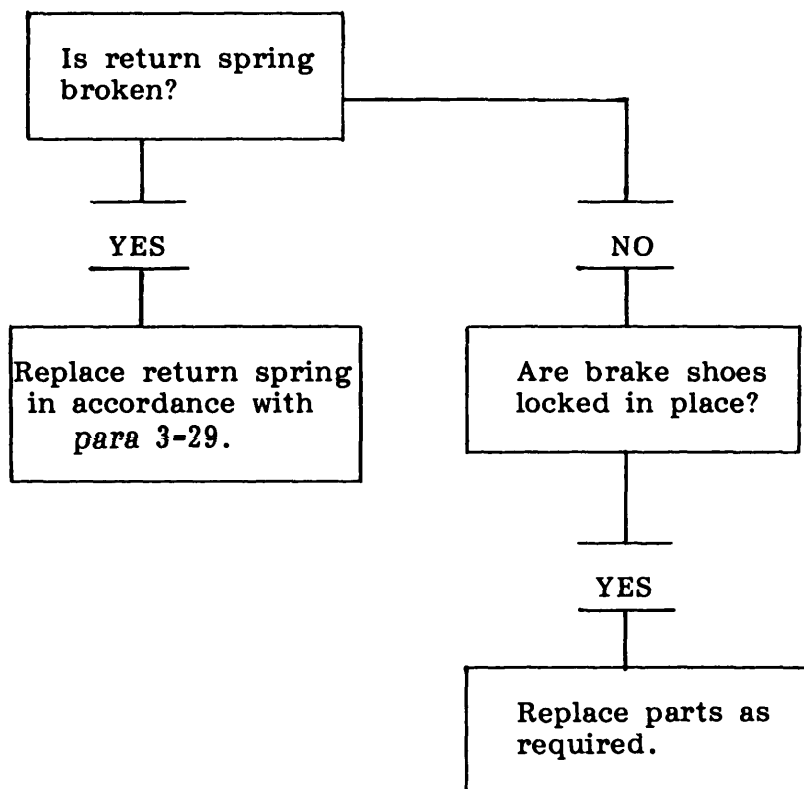


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 7. TRANSPORTER PULLS TO ONE SIDE.

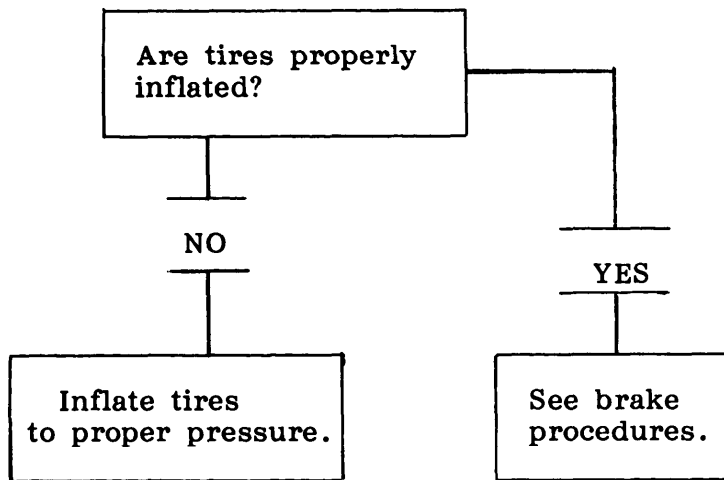


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 8. EXCESSIVELY WORN TIRES.

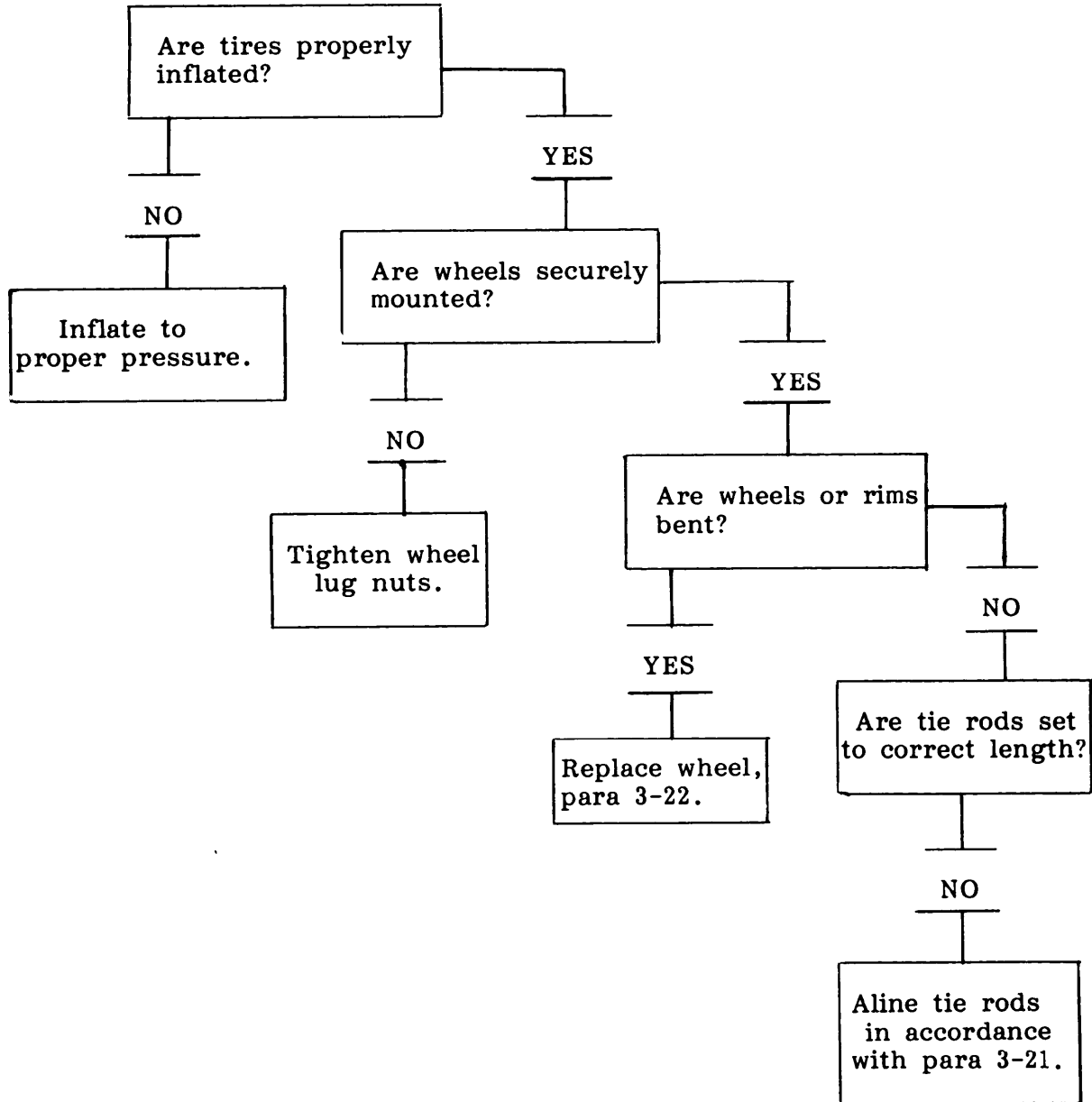


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 9. WHEEL BEARINGS NOISY OR BINDING.

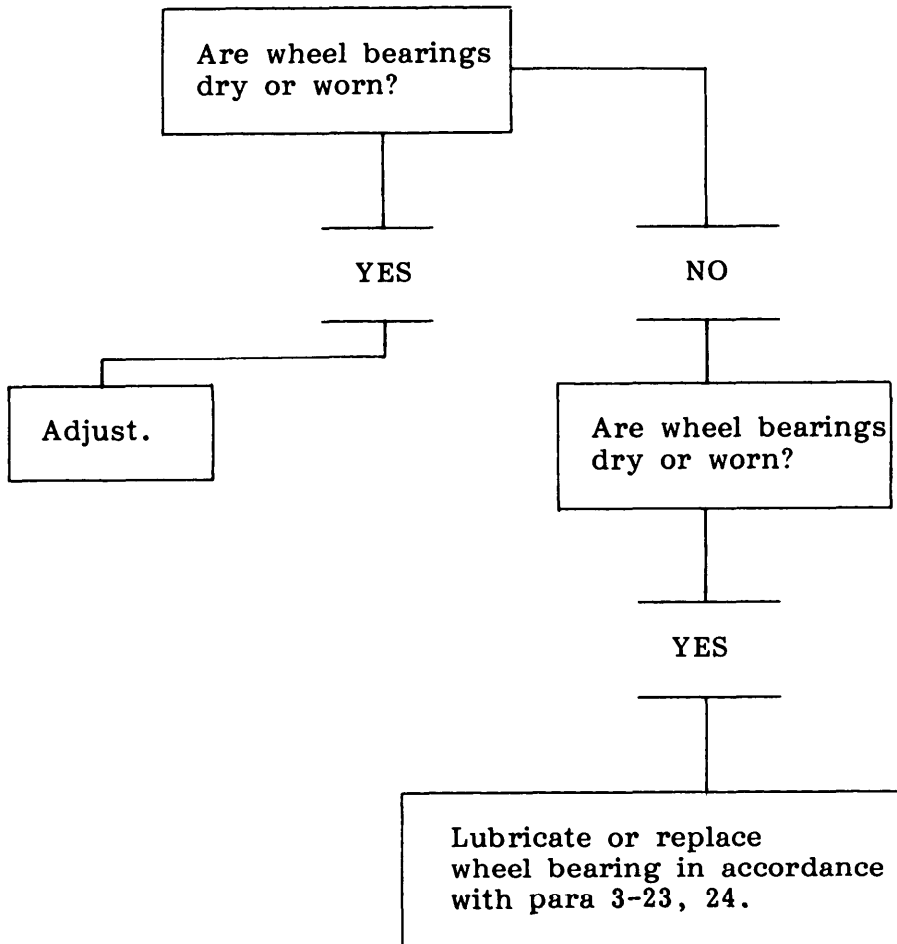


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 10. FAULTY STEERING.

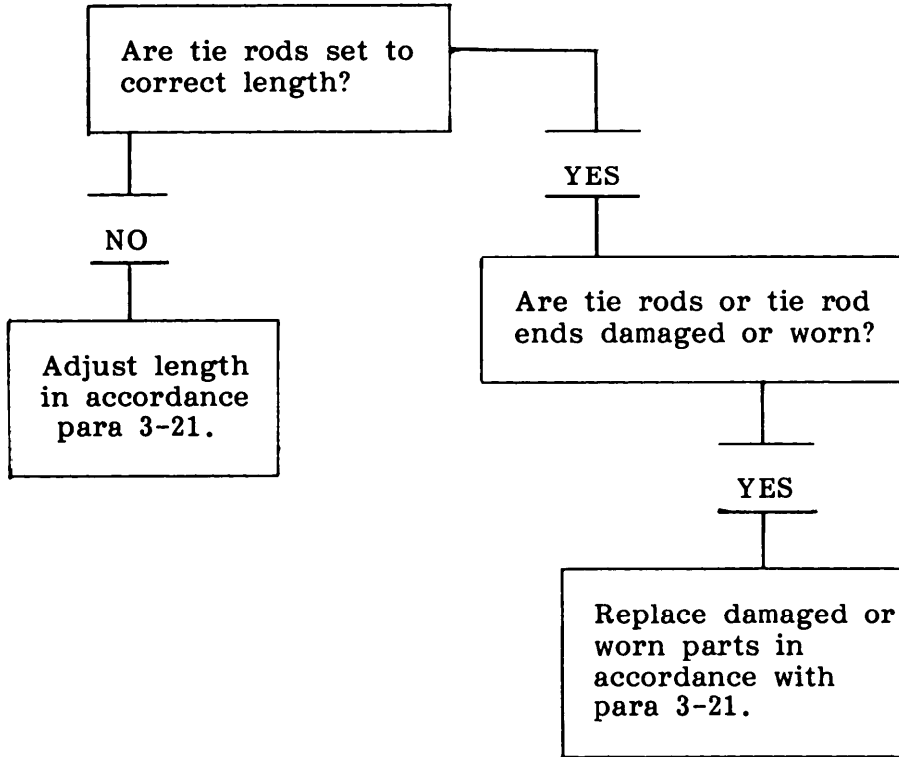
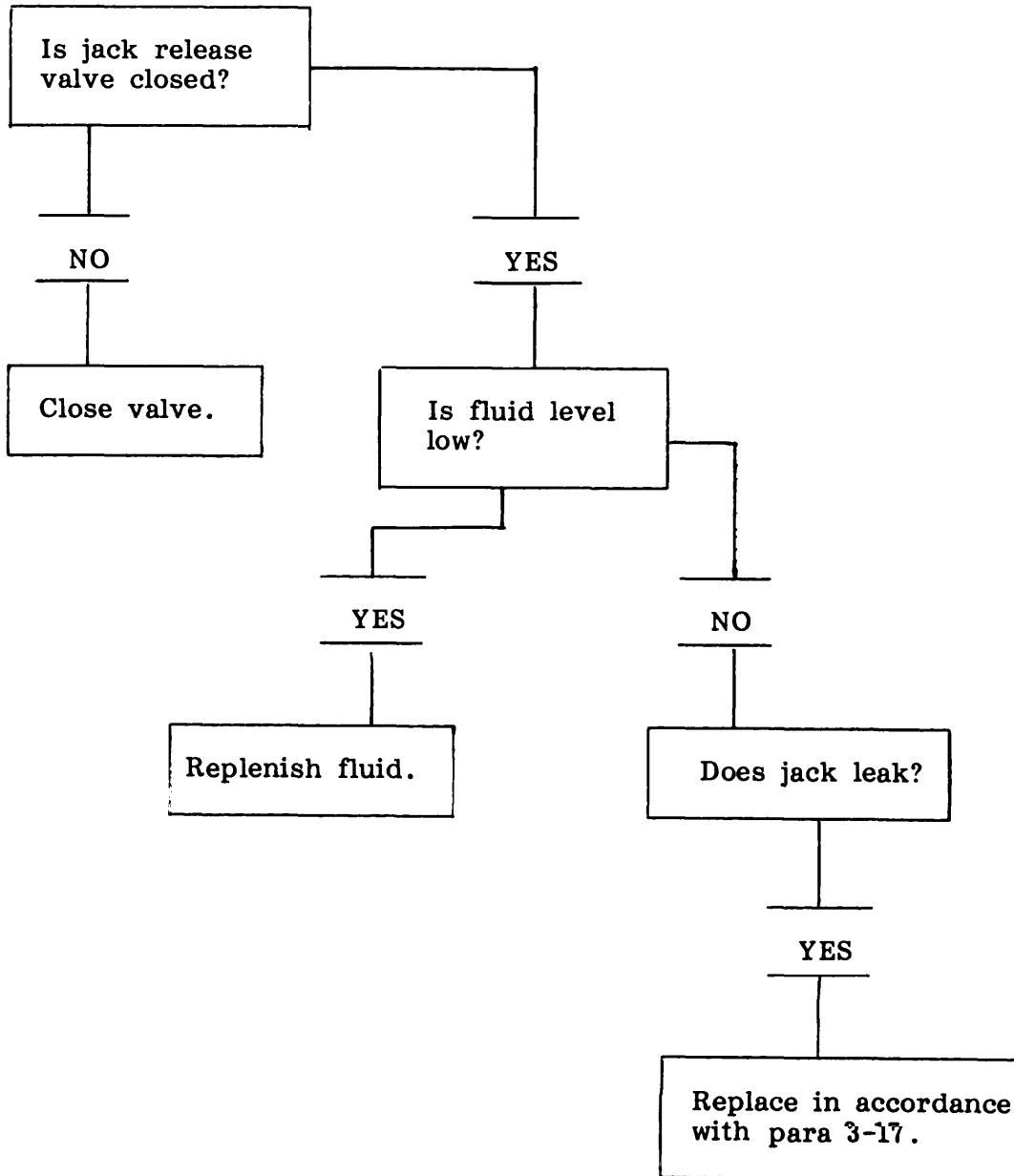


Table 3-2. Troubleshooting - Continued

TROUBLESHOOTING PROCEDURE 11. JACKS WILL NOT MAINTAIN LOAD.



Section V. MAINTENANCE PROCEDURES

	Para.		Para.
Suspension Frame	3-12	Front Wheel Bearings	
Lockout Struts	3-13	and Seals	3-23
Turnbuckle	3-14	Rear Wheel Bearings	
Cable Assembly	3-15	and Seals	3-24
Reflector	3-16	Steering Center Arm	3-25
Hydraulic Jack	3-17	Parking Brake Handle	3-26
Axle Frame	3-18	Cable	3-27
Banjo Suspension	3-19	Lines and Hoses	3-28
Left and Right Shock		Brake Shoes and Wheel Cylinders	3-29
Absorbing Assemblies	3-20	Master Cylinder	3-30
Tie Rod Ends	3-21	Damper	3-31
Wheels and Tires	3-22	Painting and Refinishing	3-32

3-11. GENERAL.

This section contains maintenance procedures for aviation unit maintenance personnel. The procedure will consist of an initial set up describing all tools, test equipment, references equipment condition and personnel required. The procedures will provide detailed instructions for each maintenance task.

3-12. SUSPENSION FRAME.

This task covers:

- a. Removal
- b. Cleaning
- c. Inspection
- d. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

- a. *Removal.* (Refer to Figures 3-2, 3-3, and 3-4).

NOTE

Removal of front suspension frame shown, removal of rear suspension frame is similar.

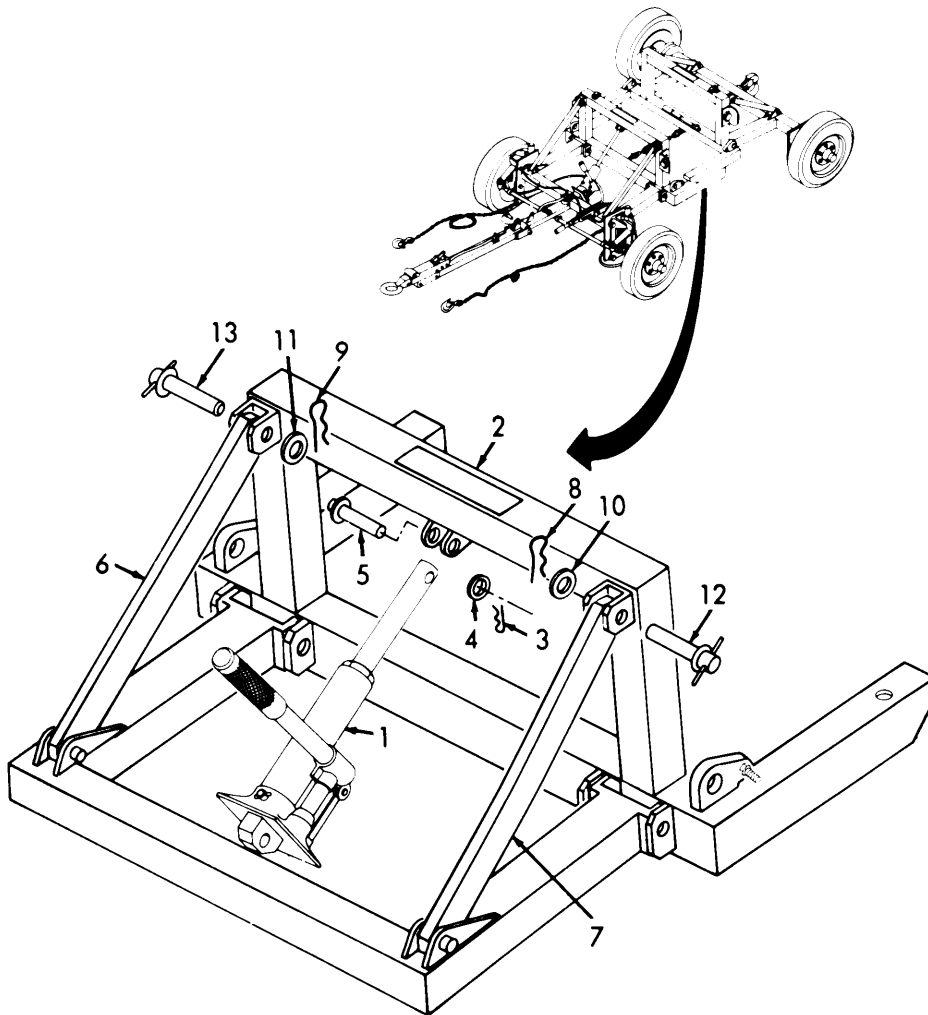
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3-12. SUSPENSION FRAME - Continued.

a. *Removal - Continued.*

- (1) Disengage hydraulic jack (1, Figure 3-2 from suspension frame (2).
 - (a) Remove cotter pin (3) and washer (4) from one side of pin (5).
 - (b) Remove pin (5) and move jack (1) to erect position.

- (2) Disengage lockout struts (6) and (7) from suspension frame (2).
 - (a) Remove locking clip (8) and (9) and washers (10) and (11) from T-pins (12) and (13).
 - (b) Remove T-pins (12) and (13) and move lockout struts (6) and (7) away from suspension frame.



FRONT SUSPENSION FRAME SHOWN

Figure 3-2. Suspension Frame, Removal.

GO TO NEXT PAGE

3-12. SUSPENSION FRAME - Continued.

a. *Removal-Continued.*

(3) Disengage suspension frame (1, Figure 3-3) from tine (2).

(a) Remove cotter pins (3) and (4) and washers (5) and (6) from one end of pins (7) and (8).

NOTE

It may be necessary to use a hammer to remove pins (?) and (8).

(b) Remove pins (7) and (8) and separate suspension frame (1) from axle frame (2).

(4) Disengage front suspension frame (1) from rear suspension frame-(9).

(a) Remove nut (10), lockwasher (11), washer (12), washer (13), and bolt (14).

(b) Remove nut (15), lockwasher (16), washer (17), washer (18), and bolt (19).

(c) Separate suspension frame (1) from rear suspension frame

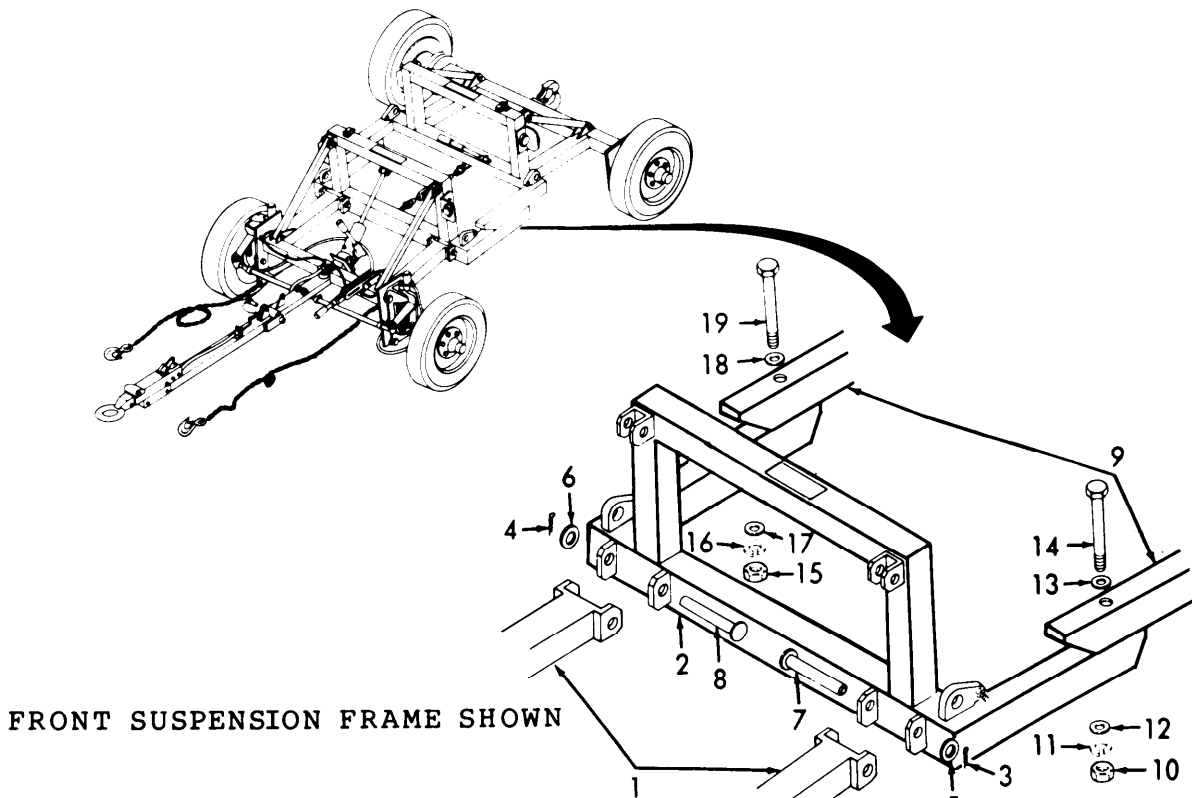


Figure 3-3. Disengaging Suspension from Axle Frame and Rear Frame.
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3-12. SUSPENSION FRAME - Continued.

a. Removal-Continued.

- (5) Remove jack handle (1, Figure 3-4) and attaching hardware from suspension frame (2).
 - (a) Remove screws (3) and (4), washer (5) and (6), and clamps (7) and (8).
 - (b) Stow hardware in a secure area.

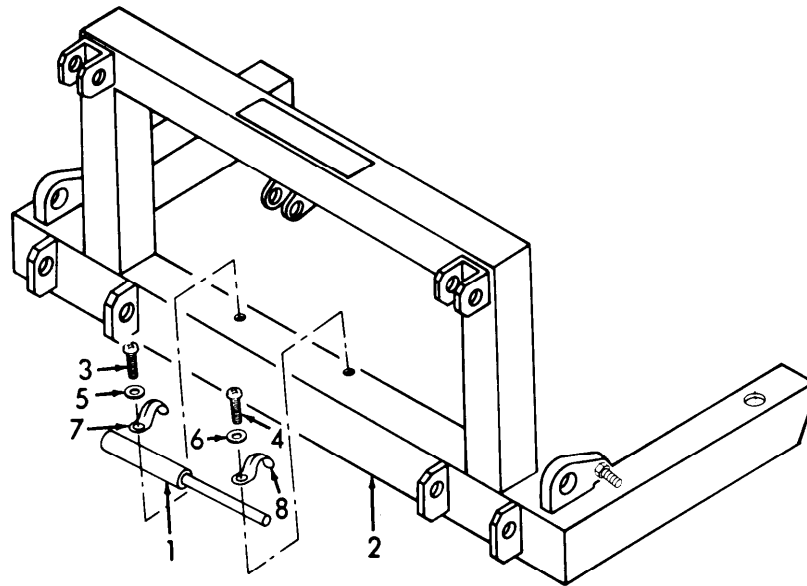


Figure 3-4. Jack Handle, Removal.

b. Cleaning.

- (1) Wash suspension frame thoroughly with water and a mild soap.
- (2) Rinse off all soap with water.
- (3) Allow to dry.

c. Inspection.

- (1) Inspect suspension frame for signs of wear or damage.
- (2) Inspect for cracks, dents, and bent or broken flanges.
- (3) Inspect for signs of corrosion.

GO TO NEXT PAGE

3-12. SUSPENSION FRAME - Continued.

d. *Installation.*

NOTE

Removal of front suspension frame shown, removal of rear suspension frame is similar.

- (1) Install jack handle attaching hardware onto tine (2, Figure 3-5).
 - (a) Install clamps (7) and (8), with washers (5) and (6), and screws (3) and (4), but do not tighten.
 - (b) Install jack handle (1), into clamps (7) and (8), and tighten screws (3) and (4).

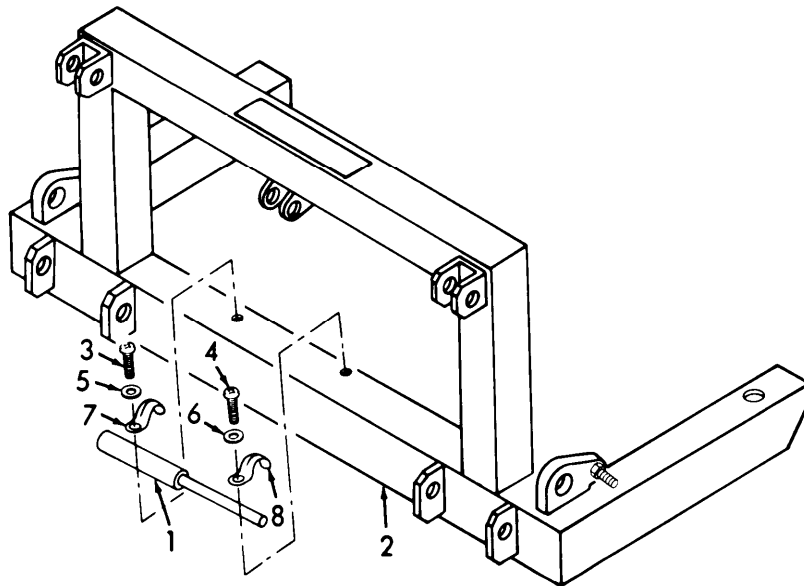


Figure 3-5. Jack Handle, Installation.

- (2) Attach front suspension frame (1, Figure 3-6) to rear suspension frame (9).
 - (a) Aline holes in suspension frame tines.
 - (b) Install bolt (19), washer (18), washer (17), lockwasher (16), and nut (15).
 - (c) Install bolt (14), washer (13), washer (12), lockwasher (11), and nut (10).
- (3) Attach suspension frame (1) to tine (2).
 - (a) Aline holes in suspension frame (1) with holes in tine (2).
 - (b) Install pins (8) and (7).
 - (c) Install washers (6) and (5), and cotter pins (4) and (3).

GO TO NEXT PAGE

3-12. SUSPENSION FRAME - Continued.

d. Installation-Continued.

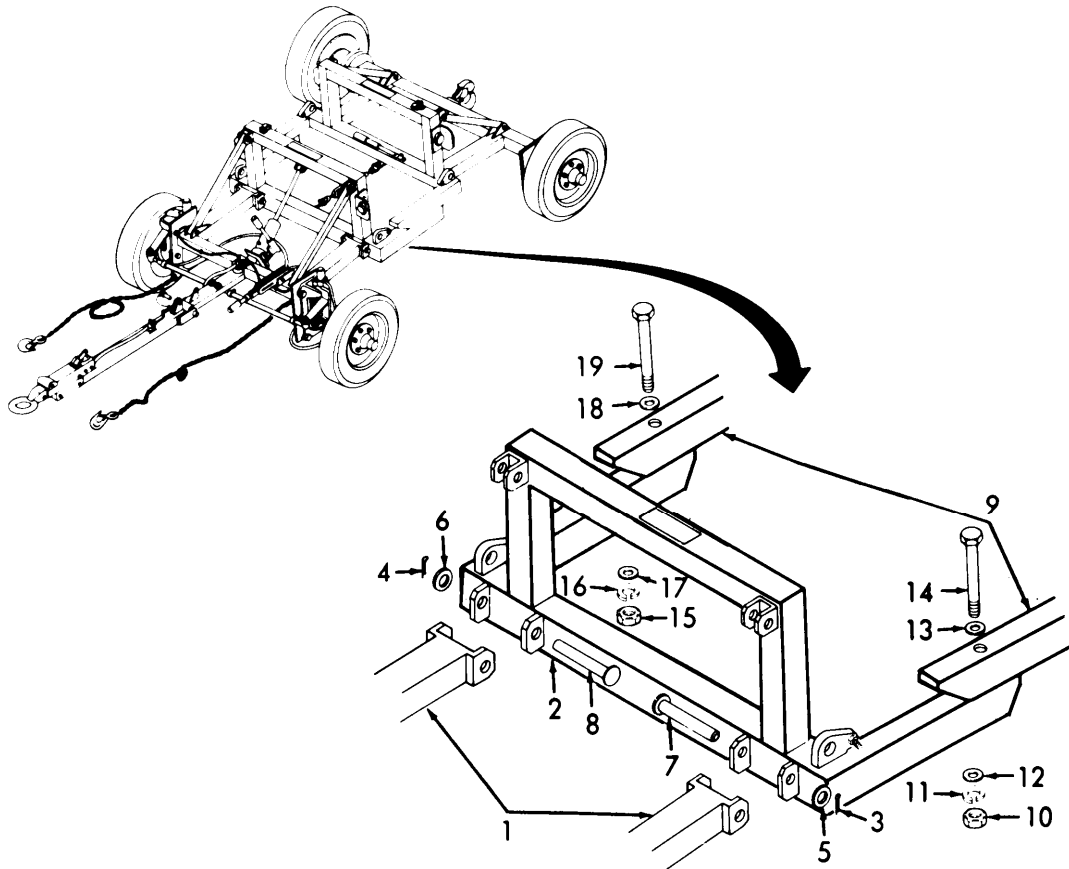


Figure 3-6. Engaging of Suspension to Axle Frame and Rear Frame.

- (4) Attach lockout struts (6, Figure 3-7) to suspension frame (2).
 - (a) Aline holes in lockout strut with holes in suspension frame (2).
 - (b) Install T-pins (13) and (12).
 - (c) Install washers (11) and (10), and locking clips (9) and (8).
- (5) Attach hydraulic jack (1) to suspension frame (2).
 - (a) Aline hole in hydraulic jack (1) with hole in suspension frame (2).
 - (b) Install pin (5), washer (4), and cotter pin (3).

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3-12. SUSPENSION FRAME - Continued.

d. *Installation-Continued.*

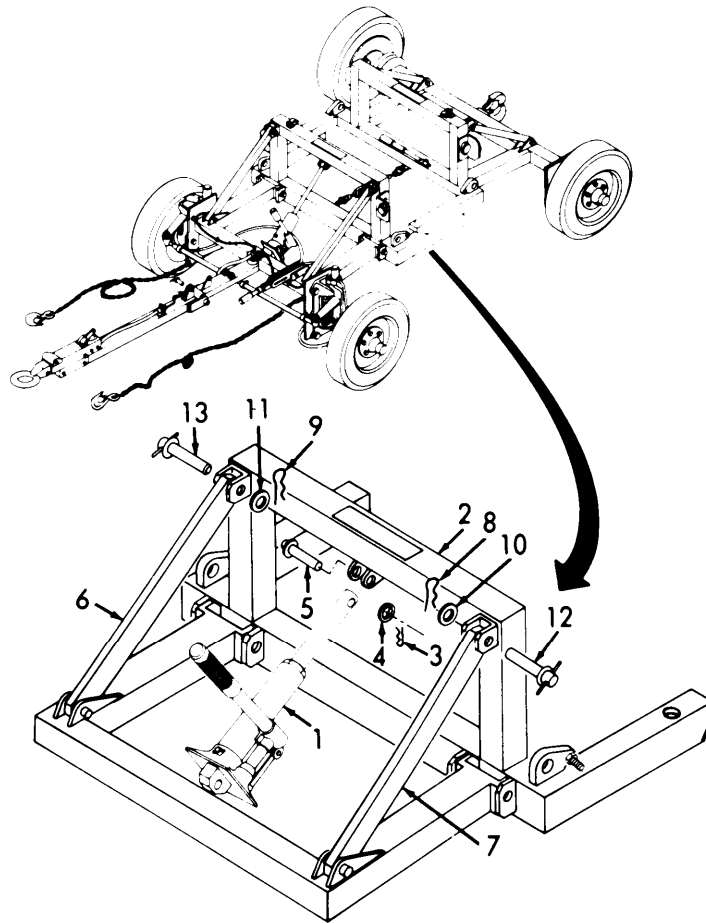


Figure 3-7. Suspension Frame, Installation.

END OF TASK

3-13. LOCKOUT STRUTS.

This task covers:

- ⌘ Removal
- ⌘ Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic MOS63B

GO TO NEXT PAGE

3-13. LOCKOUT STRUTS - Continued.*a. Removal.*

- (1) Remove locking clip (2, Figure 3-8) from T-pin (3).
- (2) Remove one cotter pin (4), and one washer (5) from pin (6).
- (3) Remove T-pin (3), pin (6), and lockout strut (1).

b. Installation.

- (1) Aline lockout strut into place with beveled edge down.
2. Install pin (6) through bottom of lockout strut (1).
- (3) Install washer (5) and cotter pin (4) into pin (6).
- (4) Install T-pin (3) through top of lockout strut (1).
- (5) Install locking clip (2) into T-pin (3).

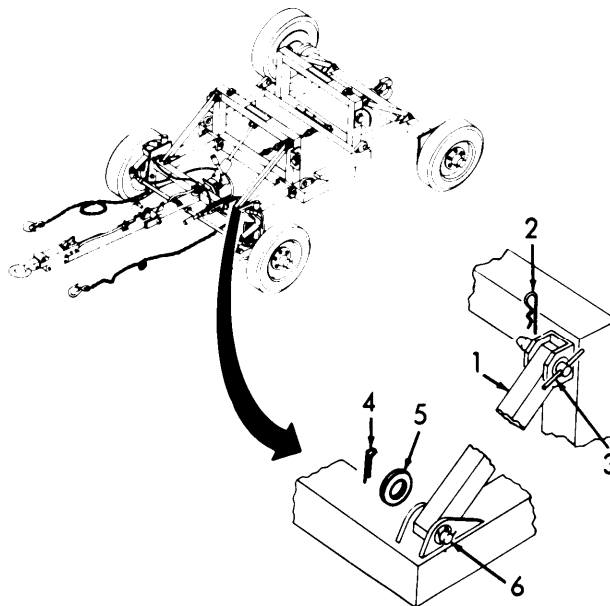


Figure 3-8. Lockout Struts, Removal and Installation

END OF TASK

3-14. TURNBUCKLE-MAINTENANCE INSTRUCTIONS.

This task covers:

- a* : Removal
b : Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool Kit, General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
 MOS63B

GO TO NEXT PAGE

3-14. TURNBUCKLE- MAINTENANCE INSTRUCTIONS - Continued.

a. *Turnbuckle Removal.*

- (1) Remove turnbuckle chain shackle assembly (3, Figure 3-9) as follows:
 - (a) Remove cotter pin (1) and pin (2) from shackle (3).
 - (b) Retain shackle (3) for later use.
- (2) Remove turnbuckle assembly (4) from cable (5) as follows:
 - (a) Remove nut (6) and bolt (7) from turnbuckle (4).
 - (b) Remove turnbuckle assembly (4).

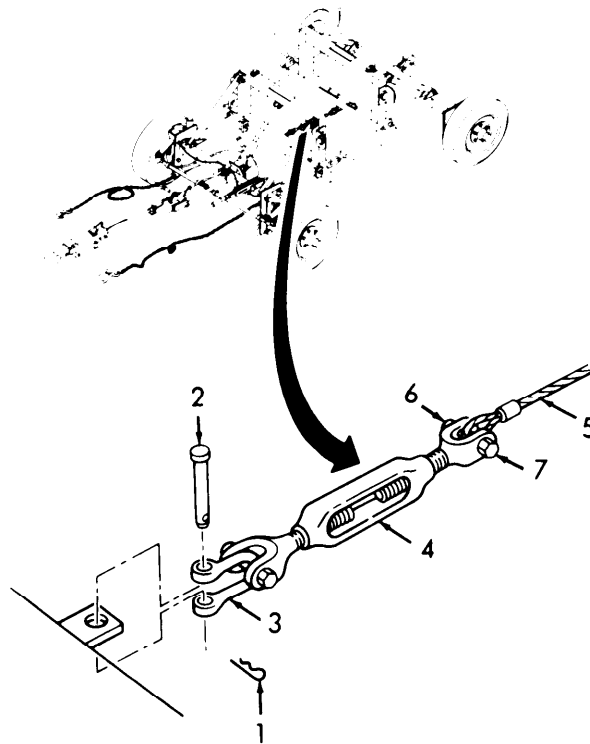


Figure 3-9. Turnbuckle, Removal.

b. *Turnbuckle Installation.*

- (1) Attach turnbuckle (4, Figure 5-10) to cable (5) with nut (6) and bolt (7).
- (2) Attach other end of turnbuckle (4) to chain shackle (3).
- (3) Attach chain shackle (3) to transporter frame (8) with pin (2) and cotter pin (1).

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3-14. TURNBUCKLE-MAINTENANCE INSTRUCTIONS - Continued.

b. Turn buckle Installation-Continued.

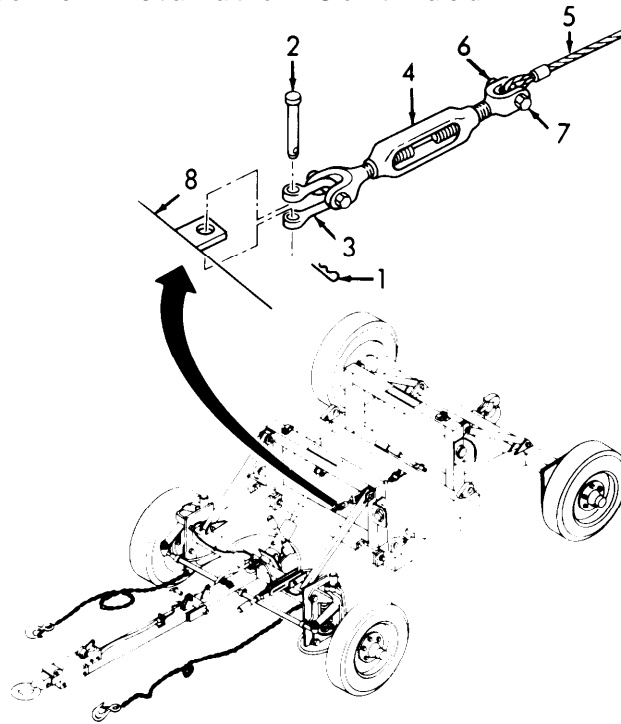


Figure 3-10. Turnbuckle, Installation.

END OF TASK

3-15. CABLE ASSEMBLY MAINTENANCE INSTRUCTIONS.

This task covers:

- a. Removal
- b. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

GO TO NEXT PAGE

3-15. CABLE ASSEMBLY MAINTENANCE INSTRUCTIONS - Continued

a. *Cable Assembly Removal.*

- (1) Remove chain shackle assembly (1, Figure 3-11) from transporter (2).
Remove cotter pin (3) and pin (4) from chain shackle assembly (1).
- (2) Remove cable assembly (5) from turnbuckle assembly (6) and remove nut (7) and bolt (8) from turnbuckle assembly (6).

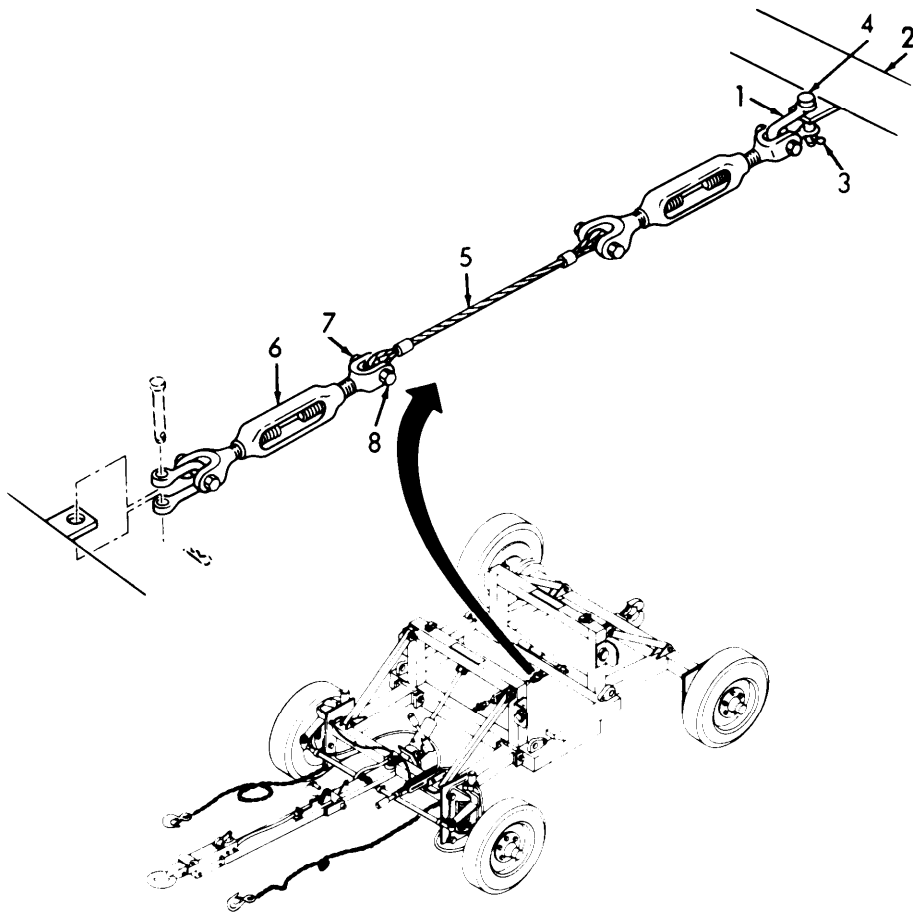


Figure 3-11. Cable Assembly, Removal.

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3-15. CABLE ASSEMBLY MAINTENANCE INSTRUCTONS -Continued.

b. Cable Assembly Installation.

- (1) Attach cable assembly (1, Figure 3-12) to turnbuckle assembly (2) with nut (3) and bolt (4).
- (2) Attach other end of cable assembly (1) to transporter (5) by installing pin (6) and cotter pin (7) through chain shackle assembly (8).

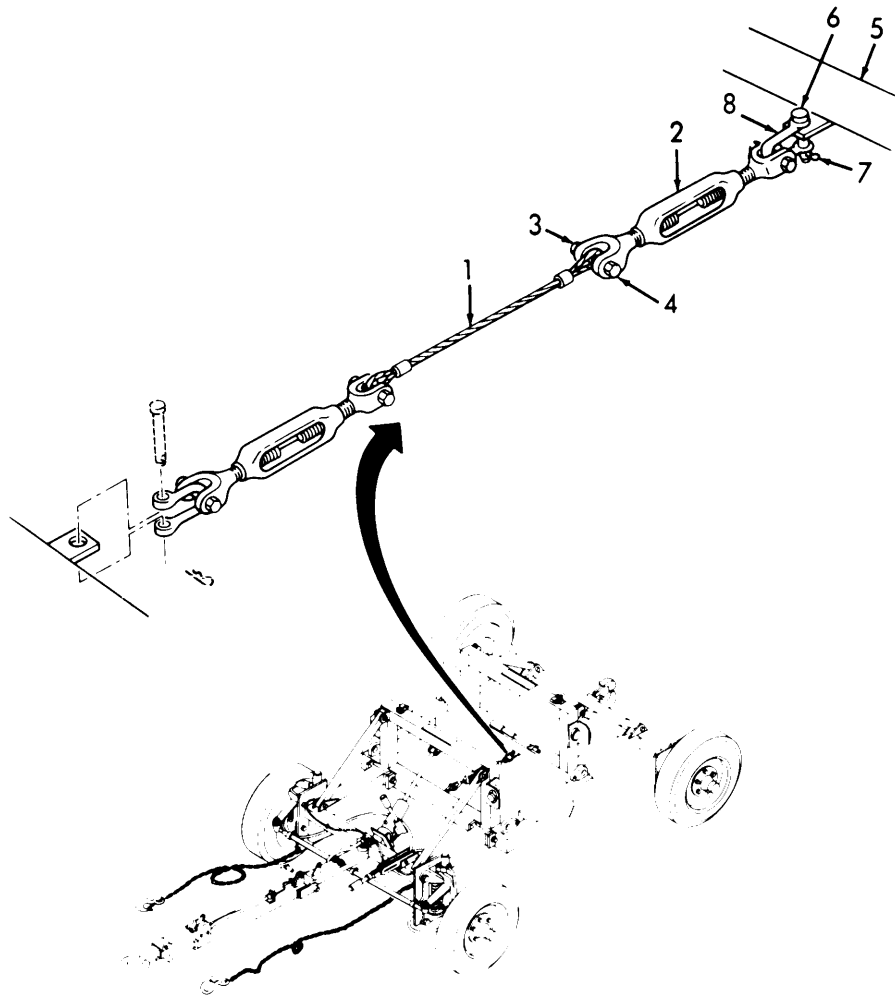


Figure 3-12. Cable Assembly, Installation.

END OF TASK

3-16. REFLECTOR MAINTENANCE INSTRUCTIONS.

This task covers:

- a. Removal
- b. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

- a. *Reflector Removal.* To remove any reflector remove two screws (1, Figure 3-13) two lockwashers (2), and reflector (3).

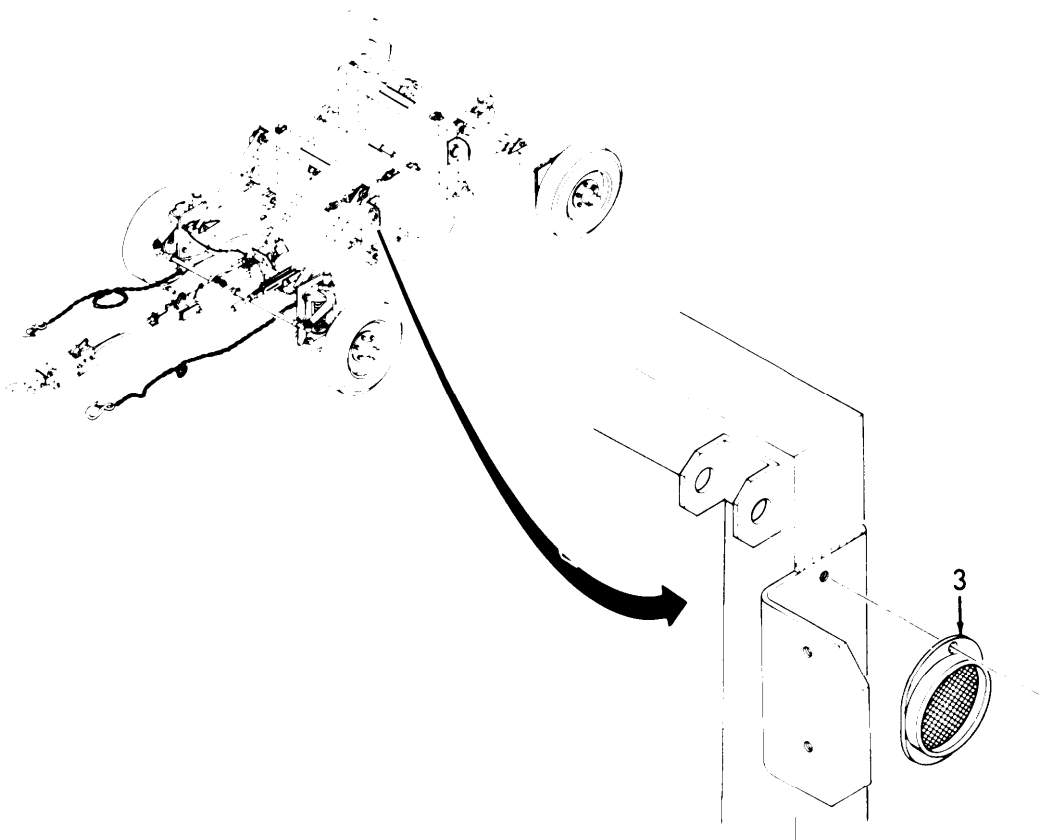


Figure 3-13. Reflector, Removal.

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3-16. REFLECTOR MAINTENANCE INSTRUCTIONS - Continued.*b. Reflector Assembly Installation.*

Install reflector (1, Figure 3-14) to reflector bracket (2) with two lockwashers (3) and two screws (4).

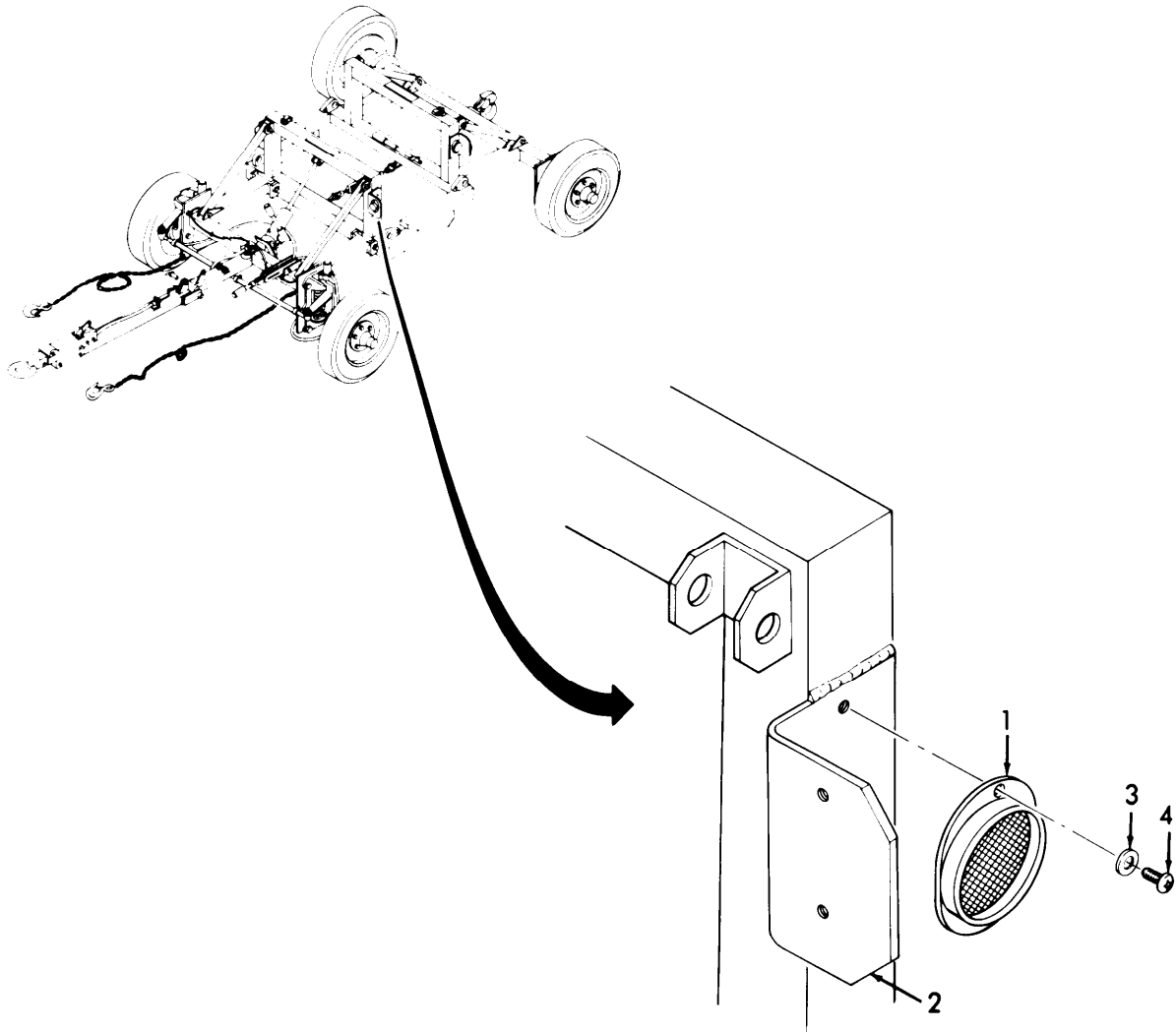


Figure 3-14. Reflector, Installation.

END OF TASK

3-17. HYDRAULIC JACK.

This task covers:

- a. Removal
- b. Cleaning
- c. Inspection
- d. Service
- e. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

Material Parts: Hydraulic Fluid, MIL-H-5606

a. *Removal.*

- (1) Remove cotter pin (3, Figure 3-15) and washer (4) from one side of pin (5).
- (2) Remove pin (5) and move jack (1) to erect position.
- (3) Remove cotter pin (6) and washer (7) from one side of pin (8).
- (4) Remove pin (8) and jack (1) from frame (2).

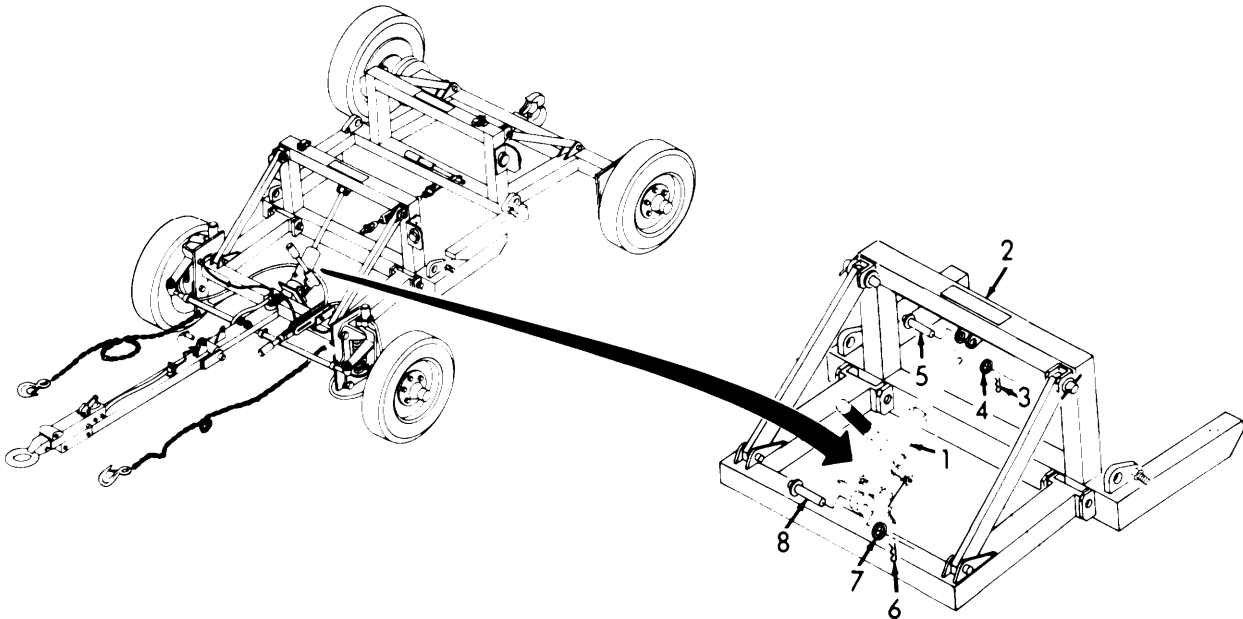


Figure 3-15. Hydraulic Jack, Removal.

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3-17. HYDRAULIC JACK - Continued.

b. Cleaning.

- (1) Wash jack exterior thoroughly with water and a mild soap.
- (2) Rinse off all soap and water.
- (3) Allow to dry.

e. Inspection.

- (1) Inspect jack for signs of wear and damage.
- (2) Inspect jack for cracks, dents, and bent or broken flanges.
- (3) Inspect jack for signs of corrosion.
- (4) Inspect for missing or damaged hardware.

d. Service. (Refer to Figure 3-16).

- (1) Remove plug (1).
- (2) Fill with hydraulic fluid MIL-H-5606.
- (3) Reinstall plug (1).

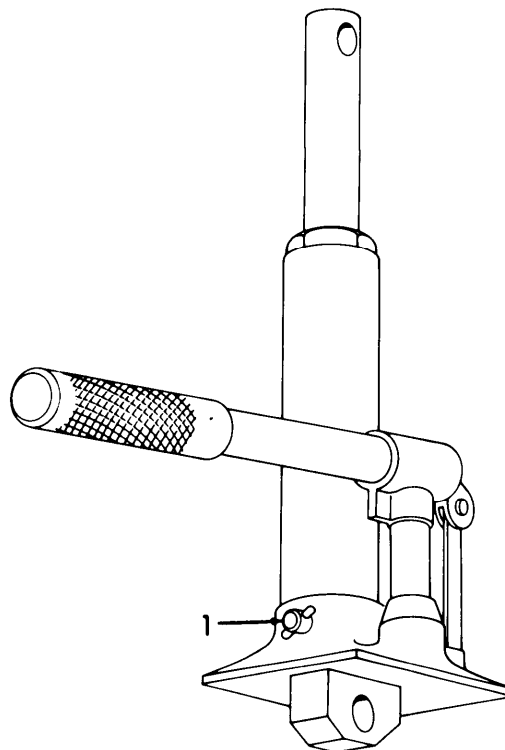


Figure 3-16. Hydraulic Jack, Servicing.

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3-17. HYDRAULIC JACK - Continued.

e. Installation.

- (1) Aline hole in hydraulic jack (1, Figure 3-17) with hole in suspension frame (2).
- (2) Install pin (5), washer (4), and cotter pin (3).
- (3) Install pin (6), washer (7), and cotter pin (8).

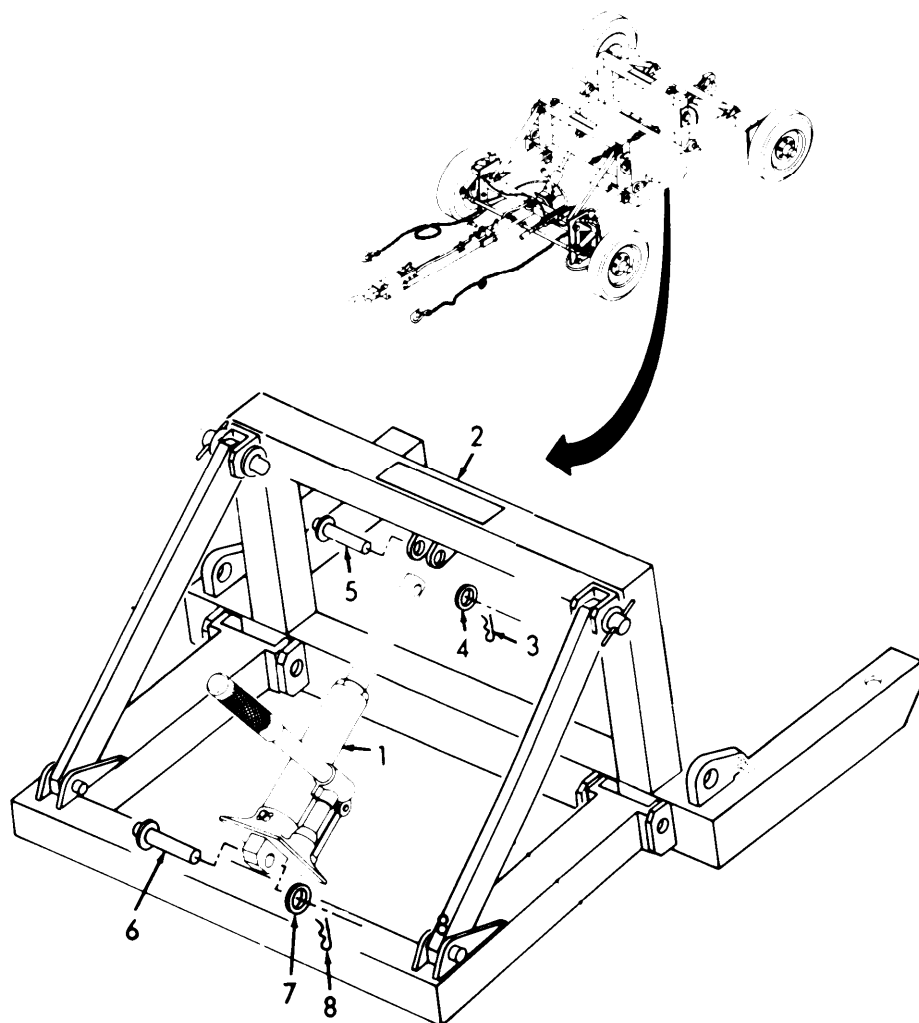


Figure 3-17. Hydraulic Jack, Installation.

END OF TASK

3-18. AXLE FRAME.

This task covers:

- a. Removal
- b. Cleaning
- c. Inspection
- d. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Material Parts: Cotter pins (2) MS 9245-65

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

<u>Equipment Condition Para.</u>	<u>Condition Description</u>
2-8	Front and rear suspension frames separated.
3-22	Left and right front wheels and tires removed.
3-20	Left and right shock absorbing spring assemblies removed.
3-25	Steering center arm removed.
3-13	Front lockout struts removed.
3-26	Parking brake handle removed.
3-12	Front suspension frame removed.
3-28	Lines and hoses removed.

GO TO NEXT PAGE

3-18. AXLE FRAME-Continued.

a. *Removal.*

- (1) Disconnect hydraulic jack (6, Figure 3-18) from front axle frame (13).
 - (a) Manually support hydraulic jack (6).
 - (b) Remove two cotter pins (1 and 5), two washers (2 and 4), and pin (3).
 - (c) Separate hydraulic jack (6) from front axle frame (13).
- (2) Remove safety chains (9 and 12).
 - (a) Remove pin (7) from left safety chain shackle (8). Separate safety chain (9) from front axle (13).
 - (b) Remove pin (10) from right safety chain shackle (11). Separate safety chain (12) from front axle frame (13).

b. *Cleaning.*

- (1) Wash front axle frame (13) with fresh water and mild soap solution.
- (2) Rinse front axle and frame (13) thoroughly with fresh water.
- (3) Allow front axle frame (13) to air dry.

c. *Inspection.*

- (1) Inspect front axle frame (13) for signs of wear, damage, and corrosion.
- (2) Inspect plates (15 and 17), lockout strut attaching flanges (18 and 21), parking brake bracket (20), center arm attach points (16), and frame brackets (14 and 19) for damage.

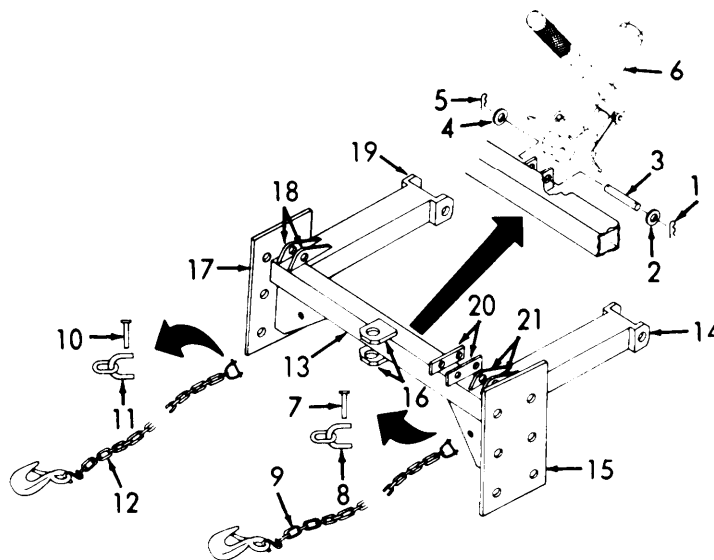


Figure 3-18. Front Axle Frame, Removal.

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3-18. AXLE FRAME - Continued.

d. *Installation.*

- (1) Install safety chains (9, and 12, Figure 3-19).
 - (a) Position right safety chain (12) on front axle frame (13). Install pin (10) into left safety chain shackle (11).
 - (b) Position left safety chain (9) on front axle frame (13). Install pin (7) into shackle (8).
- (2) Connect hydraulic jack (6) to front axle frame (13).
 - (a) position hydraulic jack (6) on front axle frame (13).
 - (b) Install pin (3), two washers (2 and 4), and two new cotter pins (MS 9245-65) (1 and 5).

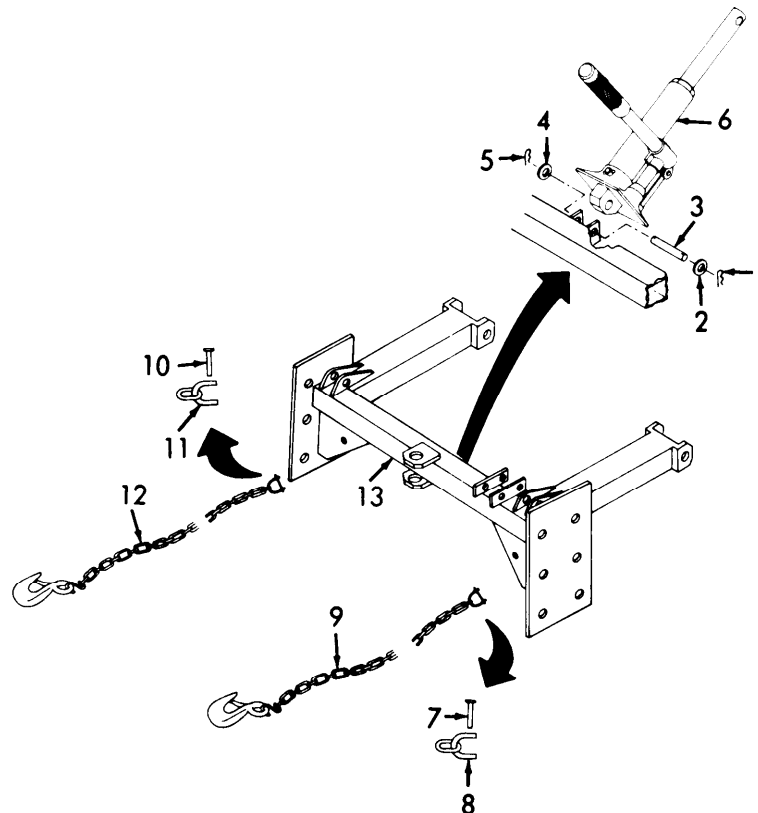


Figure 3-19. Front Axle Frame, Installation.

END OF TASK

3-19. BANJO SUSPENSION.

This task covers:

- a. Removal
- b. Cleaning
- c. Inspection
- d. Installation

INITIAL SET UP

Tools: Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Materials/Parts: Solvent P-D-680, Cloth, Automotive and artillery grease MIL-G-10924, Medium bristle brush

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

a. *Removal.*

- (1) Set parking brake and block wheels so transporter will not roll.
- (2) Jack up rear axle frame and remove rear wheel.
- (3) Remove four nuts (1, Figure 3-20) four lockwasher (2), four bolts (3), and banjo suspension assembly (4).

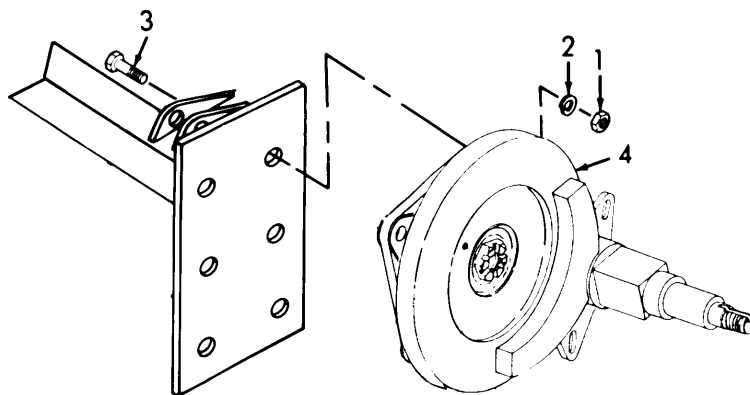


Figure 3-20. Banjo Suspension, Removal.

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3-19. BANJO SUSPENSION - Continued.*b. Cleaning.*

Cleaning Solvent, Federal Specification P-D-680, is toxic and flammable. Use solvent only in a well-ventilated area. Avoid prolonged breathing of vapors. Keep away from open flame. Do not use in excessive amounts.

- (1) Clean using a clean, soft cloth, or a medium bristle brush and cleaning solvent (Federal Specification P-D-680).
- (2) Allow to dry.

c. Inspection.

Inspect all parts for damage, wear, corrosion and missing parts.

d. Installation.

- (1) Install banjo suspension assembly (4, Figure 3-21) onto axle frame mounting flange (5).
 - (a) Aline banjo suspension assembly (4) with axle frame mounting flange (5).
 - (b) Install four bolts (1), four washers (2), and four nuts (3).
 - (c) Install rear wheel assembly and lower transporter to ground per para 3-22.

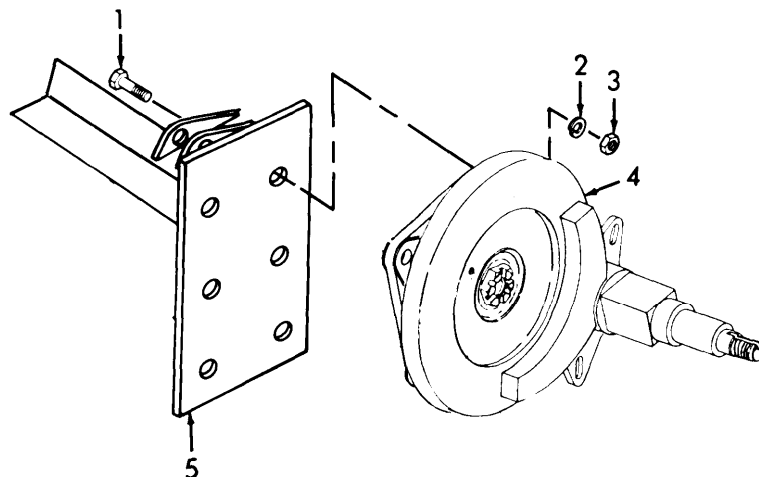


Figure 3-21. Banjo Suspension, Installation.

END OF TASK

3-20. LEFT AND RIGHT SHOCK ABSORBING SPRING ASSEMBLIES.

This task covers:

- a. Removal
- b. Disassembly
- c. Cleaning
- d. Inspection
- e. Repair
- f. Reassembly
- g. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Materials/Parts: Automotive and artillery grease (MIL-G-10924), Cleaning Solvent P-D-680, Cloth, Medium Bristle Brush

Personnel Required: A light wheel vehicle/power generation mechanic MOS63B

<u>Equipment Condition Para.</u>	<u>Condition Description</u>
3-22	Left and right front wheels removed.
3-29	Left and right brake assembly removed.
3-21	Left and right tie-rods removed.

NOTE

Left shock absorbing spring assembly is shown, right shock absorbing assembly is similar.

GO TO NEXT PAGE

3-20. LEFT AND RIGHT SHOCK ABSORBING SPRING ASSEMBLIES - Continued.

a. Removal.

- (1) Remove shock absorbing spring assembly (3, Figure 3-22) from front axle frame(l).
 - (a) Remove six nuts (6), six lockwashers (5), six bolts (4), and bracket (2).
 - (b) Separate spring assembly (3) from front axle frame (1).

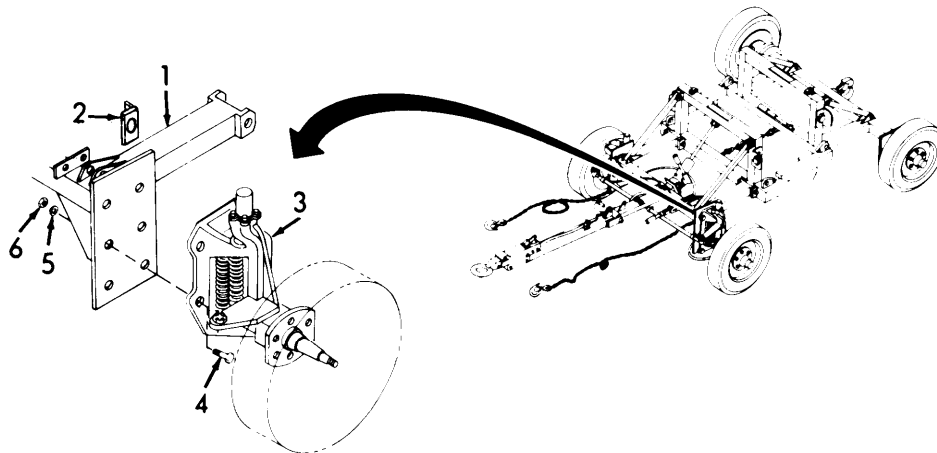


Figure 3-22. Shock Absorbing Spring Assembly, Removal.

b. Disassembly.

- (1) Remove cap (1, Figure 3-23) from knuckle (2).
 - (a) Remove three bolts (3) and three lockwashers (4).
 - (b) Lift cap (1) from knuckle (2).
- (2) Remove kingpin (5).
 - (a) Remove capscrew (6).
 - (b) Lift kingpin (5) from knuckle (2).
- (3) Note and record position of dust covers (7), washer (8), and spring support assembly (9).
- (4) Remove bracket (10) from knuckle (2) and disassemble.
 - (a) Remove bracket (10) from knuckle (2).
 - (b) Remove three dust covers (7), washer (8), spring support assembly (9), six springs (11), and three spring guides (12).
 - (c) Separate springs (11) from spring guides (12).
 - (d) Remove two grease fittings (13).

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3-20. LEFT AND RIGHT SHOCK ABSORBING SPRING ASSEMBLIES - Continued.

b. *Disassembly-Continued.*

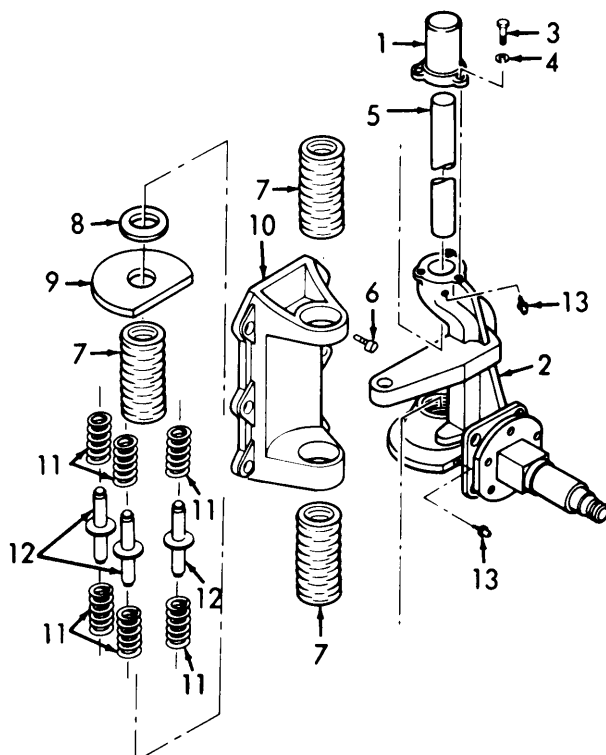


Figure 3-23. Shock Absorbing Spring Assembly, Disassembly.

c. *Cleaning.*

WARNING

Cleaning Solvent, Federal Specification P-D-680, is toxic and flammable. Use solvent only in a well-ventilated area. Avoid prolonged breathing of vapors. Keep away from open flame. Do not use in excessive amounts.

- (1) Clean all components using a soft clean cloth or medium bristle brush dampened with cleaning solvent (Federal Specification P-D-680).
- (2) Allow components to air dry.

GO TO NEXT PAGE

3-20. LEFT AND RIGHT SHOCK ABSORBING SPRING ASSEMBLIES - Continued.

d. Inspection.

- (1) Check inside bore of cap (1, Figure 3-24) for wear.
- (2) Check kingpin (2) for wear.
- (3) Check springs (6) for broken or distorted coils.
- (4) Check dust covers (5) for tears.
- (5) Check spindle (4) on knuckle (3) for worn bearing surfaces and damaged threads.
- (6) Check bracket (7) and knuckle (3) for cracks.
- (7) Check spring guides (8) for wear and cracks.

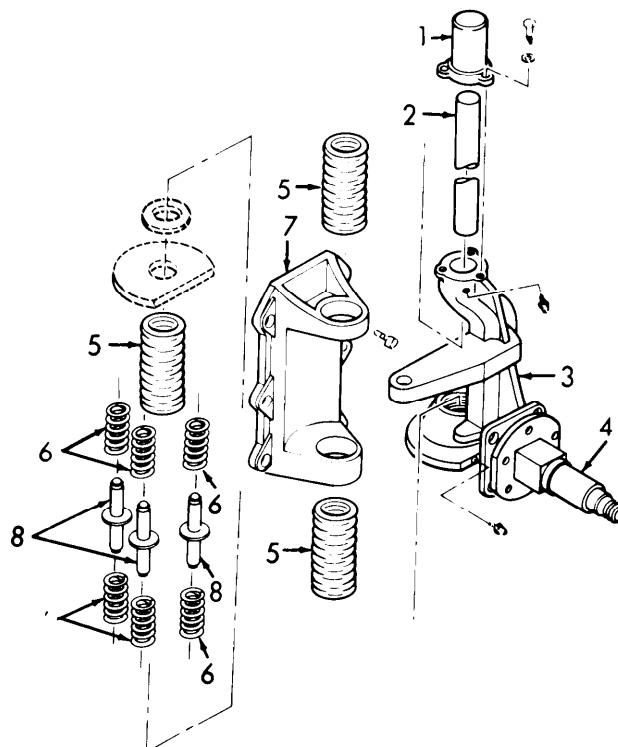


Figure 3-24. Shock Absorbing Spring Assembly, Inspection.

e. Repair.

Repair of the left or right shock absorbing spring assembly is limited to replacement of defective parts.

GO TO NEXT PAGE

3-20. LEFT AND RIGHT SHOCK ABSORBING SPRING ASSEMBLIES - Continued.

f. *Reassembly.* (Refer to Figures 3-25, 3-26, and 3-27).

- (1) Install kingpin (2, Figure 3-25) through bottom hole of bracket (1) so that one inch of kingpin extends from top of hole.
- (2) Install one dust cover (3) on part of kingpin (2) extending into bracket (1). Compress dust cover.

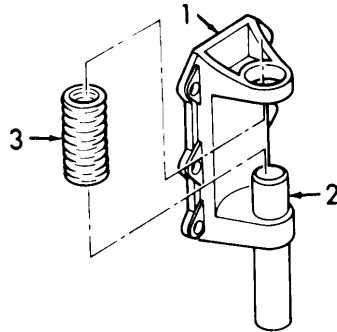


Figure 3-25. Kingpin, Installation.

- (3) Position knuckle (1, Figure 3-26) over installed dust cover (2) and kingpin (4).
- (4) Push kingpin (4) up through bottom hole of knuckle (1). Position dust cover (5) over kingpin.
- (5) Continue pushing kingpin (4) up through spring support assembly (6).
- (6) Install washer (7) between top of spring support assembly (6) and bracket (3).
- (7) Push knuckle (1) toward top of bracket (3) and install dust cover (8).

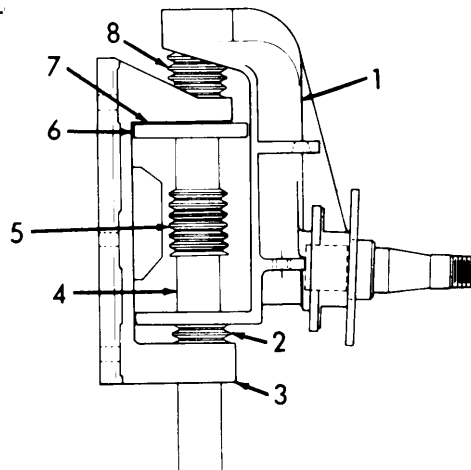


Figure 3-26. Spring Support, Installation.

GO TO NEXT PAGE

3-20. LEFT AND RIGHT SHOCK ABSORBING SPRING ASSEMBLIES - Continued.

f. *Reassemble-Continued.*

- (8) Refer to and push kingpin (10, Figure 3-27) up through top hole in knuckle (4).
- (9) Aline hole in kingpin (10) with small hole in bracket (11). Install cap screw (5) through bracket and into kingpin.
- (10) Position six springs (8) on three spring guides (9).
- (11) Place springs (8) and spring guides (9) in position on spring support assembly (6).
- (12) Using hand or screwdriver pressure, place spring (8) and spring guide (9) assemblies into position on knuckle (4).
- (13) Install cap (12), three lockwashers (2), and three bolts (1).
- (14) Install two grease fittings (3 and 7).

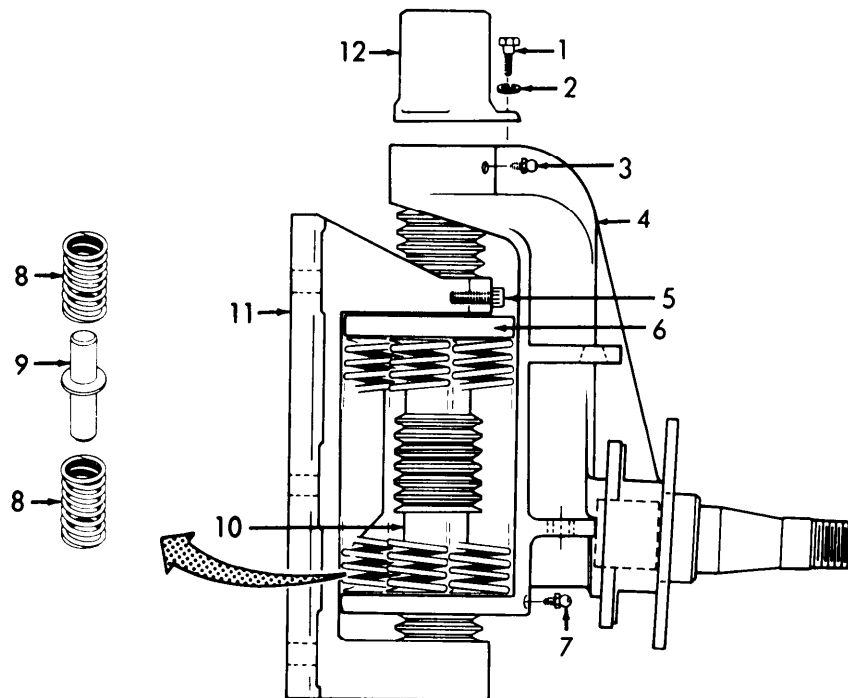


Figure 3-27. Springs, Installation.

GO TO NEXT PAGE

3-20. LEFT AND RIGHT SHOCK ABSORBING SPRING ASSEMBLIES - Continued.

g. Installation.

- (1) Install shock absorbing spring assembly on front axle frame (1, Figure 3-28).
 - (a) Position spring assembly (3) on front axle frame (1).
 - (b) Install six bolts (4), six lockwashers (5), six nuts (6), and bracket (2).

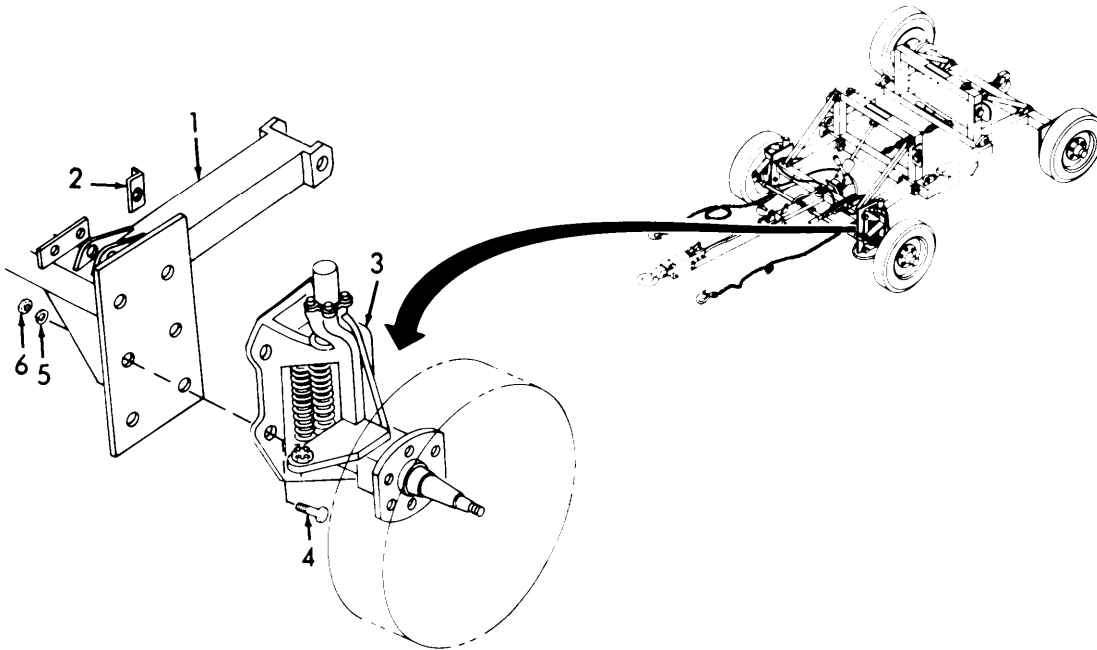


Figure 3-28. Shock Absorbing Spring Assembly, Installation.

END OF TASK

3-21. TIE ROD ENDS.

This task covers:

- a. Removal
- b. Installation
- c. Alinement

INITIAL SET UP

Tools: Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Materials/Parts: Cotter pins, MS24665-285

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

GO TO NEXT PAGE

3-21. TIE ROD ENDS-Continued.

a. Removal.

- (1) Remove tie rod ends (4, Figure 3-29) and (6).
 - (a) Remove four cotter pins (2), four nuts (3), and four bolts (1) from tie rod ends (4) and (6).
 - (b) Use spreader tool to disengage tie rod ends (4) and (6) from transporter frame.
 - (c) Remove four clamps (5) and (7).
 - (d) Remove tie rod ends (4) and (6) from tie rods (8).

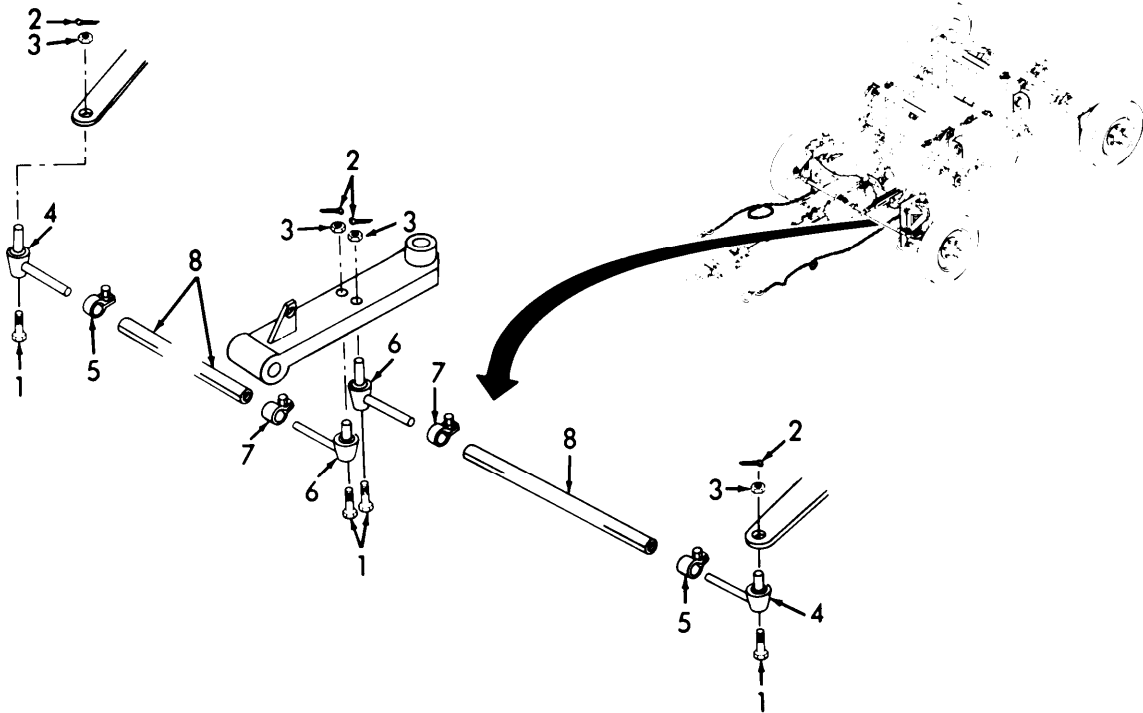


Figure 3-29. Tie Rod Ends, Removal.

b. Installation.

- (1) Install tierodends (4, Figure 3-30) and (6).
 - (a) Install four clamps (5) and (7) onto tie rod ends (4) and (6).
Then install tie rod ends (4) and (6) into tie rods (8).
 - (b) Adjust each tie rod assembly to provide 23-1/8 inches between centers of tie rod ends (4) and (6).
 - (c) Install tie rod assemblies onto transporter frame.
 - (d) Install four bolts (1), four nuts (3), and four cotter pins (2).

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3-21. TIE ROD ENDS -Continued.

b. *Installation-Continued.*

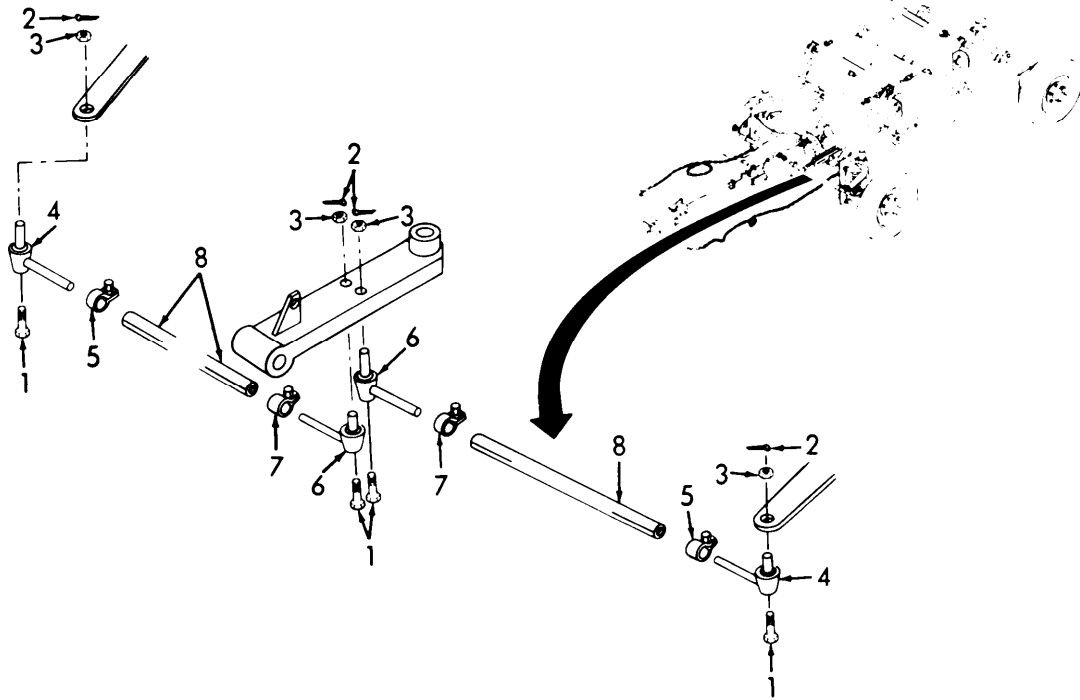


Figure 3-30. Tie Rod Ends, Installation.

c. *Alinement.* (Refer to Figure 3-31).

- (1) Place transporter on flat surface with front wheels and towbar facing straight ahead.
- (2) Adjust each tie rod assembly to provide 23-1/8 inches between the centers of tie rod.
- (3) Measure the distance between the center of the front wheels. This will give the "Toe in" measurement. The dimension should be 62 3/8".

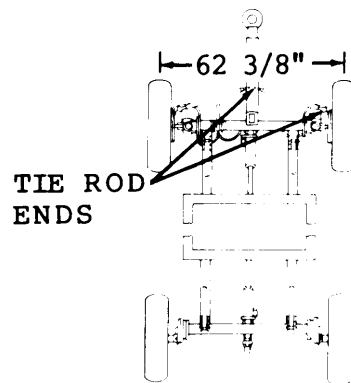


Figure 3-31. Alinement.

END OF TASK

3-22. WHEELS AND TIRES.

This task covers:

- Removal
 a
 b : Installation

INITIAL SET UP

Tools : Motor pool facilities.

Personnel Required: A light wheel vehicle power generation mechanic MOS63B .

a. *Removal.*

- (1) Block wheels and jack up transporter assembly.
- (2) Remove six nuts (1, Figure 3-32) and wheel assembly.
- (3) Deflate tire and remove tire (2) and tube (3) from wheel (4).

b. *Installation.*

- (1) Install tire (2, Figure 3-32) and tube (3) onto wheel (4).
- (2) Inflate tire to proper pressure.
- (3) Install wheel assembly onto transporter.
- (4) Install six nuts (1) and lower transporter to ground then remove wheel blocks.

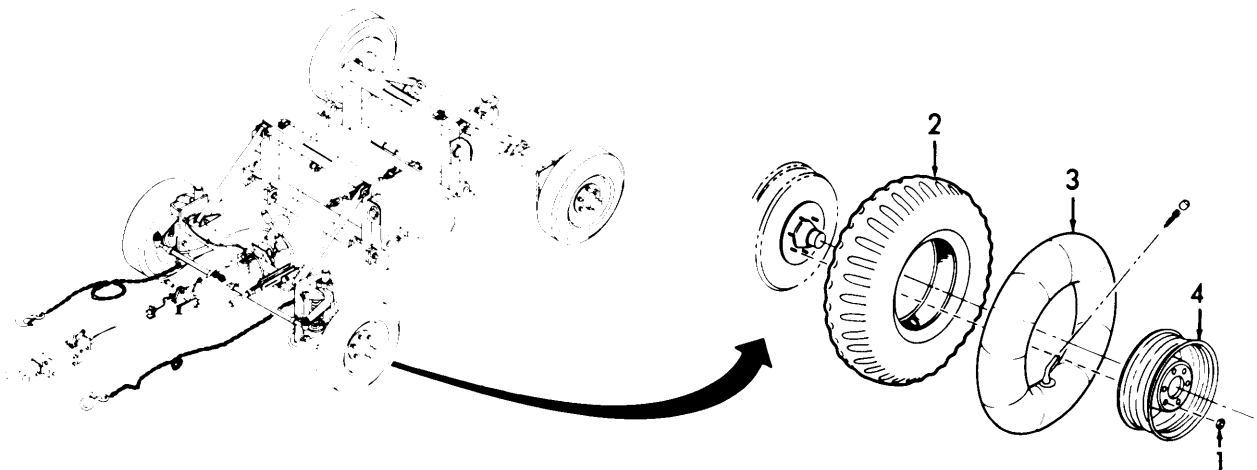


Figure 3-32. Wheel and Tire, Removal and Installation.

END OF TASK

3-23. FRONT WHEEL BEARINGS AND SEALS.

This task covers:

- a. Removal
- b. Installation
- c. Adjustment

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Materials/Parts: Cotter pin (1) MS-24665-357
Packing (1) 23606

Personnel Required: A light wheel vehicle/power generation mechanic MOS63B

Equipment
Condition
Para.

Condition Description

3-22

Front wheel and tire removed.

a. *Removal.*

- (1) Remove grease cap (1, Figure 3-33) cotter pin (11), nut (2), and key washer (3).
- (2) Pull drum (6) from spindle (10).
- (3) Remove bearing (4) and cup (5) from drum (6).
- (4) Remove retainer (7), bearing (8), and grease seal (9) from spindle (10).

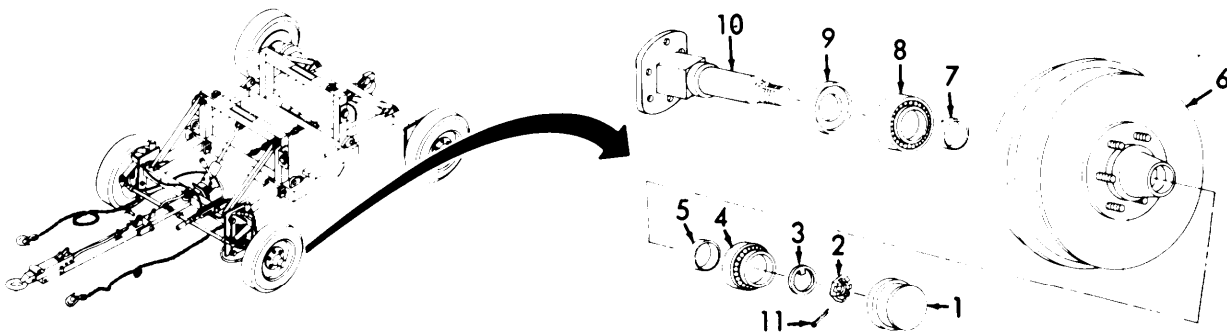


Figure 3-33. Front Wheel Bearings, Removal.

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3-23. FRONT WHEEL BEARINGS AND SEALS - Continued.

b. Installation.

- (1) Install grease seal (9, Figure 3-34) bearing (8), and bearing (7) on spindle (10).
- (2) Install cup (5) and bearing (4) in drum (6).
- (3) Position drum (6) on spindle (10).
- (4) Install key washer (3) and nut (2).
- (5) Install new cotter pin (MS24665-357) (11) through nut (2) and spindle (10).
- (6) Install grease cap (1).

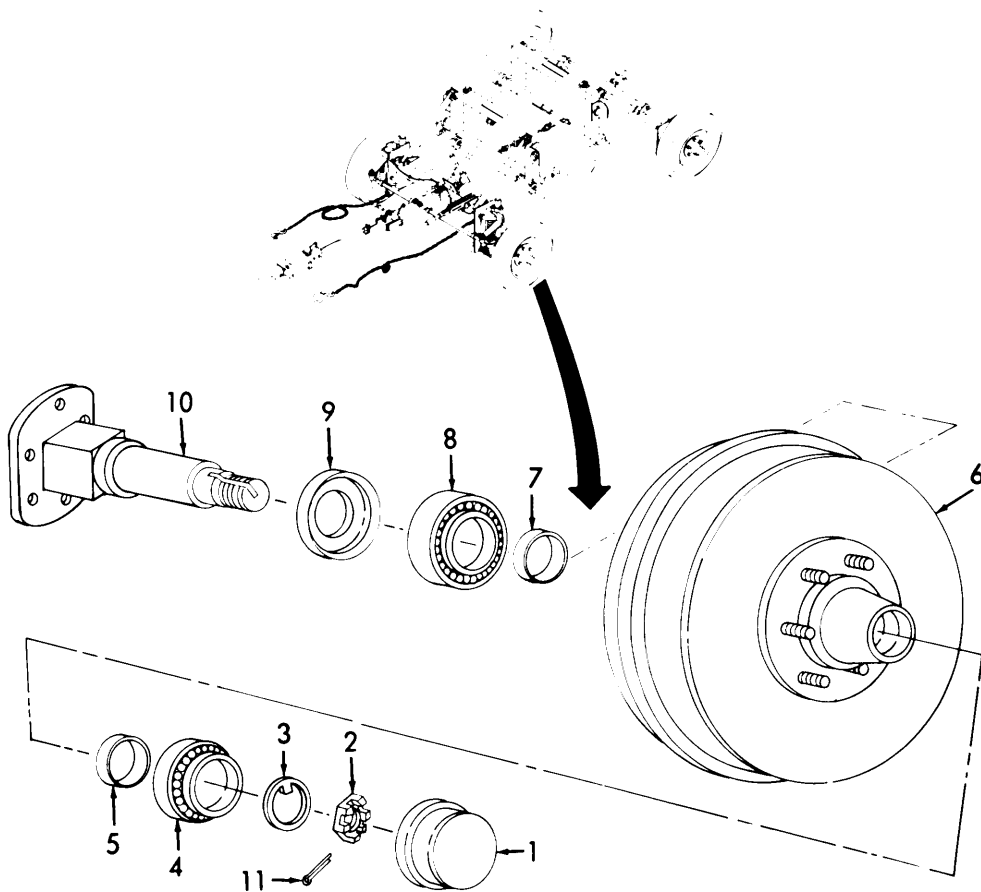


Figure 3-34. Front Wheel Bearings, Installation.

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3-23. FRONT WHEEL BEARINGS AND SEALS - Continued.

c. Adjustment.

- (1) Remove grease cap (1, Figure 3-35).
- (2) Remove cotter pin (2).
- (3) Loosen nut (3) several turns.
- (4) Slowly tighten nut (3) while turning drum (4).
- (5) Stop tightening nut (3) when drum (4) no longer turns freely.
- (6) Loosen nut (3) 1/4 turn.
- (7) Install cotter pin (2) and grease cap (1).

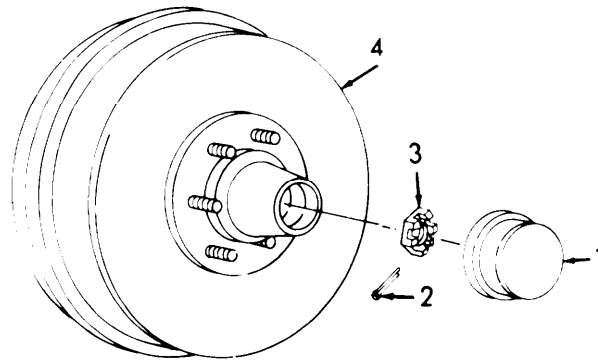


Figure 3-35. Front Wheel Bearing Adjustment.

END OF TASK

3-24. REAR WHEEL BEARINGS AND SEALS.

This task covers:

- a. Removal
- b. Installation
- c. Adjustment

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Materials/Parts: Cotter pin (1)
Packing (1) 23606

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

Equipment Condition Para.

Condition Description

3-22

Rear wheel and tire removed

a. *Removal.*

- (1) Remove grease cap (1, Figure 3-36) cotter pin (11), nut (2), and key washer (3).
- (2) Pull drum (6) from spindle (10).
- (3) Remove bearing (4) and cup (5) from drum (6).
- (4) Remove retainer (7), bearing (8), and grease seal (9) from spindle (10).

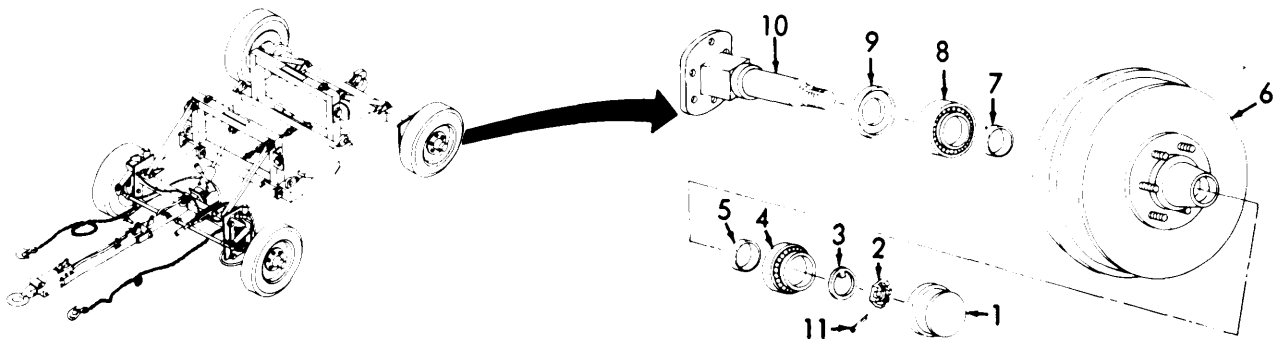


Figure 3-36. Rear Wheel Bearings, Removal.

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3-24. REAR WHEEL BEARINGS AND SEALS -Continued.

b. *Installation.*

- (1) Install grease seal (9, Figure 3-37) bearing (8), and retainer (7) on spindle (10).
- (2) Install cup (5) and bearing (4) in drum (6).
- (3) Position drum (6) on spindle (10).
- (4) Install key washer (3) and nut (2).
- (5) Install new cotter pin (MS24665-357) (11) through nut (2) and spindle (10).
- (6) Install grease cap (1).

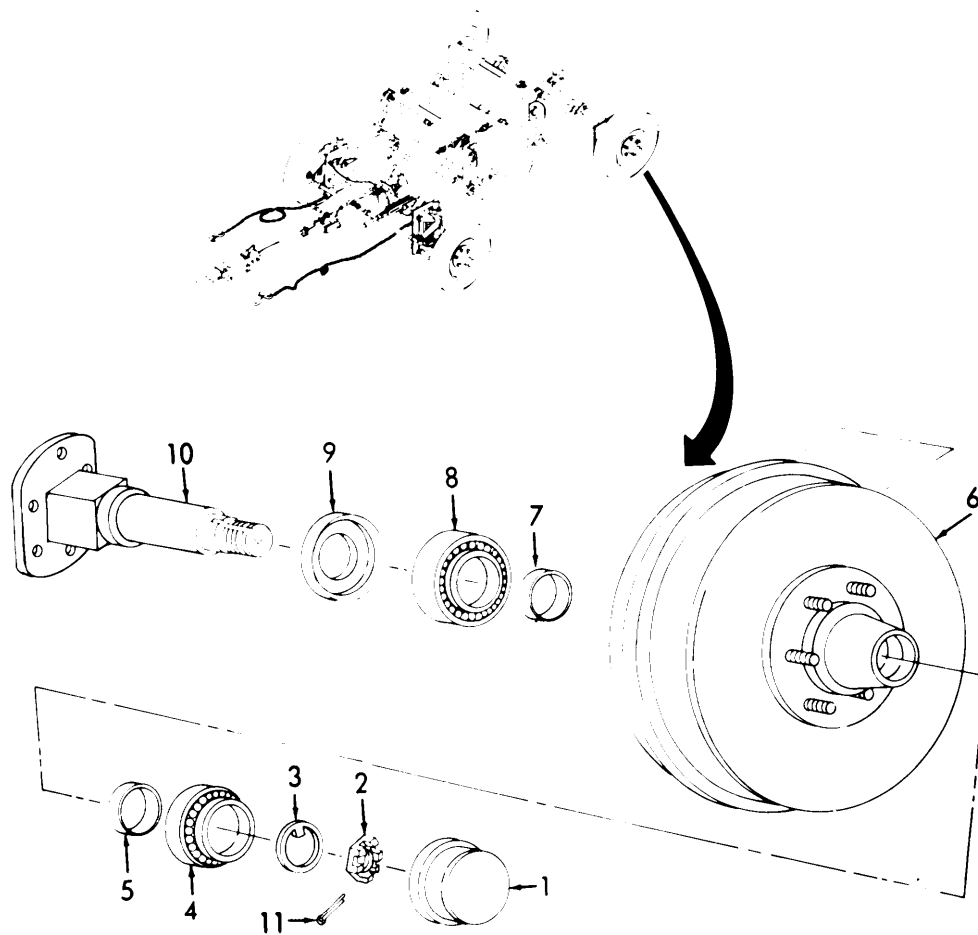


Figure 3-37. Rear Wheel Bearings, Installation.

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3-24. REAR WHEEL BEARINGS AND SEALS -Continued.*c. Adjustment,*

- (1) Remove grease cap (1, Figure 3-38).
- (2) Remove cotter pin (2).
- (3) Loosen nut (3) several turns.
- (4) Slowly tighten nut (3) while turning drum (4).
- (5) Stop tightening nut (3) when drum (4) no longer turns freely.
- (6) Loosen nut (3) 1/4 turn.
- (7) Install cotter pin (2) and grease cap (1).

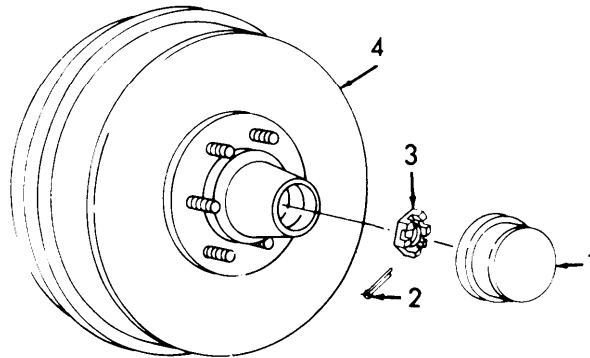


Figure 3-38. Rear Wheel Bearing Adjustment.

END OF TASK

3-25. STEERING CENTER ARM.

This task covers:

- a. Removal
- b. Cleaning
- c. Inspection
- d. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit,
General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

Materials/Parts: Cotter pins MS24865-357

a. Removal.

- (1) Remove screw (2) from clamp (3).
- (2) Disconnect flex hose (4) from fitting on towbar (9).
- (3) Remove cotter pin (5) and washer (6) from pin (7).
- (4) Remove pin (7), washer (8), and remove towbar (9).
- (5) Remove two cotter pins (10), two nuts (11), and disconnect tie rods (12) from steering center arm (1).
- (6) Remove bolt (13), washer (14), pivot pin (15), and remove steering center arm (1).

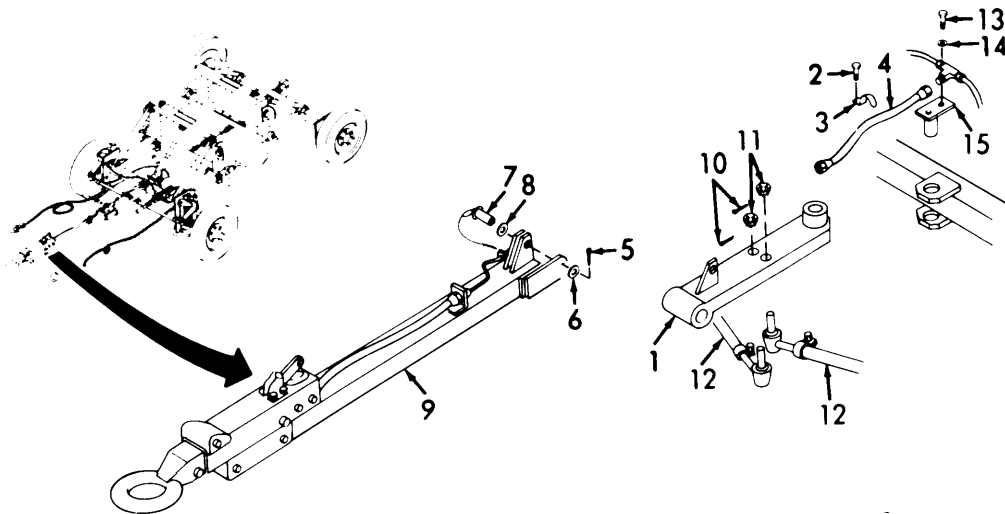


Figure 3-39. Steering Center Arm Removal.

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3-25. STEERING CENTER ARM - Continued.*b. Cleaning.*

Clean steering center arm in mild soap solution and let dry.

c. Inspection.

(1) Inspect parts for cracks, corrosion, excessive wear, or damage.

(2) Replace missing or damaged hardware.

d. Installation.

- (1) Install steering center arm (1, Figure 3-40).
- (2) Install pivot pin (15) with washer (14) and bolt (13).
- (3) Install tie rods (12) onto steering center arm (1).
- (4) Install two nuts (11) and two cotter pins (10).
- (5) Install towbar (9), and pin (7) with washer (8).
- (6) Install washer (6) and cotter pin (5).
- (7) Connect flex hose (4) to fitting on towbar (9).
- (8) Bleed brake system in accordance with paragraph 3-28f.

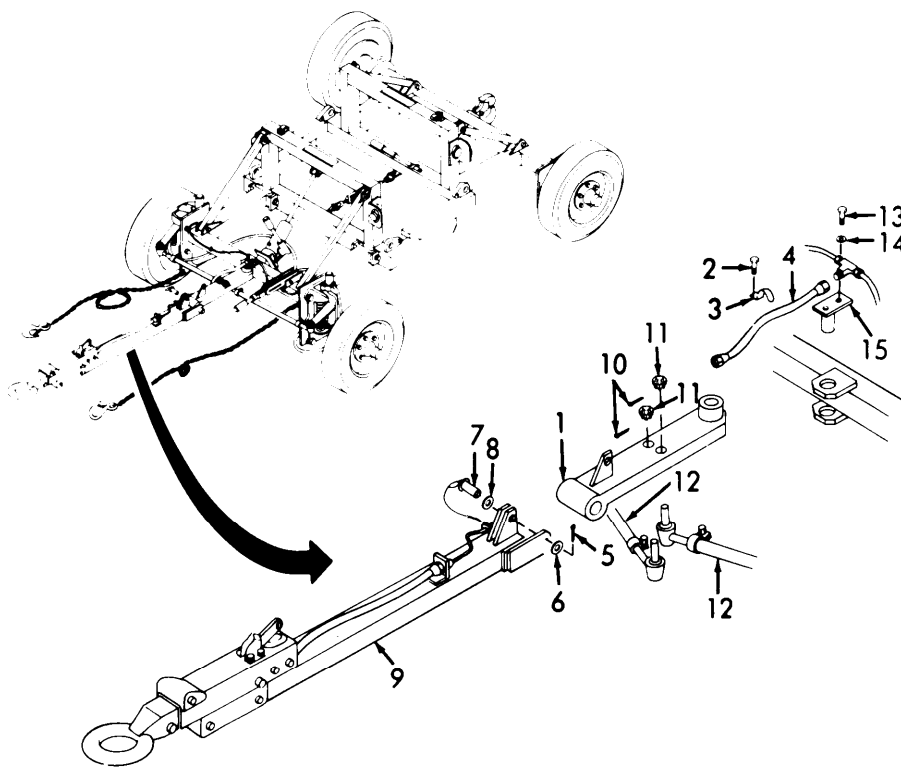


Figure 3-40. Steering Center Arm, Installation.

END OF TASK

3-26. PARKING BRAKE HANDLE.

This task covers:

- a. Removal
- b. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit,
General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

a. *Removal.*

- (1) Remove two nuts (1, Figure 3-41) two lockwashers (2), and two bolts (3).
- (2) Raise handle assembly (4) from mount.
- (3) Remove two cotter pins (5), two washers (6), and two pins (7).
- (4) Remove two clamps (8 and 9) with attached cables (10).

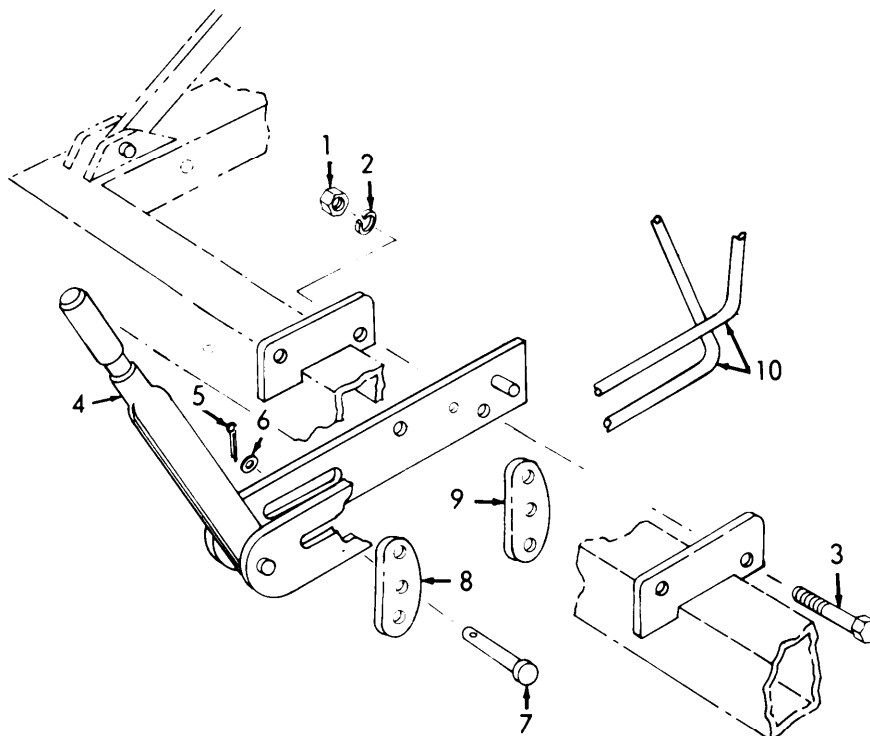


Figure 3-41. Parking Brake Handle, Removal.

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3-26. PARKING BRAKE HANDLE - Continued.

b. Installation.

- (1) Install both cables (10, Figure 3-42) with attached clamps (8 and 9) to handle assembly (4).
- (2) Install two pins (7), two washers (6), and two cotter pins (5).
- (3) Install handle assembly (4) into position.
- (4) Install two bolts (3), two lockwashers (2), and two nuts (1).

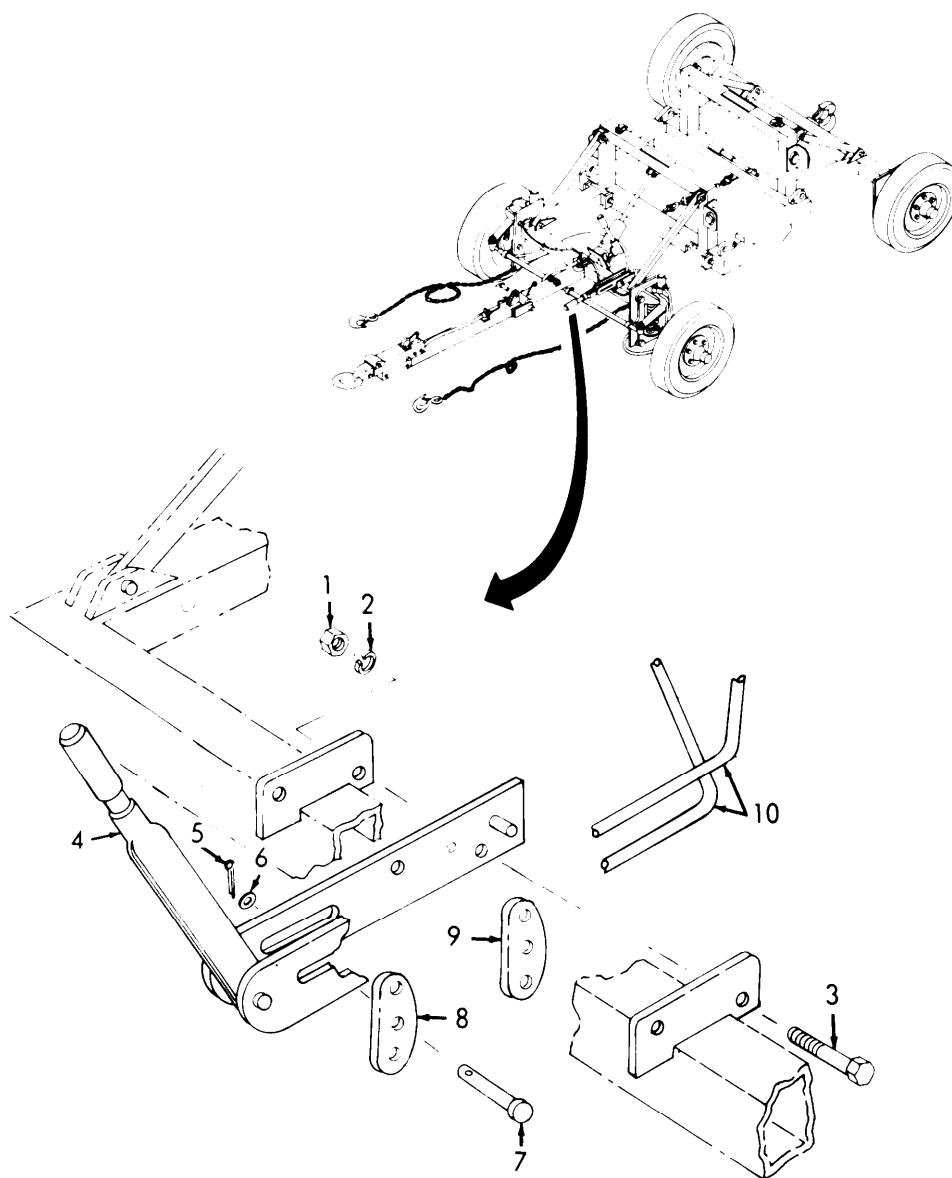


Figure 3-42. Parking Brake Handle, Installation.

END OF TASK

3-27. CABLE.

This task covers:

- a. Removal
- b. Service
- c. Installation
- d. Adjustment

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit,
General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

a. *Removal.*

- (1) Remove cotter pin (1, Figure 3-43) and pin (2).
- (2) Remove shackle (3) from bracket (4).
- (3) Remove cotter pin (5) and pin (6).
- (4) Remove shackle (7) from bracket (8).
- (5) Remove turnbuckle (9) with attached cable.

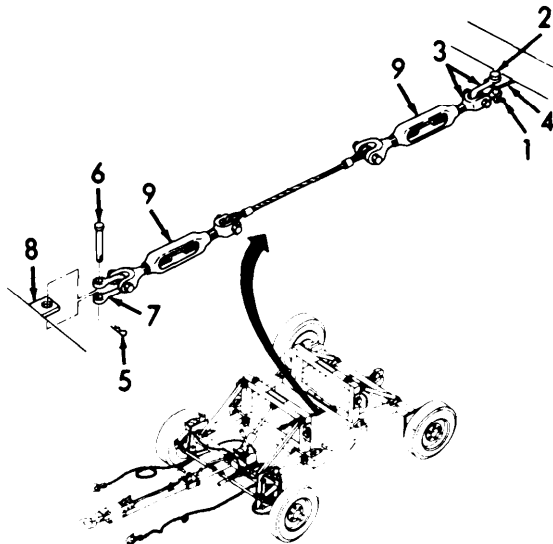


Figure 3-43. Cable, Removal.

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3-27. CABLE - Continued.

b. *Service.* Servicing of the cable consists of applying a small amount of grease (MIL-G-10924) to the turnbuckle threads. Then work it in by screwing in and out the screws.

c. *Installation.*

(1) place turnbuckle (9, Figure 3-44) with attached cable into position.

(2) Install shackle (7) to bracket (8).

(3) Install pin (6) and cotter pin (5).

(4) Install shackle (3) to bracket (4).

(5) Install pin (2) and cotter pin (1).

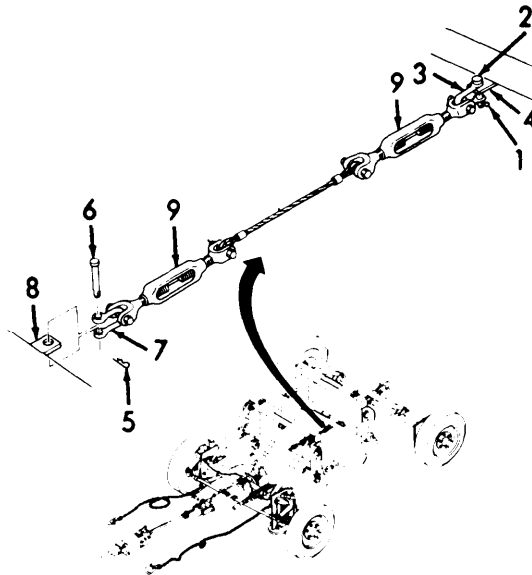


Figure 3-44. Cable, Installation.

d. *Adjustment.* To loosen the cable, turn the turnbuckle counterclockwise (as viewed from front). To tighten the cable, turn the turnbuckles clockwise (as viewed from the front).

END OF TASK

3-28. LINES AND HOSES.

This task covers:

- a. Removal
- b. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit,
General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

a. *Removal.*

- (1) Disconnect fittings on each end of hose or line.
- (2) Remove hold down clamps as needed.

b. *Installation.*

- (1) Connect hose or line fittings.
- (2) Install hold down clamps as required.

END OF TASK

3-29. BRAKE SHOES AND WHEEL CYLINDERS.

This task covers:

- a. Removal
- b. Cleaning
- c. Inspection
- d. Installation
- e. Adjustment
- f. Bleeding

INITIAL SET UP

Tools : Tool kit, General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic
MOS63B

Materials/Parts: Brake Fluid, Silicon, Automotive, All Weather, Oper
ational and Preservative (BFS) Spec. MIL-B-46176, Quart
container, and Hose

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3-29. BRAKE SHOES AND WHEEL CYLINDERS -Continued.

Equipment Condition para.	Condition Description
3-22	Left and right front wheels removed.
3-29	Left and right drums removed.

a. *Removal.*

- (1) Remove brake hold down springs (1, Figure 3-45) guide shoe (2), and cover (3).
- (2) Remove hold down cup (4), hold down spring (5), and hold down rod (6).
- (3) Remove adjusting assembly spring (7).
- (4) Remove adjusting screw assembly (8) and both brake shoes (9).
- (5) Remove strut (10) and spring (11).
- (6) Remove retainer (12) and lever (13). Be sure to disconnect cable from lever (13).
- (7) Disconnect hydraulic line from wheel cylinder.
- (8) Remove two screws (14), two washers (15), and wheel cylinder (16).
- (9) Remove four nuts (17), four lockwashers (18), four bolts (19), and back plate (20).

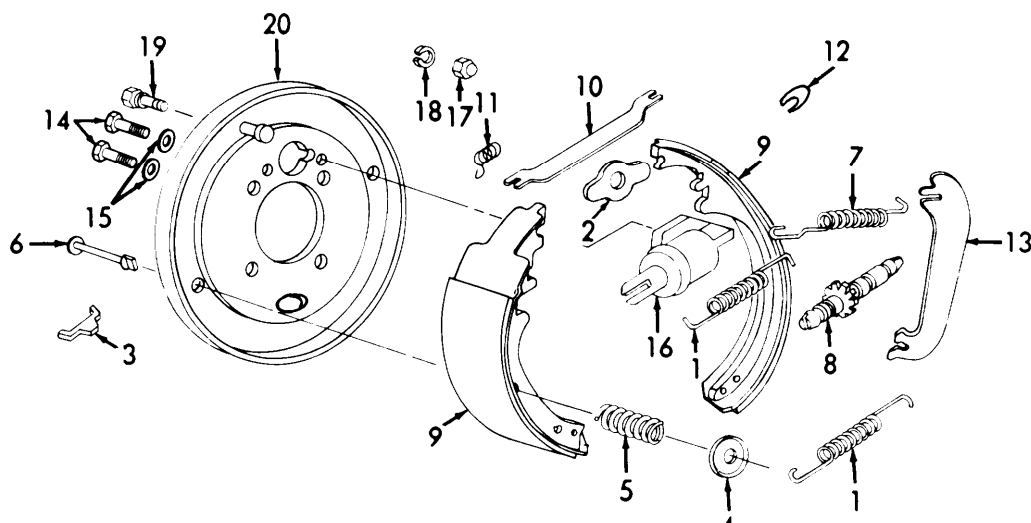


Figure 3-45. Brakes, Removal.

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3-29. BRAKE SHOES AND WHEEL CYLINDERS -Continued.

b. Cleaning.

Clean all parts with mild soap solution and let dry.

c. Inspection.

Inspect all parts for damage, corrosion, excessive wear, and missing hardware. Replace missing, worn, or damaged hardware.

d. Installation.

- (1) Aline back plate (20, Figure 3-46) install four bolts (19), four lockwashers (18), and four nuts (17).
- (2) Aline wheel cylinder (16) on back plate (20), install two washers (15), and two screws (14).
- (3) Connect hydraulic line to wheel cylinder.
- (4) Install lever (13) and retainer (12) to brake shoes (9).
- (5) Install spring (11) and strut (10).
- (6) Install adjusting screw assembly (8) and brake shoes (9).
- (7) Connect brake cable to lever (13).
- (8) Install adjusting assembly spring (7).
- (9) Install hold down rod (6), hold down spring (5), and hold down cup (4).
- (10) Install cover (3), guide shoe (2), and hold down springs (1).
- (11) Rotate adjustment wheel to pull brake shoes towards each other to allow installation of drum.

e. Adjustment.

- (1) Remove cover (3) and tighten adjusting screw assembly (8) while spinning drum in forward rotation only, until lining drags slightly on drum.
- (2) Back off adjusting screw assembly (8), 10 to 12 notches.
- (3) Replace cover (3).

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3-29. BRAKE SHOES AND WHEEL CYLINDERS -Continued.

e. Adjustment-Continued.

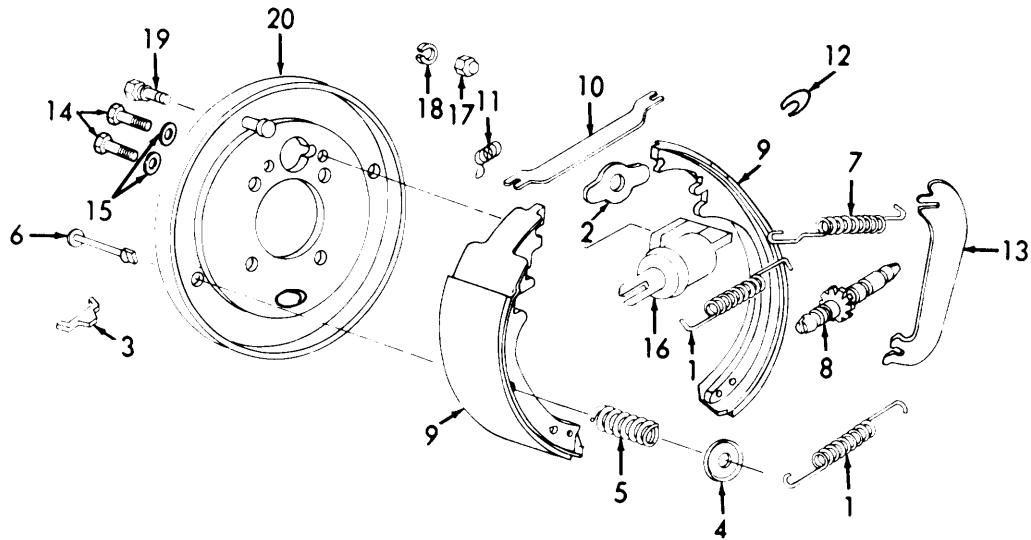


Figure 3-46. Brakes, Installation and Adjustment.

f. Bleeding.

- (1) Fill master cylinder (1, Figure 3-47) with brake fluid (MIL-B-46176).
- (2) Position quart container (2) beside wheel. Partially fill container with brake fluid.
- (3) Connect one end of bleeder hose (3) to bleed screw (4) of wheel cylinder (5). Submerge other end of hose in container (2).
- (4) Loosen bleed screw (4) one full turn.
- (5) Pump lunette eye (6), to operate actuator, until fluid flow in container (2) is bubble free. Refill master cylinder as required.
- (6) Tighten bleed screw (4) and remove bleeder hose (3).
- (7) Repeat procedure for right side.

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3-29. BRAKE SHOES AND WHEEL CYLINDERS -Continued.

f. *Bleeding-Continued.*

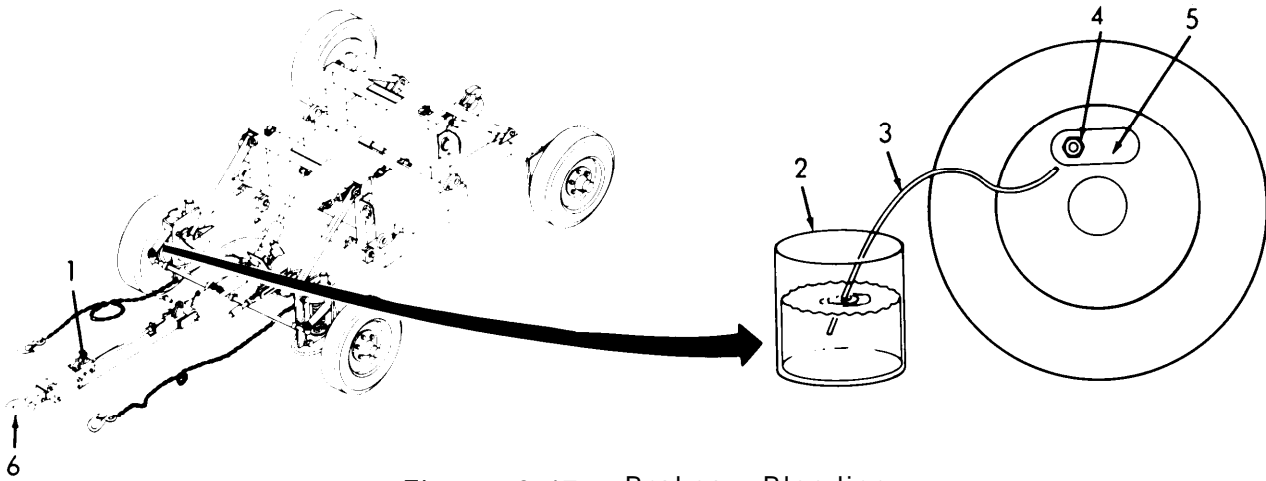


Figure 3-47. Brakes, Bleeding.

END OF TASK

3-30 MASTER CYLINDER.

This task covers:

- a. Removal
- b. Cleaning
- c. Inspection
- d. Installation

INITIAL SET UP

Tools: Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Personnel Required: A light wheel vehicle/power generation mechanic MOS63B

a. *Removal.*

- (1) Disconnect hydraulic tube (1, Figure 3-48) from fitting (2).
- (2) Remove four bolts (3), four washers (4), and remove master cylinder assembly (9).
- (3) Remove two bolts (5), two washers (6), two nuts (7), two bracket assemblies (8).
- (4) Remove push rod assembly (10).

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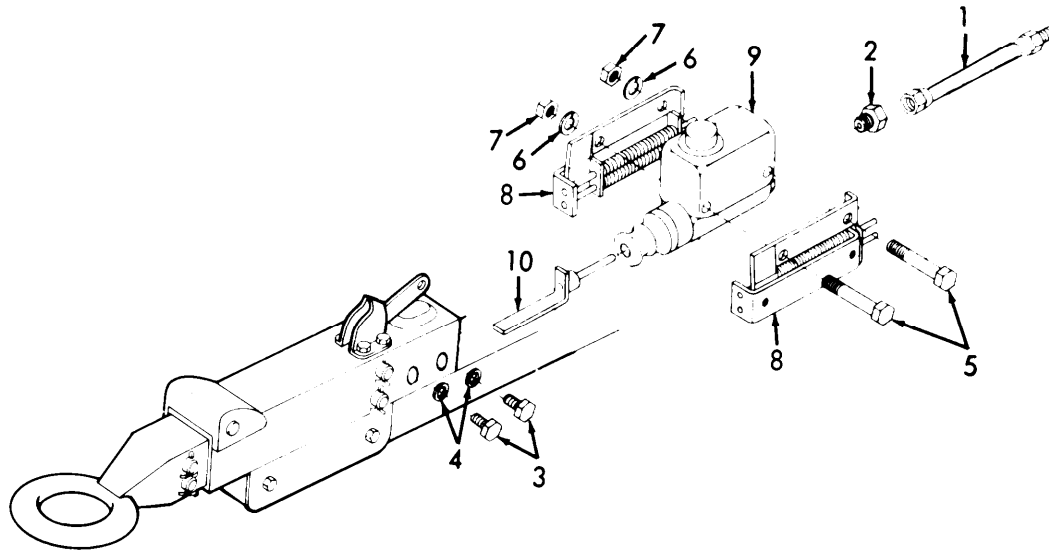
3-30. MASTER CYLINDER - Continued.*a. Removal-Continued.*

Figure 3-48. Master Cylinder, Removal.

b. Cleaning.

Clean all parts with mild soap solution and let dry.

e. Inspection.

Inspect parts for cracks, corrosion, damage and missing hardware. Replace damaged or missing parts.

d. Installation.

- (1) Install pushrod assembly (10, Figure 3-49) onto master cylinder assembly (9).
- (2) Install two bracket assemblies (8) with two nuts (7), two washers (6), and two bolts (5).
- (3) Install master cylinder assembly (9) and secure with four washers (4) and four bolts (3).
- (4) Connect hydraulic tube (1) to fitting (2).
- (5) Bleed hydraulic system in accordance with paragraph 3-29f.

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3-30. MASTER CYLINDER - Continued.

d. *Installation-continued.*

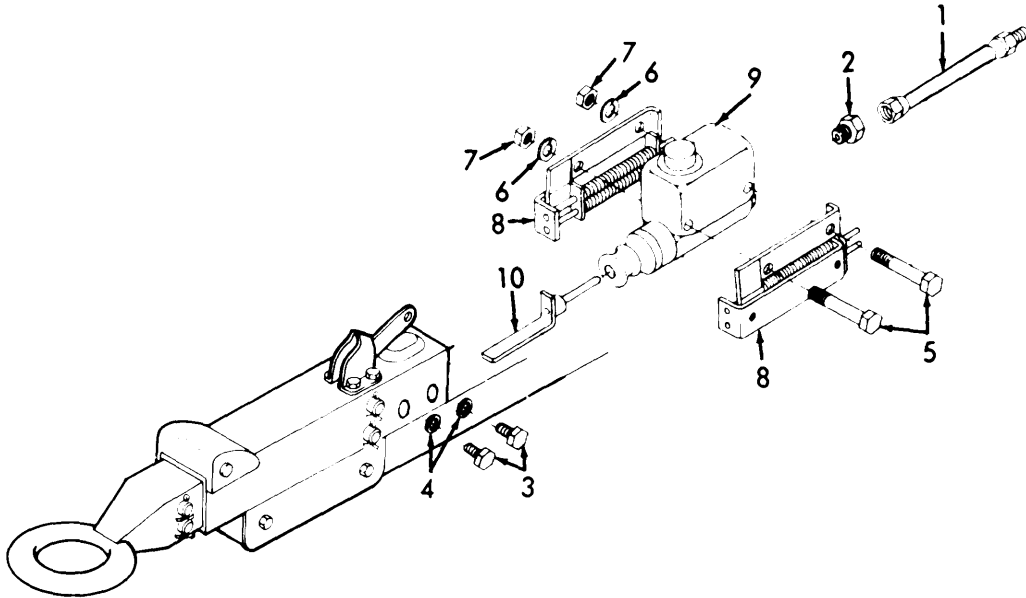


Figure 3-49. Master Cylinder, Installation.

END OF TASK

3-31. DAMPER.

This task covers:

- a. Removal
- b. Installation

INITIAL SET UP

Tools : Shop Equipment, Automotive, 4910-00-754-0654 and Tool kit, General Mechanics 5180-00-177-7033

Materials/Parts: Cotter pin (2) 8152

Personnel Required: A light wheel vehicle/power generation mechanic MOS63B

a. *Removal.*

- (1) Remove two cotter pins (1, Figure 3-50) from master pins (2).

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3-31. DAMPER - Continued.

a. Removal-Continued.

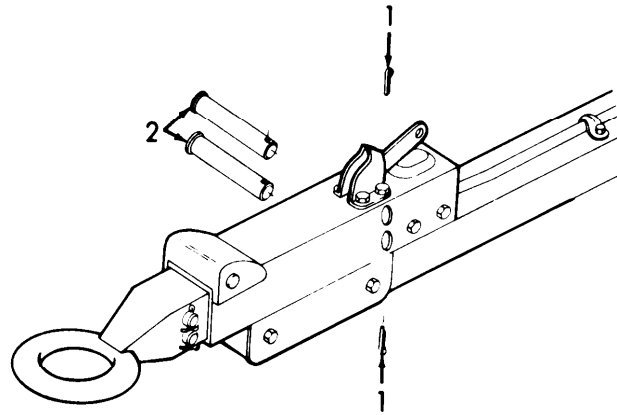


Figure 3-50. Master Pin, Removal.

- (2) Separate lunette eye (2, Figure 3-51) from brake actorator housing(l).
- (3) Remove two cotter pins (3) and two damper pins (4).
- (4) Remove push rod block (7), two rollers (5), and two dampers (6) from lunette eye (2).

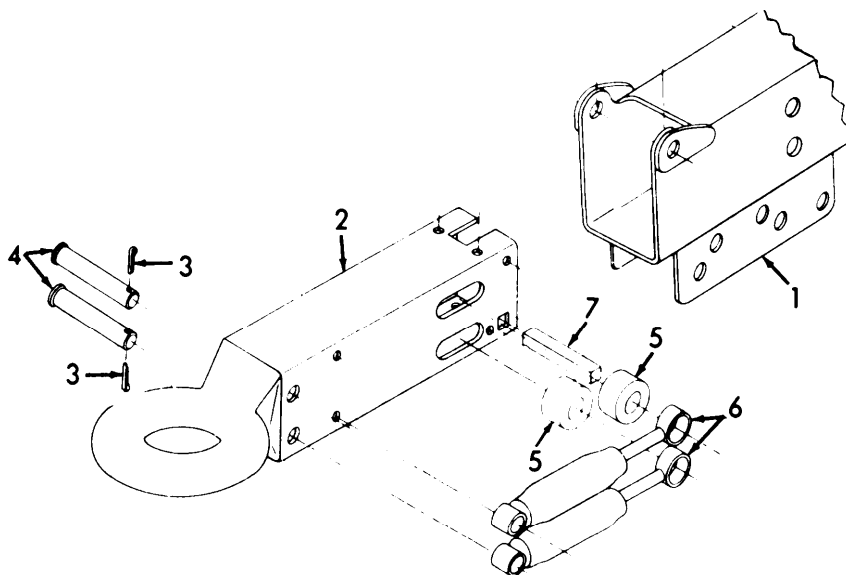


Figure 3-51. Damper, Removal.

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3-31. DAMPER - Continued

b. *Installation.*

- (1) Position two ampers (6, Figure 3-52) and two rollers (5) in lunette eye (2).
- (2) Install two damper pins (4) and two new cotter pins (7997) (3).
- (3) Install push rod block (7) and position lunette eye (2) in actuator housing (1).

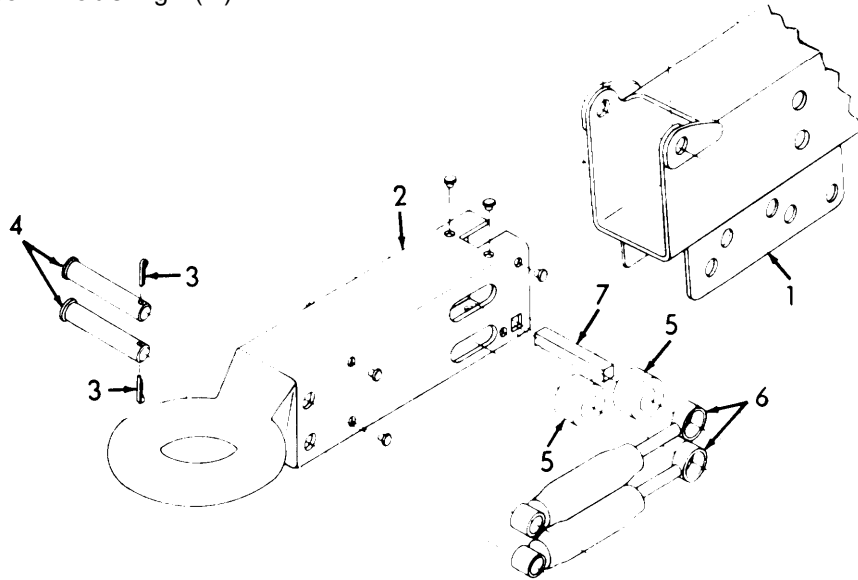


Figure 3-52. Damper, Installation"

- (4) Install master pin (2, Figure 3-53) and two new cotter pins (8152) (1).

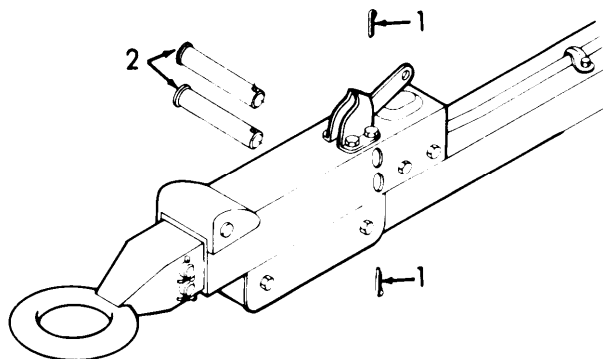


Figure 3-53. Master Pin, Installation.

END OF TASK

3-32. PAINTING AND REFINISHING.

This task covers:

- a. Cleaning
- b. Surface Preparation
- c. Prime Coating
- d. Final Coating

INITIAL SET UP

Tools: None

Materials: Sandpaper
 Primer, TT-P-636
 Paint, Forest Green, MIL-E-52798

Personnel Required: A light wheel vehicle/power generation mechanic
 MOS63B

a. *Cleaning.*

Clean all parts to be painted with mild soap solution.

b. *Surface Preparation.*

Use sandpaper to remove damaged paint and corrosion on base metal.

c. *Prime Coating.*

Coat the prepared surface with primer, TT-P-636.

d. *Final Coating.*

Cover the prime coat with paint forest green, MIL-E-52798.

END OF TASK

Section VI. PREPARATION FOR STORAGE OR SHIPMENT

3-33. GENERAL.

This section contains information on preparation of transporter for storage or shipment.

3-34. STORAGE.

- a. Perform PMCS in accordance with Table 3-1.
- b. Remove cable assembly from transporter, wrap in plastic and seal plastic with tape.
- c. Secure wrapped cable assembly to rear transporter lockout strut with strapping.
- d. Wrap exposed jack piston with plastic and seal edges with tape.
- e. Fasten jack handles in clamps on each transporter.
- f. Wrap brake safety chain in plastic and seal with tape.
- g. Set tire pressure to 25 psi and support off the ground on blocks in a warm dry environment.

3-35. SHIPMENT.

- a. Refer to paragraph 2-7 for transporter shipment.
- b. Refer to paragraph 2-8 for transporter shipment with shelter or container.

CHAPTER 4

AVIATION INTERMEDIATE MAINTENANCE - MAINTENANCE INSTRUCTIONS

Section I. REPAIR PARTS, SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT

4-1. COMMON TOOLS AND EQUIPMENT.

For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment (MTOE) applicable to your unit.

4-2. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT.

No special tools, TMDE, or support equipment is required for the Air-mobile Transporter.

4-3. REPAIR PARTS.

Repair parts are listed and illustrated in Appendix C of this manual.

Section II. SERVICE UPON RECEIPT

4-4. GENERAL.

This section contains instructions for services to be performed by the using organization upon receipt of a new or overhauled Airmobile Transporter. These services include checking, unpacking, and servicing the transporter.

4-5. CHECKING AND UNPACKING EQUIPMENT.

- a. Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on SF 364, Reports of Discrepancies.
- b. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with the instructions of TM 38-750.
- c. Check to see whether the equipment has been modified.
- d. Remove strapping, tapes, seals, and other protective shipping materials.

4-5. CHECKING AND UNPACKING EQUIPMENT - Continued.

e. Connect safety cable to front and rear transporter frames as follows:

- (1) Position turnbuckle (1, Figure 3-1) and shackle (2) on rear transporter frame eye (5).
- (2) Install pin (3) and cotter pin (4).
- (3) Position turnbuckle (6) and shackle (7) on front transporter frame eye (10).
- (4) Install pin (8) and cotter pin (9).

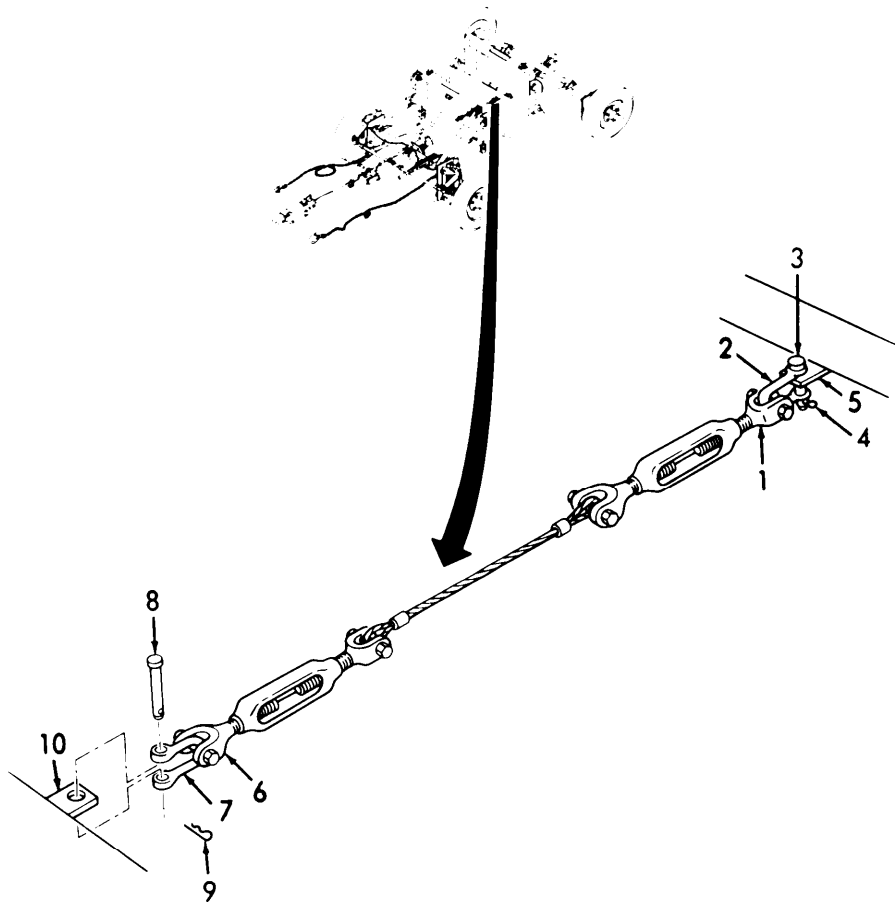


Figure 4-1. Safety Cable Connection.

Section III. MAINTENANCE PROCEDURES

4-6. GENERAL.

This section contains maintenance procedures for aviation intermediate maintenance personnel (MOS 44B, Welder).

4-7. SUSPENSION FRAME REPAIR.

Repair all cracks by welding in accordance with standard shop practices.

4-8. LOCKOUT STRUTS REPAIR.

Repair all cracks by welding in accordance with standard shop practices.

4-9. AXLE FRAME REPAIR.

Repair all cracks by welding in accordance with standard shop practices.

4-10. BRACKETS, TUBES, AND PIVOT PINS.

Repair all cracks by welding in accordance with standard shop practices.

4-11. STEERING CENTER ARM.

Repair all cracks by welding in accordance with standard shop practices.

APPENDIX A

REFERENCES

A-1 . MAINTENANCE.

DA PAM 738-751

Functional Users Manual for the Army Maintenance Management System - Aviation (TAMMS-A)

A-2. SHIPMENT AND STORAGE.

TM 1-1500-204-23 (Series)

General Aircraft Maintenance Manual

A-3. DESTRUCTION TO PREVENT ENEMY USE.

TM 740-244-3

Procedures for Destruction of Equipment to Prevent Enemy Use.

A-4. OPERATION.

FM 21-305

Operation in Adverse Weather Conditions

APPENDIX B

MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

B-1. MAINTENANCE ALLOCATION CHART.

- a. This Maintenance Allocation Chart (MAC) assigns maintenance functions in accordance with the Three Levels of Maintenance concept for army aircraft. These maintenance levels: Aviation Unit Maintenance (AVUM), Aviation Intermediate Maintenance (AVIM) and Depot Maintenance are depicted on the MAC as:

AVUM which corresponds to the O code in the Repair Parts and Special Tools List (RPSTL).

AVIM which corresponds to the F code in Repair Parts and Special Tools List (RPSTL).

Depot which corresponds to the D code in the Repair Parts and Special Tools List (RPSTL).

- b. The maintenance to be performed below depot and in the field is described as follows:
- (1) Aviation Unit Maintenance (AVUM). AVUM activities will be staffed and equipped to perform high frequency "On-Equipment" maintenance tasks required to retain or return equipment to a serviceable condition. The maintenance capability of the AVUM will be governed by the MAC, and limited by the amount and complexity of support equipment, facilities required, and number of spaces and critical skills available. The range and quantity of authorized spare modules/components will be consistent with the mobility requirements dictated by the air mobility concept. (Assignment of maintenance tasks to divisional company size aviation units will consider the overall maintenance capability of the division, the requirement to conserve personnel and equipment resources and air mobility requirements.)
 - (a) Company Size Aviation Units. Perform those tasks which consist primarily of preventive maintenance and maintenance repair and replacement functions associated with sustaining a high level of equipment operational readiness. Perform maintenance inspections and servicing to include daily, intermediate, periodic and special inspections as authorized by the MAC or higher headquarters. Identify the cause of equipment/system malfunctions using applicable technical manual troubleshooting instructions. Built-In-Test-Equipment (BITE) , installed instruments, or easy to use Test Measurement and Diagnostic Equipment (TMDE).

B-1. MAINTENANCE ALLOCATION CHART - Continued.

- (a) Company Size Aviation Units - Continued. Replace worn or damaged modules/components which do not require complex adjustment or system alignment and which can be removed/installed with available skills, tools and equipment. Perform operational and continuity checks and make minor repairs. Perform servicing functional adjustments, and minor repair/ replacement. Evacuate unserviceable modules/ components and end items beyond the repair capability of AVUM to the supporting AVIM.
 - (b) Less than Company Size Aviation Unit. Aviation elements organic to brigade, group, battalion headquarters and detachment size units are normally small and have less than ten aircraft assigned. Maintenance tasks performed by the aircraft crew chief or assigned aircraft repairman will normally be limited to preventive maintenance inspections, servicing, spot painting, spot drilling, minor adjustments, module/ component fault diagnosis and replacement of selected modules / components. Repair functions will not normally be accomplished by the supporting AVIM unit.
- (2) Aviation Intermediate Maintenance (AVIM). AVIM provides mobile, responsive "One Stop" maintenance support (Maintenance functions which are not conducive to sustaining air mobility will be assigned to depot maintenance. Performs all maintenance functions authorized to be done at AVUM. Repair of equipment for return to user will emphasize support or operational readiness requirements. Authorized maintenance includes replacement and repair of modules/ components and end items which can be accomplished efficiently with available skills, tools, and equipment. Establishes the Direct Exchange (DX) program for AVUM units by repairing selected items for return to stock when such repairs cannot be accomplished at the AVUM level. Inspect troubleshoots, test, diagnoses, repairs, adjust calibrates, and align system modules/components. Module /component disassembly and repair will support the DX program and will normally be limited to tasks requiring cleaning and the replacement of seals, fittings and items of common hardware. Unserviceable repairable modules/ components and end items which are beyond the capability of AVIM to repair will be evacuated to Depot Maintenance. This level will perform special inspections which exceed AVUM capability. Provides quick response maintenance support, on-the-job-training, and technical assistance through the use of mobile maintenance contact teams. Maintains authorized operational readiness float. Provides collections and classification services for serviceable/ unserviceable material. Operates a cannibalization activity in accordance with AR 750-50.

B-1. MAINTENANCE ALLOCATION CHART - Continued.

- (2) Aviation Intermediate Maintenance (A VIM) - Continued. (The aircraft maintenance company within the maintenance battalion of a division will perform AVIM functions consistent with air mobility requirements and conservation of personnel and equipment resources. Additional intermediate maintenance support will be provided by the supporting nondivisional AVIM unit.)

B-2. USE OF MAINTENANCE ALLOCATION CHART.

- a. The MAC assigns maintenance functions to the lowest level of maintenance based on past experience and the following considerations:
- (1) Skills available.
 - (2) Time required.
 - (3) Tools and test equipment and/ or available.
- b. Only the lowest level of maintenance authorized to perform a maintenance function is indicated. If the lowest level of maintenance cannot perform all tasks of any single maintenance function (e.g., test, repair), then the higher maintenance level(s) that can accomplish additional tasks will also be indicated.
- c. A maintenance function assigned to a maintenance level will automatically be authorized to be performed at any higher maintenance level.
- d. A maintenance function that cannot be performed at the assigned level of maintenance for any reason may be evacuated to the next higher maintenance organization. Higher maintenance levels will perform the maintenance functions of lower maintenance levels when required or directed by the appropriate commander.
- e. The assignment of a maintenance function will not be constructed as authorization to carry the associated repair parts in stock.
- Authority to requisition, stock or otherwise secure necessary repair parts will be as specified in the repair parts and special tools list appendix.
- f. Normally there will be no deviation from the assigned level of maintenance. In cases of operational necessity, maintenance functions assigned to a maintenance level may, on a one-time basis and at the request of the lower maintenance level, be specifically authorized by the maintenance officer to the level of maintenance to which the function is assigned. The special tools, equipment, etc. required by the lower level of maintenance to perform this function will be furnished by the maintenance level to which the function is assigned. This transfer of a maintenance function to a lower maintenance level does not relieve the higher maintenance level of the responsibility of the function. The higher level of maintenance has the authority to determine:

- (1) If the lower level is capable of performing the work.
- (2) If the lower level will require assistance or technical supervision on on-site inspection.
- (3) If the authorization will be granted.

B-2. USE OF MAINTENANCE ALLOCATION CHART - Continued.

- g. Organizational through depot maintenance of the US Army Electronics Command equipment will be performed by designated US Army Electronics Command personnel.
- h. Changes to the MAC will be based on continuing evaluation and analysis by responsible technical personnel and on reports received from field activities.

B-3. DEFINITIONS.

- a. Inspect. To determine serviceability of an item by comparing its physical, mechanical and electrical characteristics with established standards.
- b. Test. To verify serviceability and detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.
- c. Service. To clean, to preserve, to charge, and to add fuel, lubricants, cooling agents and air.
- d. Adjust. To rectify to the extent necessary to bring into proper operating range.
- e. Aline. To adjust specified variable elements of an item to bring optimum performance.
- f. Calibrate. To determine the corrections to be made in the readings of instruments or test equipment used in precise measurement. Consists of the comparison of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument or test equipment being compared with the certified standard.
- g. "Install. To set up for use in an operational environment such as an emplacement, site, or vehicle.
- h. Replace. To replace unserviceable items with serviceable assemblies, subassemblies or parts.
- i. Repair. To restore an item to serviceable condition through correction of a specific failure or unserviceable condition. This includes, but is not limited to, inspection, cleaning, preserving, adjusting, replacing, welding, riveting, and strengthening.

- h Overhaul. To restore an item to a completely serviceable condition as prescribed by maintenance serviceability standards prepared and published for the specific item to be overhauled.

B-3. DEFINITIONS - Continued.

- k. Rebuild. To restore an item to a standard as nearly as possible to the original or new condition in appearance, performance, and life expectancy. This is accomplished through the maintenance technique of complete disassembly of the item, inspection of all parts or components, repair or replacement of worn or unserviceable elements (items) using original manufacturing tolerances and specifications, and subsequent reassembly of the item.

B-4. FUNCTIONAL GROUPS.

Standard functional groupings are not considered feasible for aviation ground support equipment due to variation and complexity. Therefore, variations to functional groupings may occur.

B-5. MAINTENANCE CATEGORIES AND WORK TIMES.

The maintenance categories (levels AVUM, AVIM, and DEPOT are listed on the Maintenance Allocation Chart with individual columns that indicate the work times for maintenance functions at each maintenance level. Work time presentations such as 0.1 indicate the average time it requires a maintenance level to perform a specified maintenance function. If a work time has not been established, the columnar presentation shall indicate 't' -T?. Maintenance levels higher than the level of maintenance indicated are authorized to perform the indicated function.

B-6. TOOLS AND TEST EQUIPMENT (Section III).

Common tools sets (not individual tools) special tools, test and support equipment required to perform maintenance functions are listed alphabetically with a reference number to permit cross-referencing to column 5 in the MAC. In addition, the maintenance category authorized to use the device is listed along with the item National Stock Number (NSN) and, if applicable, the tool number to aid in identifying the tool/device.

B-7. REMARKS (Section IV).

Remarks contained in column 6, with an alphabetical code, are listed to provide a ready reference to the definition of the remark.

**Section II. MAINTENANCE ALLOCATION CHART
FOR AIRMOBILE TRANSPORTER**

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL			(5) TOOLS AND EQUIPMENT	(6) REMARKS
			AVUM	AVIM	DEPOT		
00	Transporter, Airmobile						
01	Frame Assy. Front and Rear	Inspect Repair Replace	.3 2.0	1.0		100 102 100	C
0101	Suspension Frame	Inspect Repair Replace	.3 .4	.5		100 102 100	C
0102	Lockout Struts	Inspect Replace Repair	.3 .8	.5		100 100 102	C
0103	Turnbuckle	Inspect Replace	.3 .5			100 100	
0104	Cable Assy	Inspect Replace	.3 .5			100 100	
0105	Reflectors	Inspect Replace	.3 .5			100 100	
0106	Hydraulic jack	Inspect Replace Service	.3 .5 .3			100 100 101	D
02	Axle Assemblies Front and Rear						
0201	Axle Frame	Inspect Repair Replace	.5 2.0	.8		100 102 100	C

(1) GROUP NUMBER	(2) COMPONENT / ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL			(5) TOOLS AND EQUIPMENT	(6) REMARKS
			AVUM	AVIM	DEPOT		
0202	Banjo Suspension (Rear)	Inspect Service Replace	.5 .5 .8			100 101 100	B, D
0203	L&R Shock Absorbing Assemblies (Front)	Inspect Service Repair Replace	.5 .8 1.0 .8			100 101 100 100	B, D
0204	Tie Rods Ends L&R (Front)	Inspect Service Replace	.3 .3 .8			100 101 100	B, D
0205	Brackets, Tubes, Pivot Pin, Etc.	Inspect Service Repair Replace	.3 .3 .5	.5		100 101 102 100	B, D C
0206	Wheels and Tires	Inspect Service Replace	.3 .5 1.0			100 101 101	B, D D
0207	Wheel Bearings and Seals	Inspect Service Replace Adjust	.3 .8 .8 .8			100 101 101 100	A, D D
0208	Steering Center Arm	Inspect Repair Replace	.3 .8	.8		100 102 100	C
03	Brake Systems (No rear brakes)						

(1) GROUP NUMBER	(2) COMPONENT / ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL			(5) TOOLS AND EQUIPMENT	(6) REMARKS
			AVUM	AVIM	DEPOT		
0301	Handle, Parking	Inspect Service Replace	.3 .3 .8			100 101 100	B, D
0302	Cable	Inspect Service Adjust Replace	.3 .3 .5 .5			100 101 100 100	B, D
0303	Lines and Hoses	Inspect Replace	.3 .5			100 100	
0304	Brake Shoes	Inspect Replace Adjust	.5 .8 .5			100 100 100	
0305	Wheel Cylinders	Inspect Replace	.3 .8			100 100	
0306	Master Cylinder	Service Inspect Replace	.3 .3 .8			101 100 100	D
0307	Damper	Inspect Replace	.3 .5			100 100	

Section III. TOOLS AND TEST EQUIPMENT

REF. NO.	MAINT. CAT.	NOMENCLATURE	NSN	TOOL NO.
100	AVUM	Tool Kit, General Mechanic, Automotive	5180-00-177-7033	SC5180-90-CL- N26
101	AVUM	Shop Equip, Auto Main- tenance & Repair, Or- ganizational Maint.	4910-00-754-0654	SC4910-95-CL- A74
102	AVIM	Shop Equip, Welding, Field Maintenance	3470-00-357-7268	SC3470-95-CL- A08

Section IV. REMARKS
Ref Code

- A. Clean and Repack Bearings
- B. Lubricate
- C. Weld
- D. Use Available Motor Pool Facilities.

APPENDIX C

REPAIR PARTS AND SPECIAL TOOLS LIST

SECTION I. INTRODUCTION

C-1. Scope. This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of Aviation Unit and Aviation Intermediate maintenance of the Transporter, Airmobile, P/N 16747A. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

C-2. General. In addition to Section I, Introduction, this Repair Parts and Special Tools List is divided into the following sections

a. Section II. Repair Parts List. A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed in item name sequence. Repair parts kits are listed separately, in their own functional group within Section 11. Repair parts for repairable special tools are also listed in this section. Items listed are shown on the associated illustration figure(s).

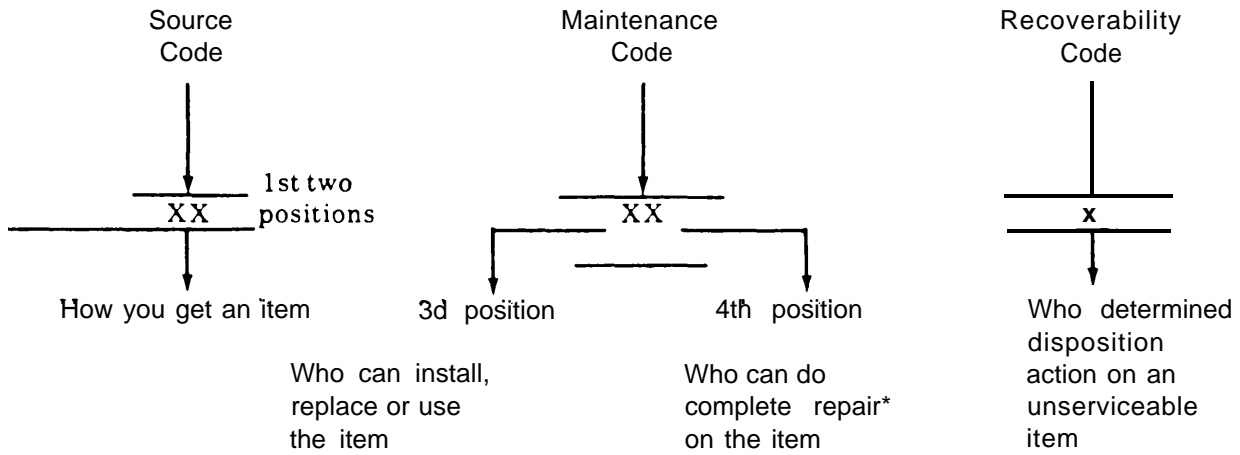
b. Section III. Special Tools List. A list of special tools, special TM DE, and other special support equipment authorized by this RPSTL, (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance. (Not applicable)

c. Section IV. National Stock Number and Part Number Index. A list, in National item identification number (NIIN) sequence of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.

C-3. Explanation of Columns (Sections II and III).

a. Item No. (Column (1)). Indicates the number used to identify items called out in the illustration.

b. SMR Code (Column (2)). The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:



*Comple' Repair: Maintenance capacity capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use user environment in order to restore serviceability to a failed item.

(1) *Source Code.* The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item equipment. Explanations of source codes follows:

Code	Explanation
PA PB PC** PD PE PF PG	Stocked items; use the applicable NSN to request requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3d position of the SMR code.
	** NOTE: Items coded PC are subject to deterioration.
KD KF KB	Items with these codes are not to be requested requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3d position of the SMR code. The complete kit must be requisitioned and applied.

Code	Explanation
MO- (Made at org AVUM Level) MF- (Made at DS AVUM Level) MH- (Made at GS Level) ML- (Made at Specialized Repair Act (SRA)) MD- (Made at Depot)	Items with these codes are not to be requested requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in this RPSTL. If the item is authorized to you by the 3d position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.

Code	Explanation
AO- (Assembled by org/ AVUM Level)	Items with these codes are not to be requested requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3d position code of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance.
AF- (Assembled by DS/ AVIM Level)	
AH- (Assembled by GS Category)	
AL- (Assembled by SRA)	
AD- (Assembled by Depot)	

- XA - Do not requisition an "XA" -coded item order its next higher assembly. (Also, refer to the NOTE below.)
- XB- If an "XB" item is not available from salvage, order it using the FSCM and part number given.
- XC - Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
- XD - Item is not stocked. order an "XD" -coded item through normal supply channels using the FSCM and part number given, if no NSN is available.

NOTE: Cannibalization or controlled exchange, when authorized may be used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 700-42,

(2) *Maintenance Code.* Maintenance codes tells you the level(s) of maintenance authorized to USE and REPAIR support items. The maintenance' codes are entered in the third and fourth positions of the SMR Code as follows:

(a) The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance.

Code	Application/Explanation
c	-Crew or operator maintenance done within organizational or aviation unit maintenance.
0)	-Organ zational or aviation unit category can remove, replace, and use the item.
F	-Direct support or aviation inter-mediate level can remove, replace, and use the item.
II	-General support level can remove. replace, and use the item.
L	-Specialized repair activity can remove, replace, and use the item.
D	-Depot level can remove, replace, and use the item.

(b) The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., perform all authorized repair functions.) (NOTE: Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.) This position will contain one of the following maintenance codes.

Code	Application Explanation
()	-Organizational or (aviation unit) is the lowest level that can do complete repair of the item.
F	-Direct support or aviation intermediate is the lowest level that can do complete repair of the item.
H	-General support is the lowest level that can do complete repair of the item.
L	-Specialized repair activity (designate the specialized repair activity is the lowest level that can do complete repair of the item,
D	-Depot is the lowest level that can do complete repair of the item.
z	-Nonreparable. No repair is authorized.
B	-No repair is authorized. (No parts or special tools arc authorized for the maintenance of a "B" coded item). However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

(3) *Recoverability Code*. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the SMR Code as follows:

Recoverability Codes	Application/Explanation
Z	-Nonreparable item. When unserviceable. condemn and dispose of the item at the level of maintenance shown in 3d position of SMR Code.
O	-Reparable item. When uneconomically repairable, condemn and dispose of the item at organizational or aviation unit level.
F	-Reparable item. When uneconomically repairable, condemn and dispose of the item at the direct support or aviation intermediate level.
H	-Reparable item. When uneconomically repairable, condemn and dispose of the item at the general support level.
D	-Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
L	-Reparable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
A	-Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals directives for specific instructions.

c. *FSCM (Column (3))*. The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

d. Part Number (Column (4)). Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specification standards, and inspection requirements to identify an item or range of items.

NOTE: When you use a NSN to requisition an item, the item you receive may have a different part number from the part ordered.

e. Description and Usable On Code (UOC) (Column (5)). This column includes the following information:

- (1) The Federal item name and, when required, a minimum description to identify the item.
- (2) The physical security classification of the item is indicated by the parenthetical entry (insert applicable physical security classification abbreviation, e.g., Phy Sec C1 (C) - Confidential, Phy Sec C1 (S) - Secret, Phy Sec C1 (T) - Top Secret).
- (3) Items that are included in kits and sets are listed below the name of the kit or set.
- (4) Spare repair parts that make up an assembled item are listed immediately following the assembled item line entry.
- (5) Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufactured fabricated.
- (6) When the item is not used with all serial numbers of the same model, the effective serial numbers are shown on the last line(s) of the description (before UOC).
- (7) The usable on code, when applicable (see paragraph 5, Special information).
- (8) In the Special Tools List section, the basis of issue (BOI) appears as the last line(s) in the entry for each special tool, special TM DE, and other special support equipment. When density of equipments supported exceeds density spread indicated in the basis of issue, the total authorization is increased proportionately.
- (9) The statement "END OF FIGURE" appears just below the last item description in Column 5 for a given figure in both Section 11 and Section 111.

f. QTY (Column (6)). The QTY (quantity per figure column) indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that the quantity is variable and the quantity may vary from application to application.

C-4. Explanation of Columns (Sect. IV).

a. National Stock Number (NSN) Index.

(1) *Stock Number Column.* This column lists the NSN by National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN (i. e., 5305-01-674-1467). When using this column to locate an item, ignore the first 4 digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

(2) *Fig. Column.* This column lists the number of the figure where the item is identified located. The figures are in numerical order in Section 11 and Section 111.

(3) *Item Column.* The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

b. Part Number Index. Part numbers in this index are listed by part number in ascending alphanumeric sequence (i. e., vertical arrangement of letter and number combination which places the first letter or digit of each group in order A through Z, followed by the numbers O through 9 and each following letter or digit in like order).

(1) *FSCM Column.* The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

(2) *Part Number Column.* Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity), which controls the design and characteristics of the item by means Of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items,

(3) *Stock Number Column.* This column lists the NSN for the associated part number and manufacturer identified in the Part Number and FSCM Columns to the left.

(4) *FIG. Column.* This column lists the number of the figure where the item is identified/located in Section II and 111.

(5) *Item Column.* The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

C-5. Special Information. Use the following subparagraphs as applicable:

a. Usable On Code. Not Applicable.

b. Index Numbers, Items which leave the word BULK in the figure column will have an index number shown in the item number column. This index number is a cross-reference between the National Stock Number/Part Number Index and the bulk material list in Section II.

c. Associated Publications. Not Applicable.

C-6. How to Locate Repair Parts.

a. When National Stock Number or Part Number is Not Known.

(1) *First.* Using the table of contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.

(2) *Second.* Find the figure covering the assembly group or subassembly group to which the item belongs.

(3) *Third.* Identify the item on the figure and note the item number.

(4) *Fourth.* Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.

(5) *Fifth.* Refer to the Part Number Index to find the NSN, if assigned

b. When National Stock Number or Part Number is Known:

(1) *First.* Using the Index of National Stock Numbers and Part Numbers, find the pertinent National Stock Number or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence (see C-4a(1)). The part numbers in the Part Number index are listed in ascending alphanumeric sequence (see 4b). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.

(2) *Second.* After finding the figure and item number, verify that the item is the one you're looking for, then locate the item number in the repair parts list for the figure.

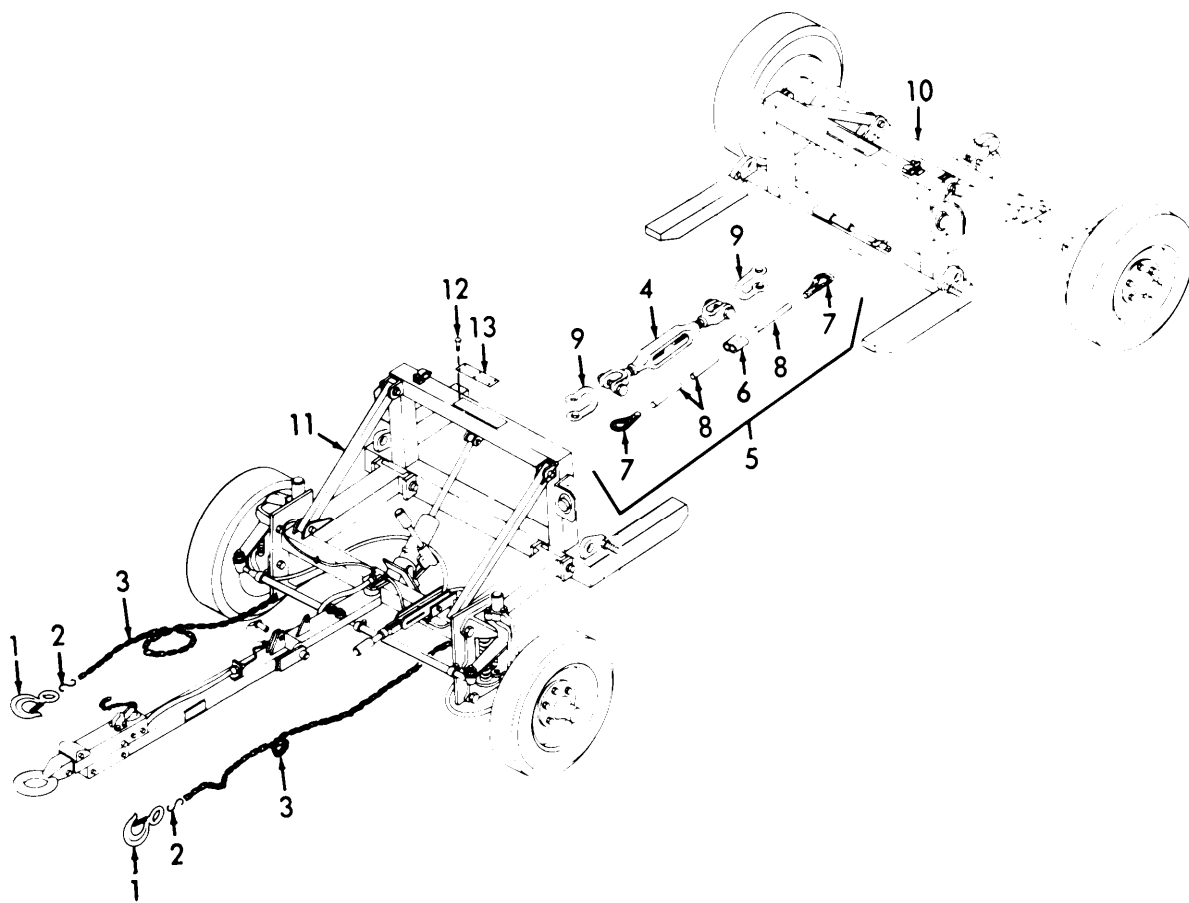


Figure 1. Front and Rear Frame Assembly.

C-8 Change 1

SECTION II			TM55-1740-203-13&P			
{1)	(2)	(3)	(4)	(5)	(6)	
ITEM	SMR		PART			
NO	CODE	FSCM	NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY	
				GROUP 01. FRAME ASSY, FRONT AND REAR		
				FIGURE 1. FRONT AND REAR FRAME ASSEMBLY		
1	PAOZZ	19207	11669139	EYE HOOK.....	2	
2	PBOZZ	19207	11669314	LINK,CHAIN,CONNECTI.....	4	
3	PAOZZ	18876	8527586	CHAIN,WELDED.....	2	
4	PAOZZ	98255	2159P	TURNBUCKLE.....	2	
5	PAOZZ	98255	16791P	CABLE ASSEMBLY.....	1	
6	PAOZZ	96906	MS51844-90	.SWAGING SLEEVE,WIRE.....	2	
7	PAOZZ	81348	FFT276	.THIMBLE,ROPE.....	2	
8	PAOZZ	81348	RRW410TYICL2	.ROPE,WIRE.....	1	
9	PAOZZ	98255	2443P	SHACKLE,CHAIN.....	2	
10	XDOFF	98255	16706A	FRAME ASSEMBLY,REAR SEE FIGURE 2 FOR BREAKDOWN	1	
11	XDOFF	98255	16707A FRAME,ASSEMBLY, FRONT SEE FIGURE 3 FOR BREAKDOWN.....	1	
12	PAOZZ	96906	MS21318-14	SCREW,DRIVE.....	12	
13	PBOZZ	98255	16797P	PLATE,IDENTIFICATIO.....	2	

END OF FIGURE

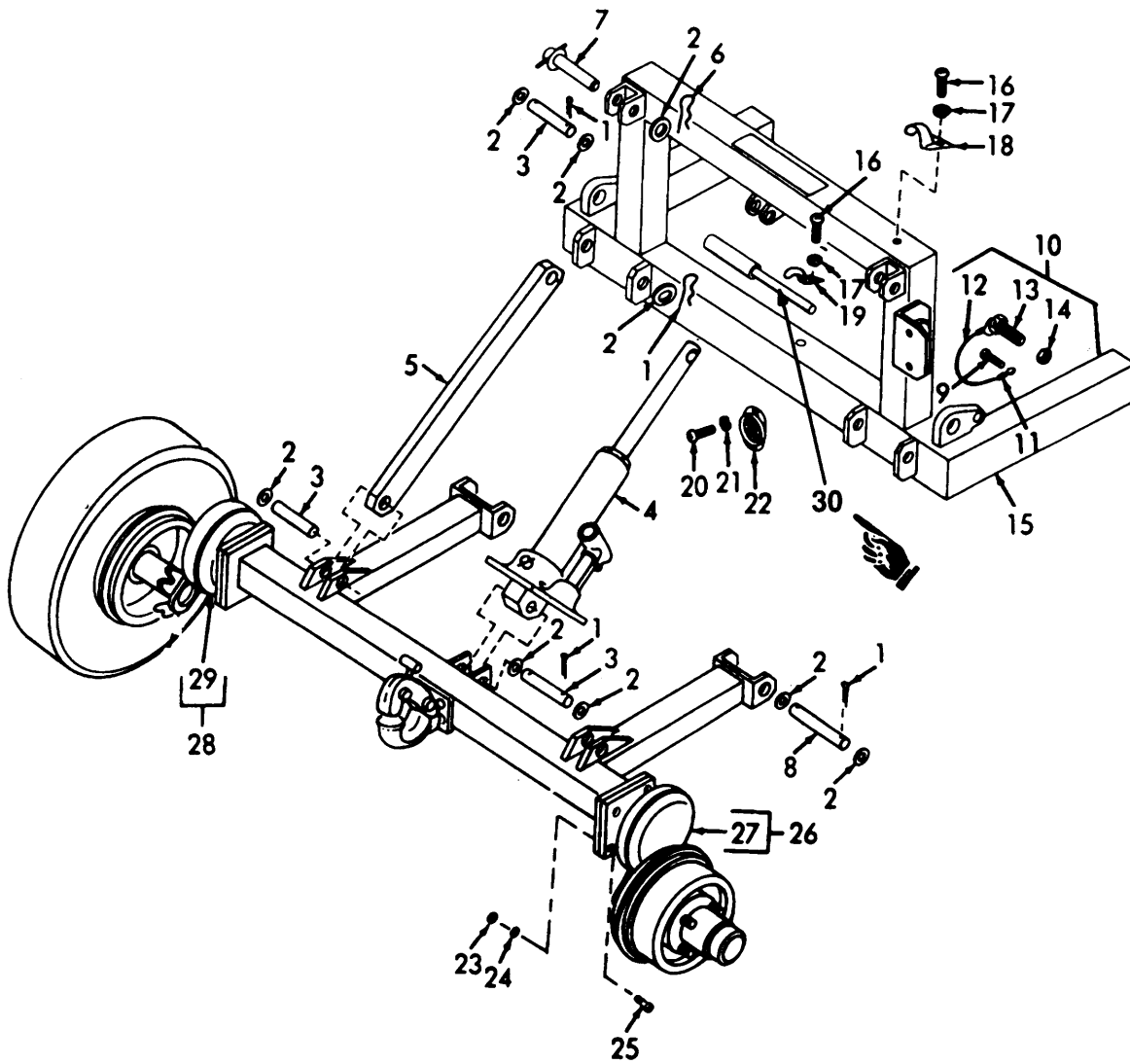


Figure 2. Rear Frame Assembly.

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
FIGURE 2. REAR FRAME ASSEMBLY					
	XDOFF	98255	16706A	FRAME ASSEMBLY, REAR SEE FIG 1 FOR NHA	1
1	PAOZZ	96906	MS24665-202	. PIN, COTTER	14
2	PAOZZ	96906	MS27183-23	. WASHER, FLAT	14
3	PAOZZ	98255	16683M	. PIN, STRAIGHT HEADLE	6
4	PAOZZ	98255	16606P	. JACK, HYDRAULIC, HAND	1
5	PAOZZ	98255	16618M	. STRUT	2
6	PAOZZ	19207	11602356-1	. PIN, LOCK	1
7	PAOZZ	98255	16628A	. PIN, STRAIGHT, HEAD	1
8	PAOZZ	98255	16611M	. PIN, STRAIGHT, HEADLE	1
9	PAOZZ	96906	MS24629-46	. SCREW, TAPPING, THREA	2
10	PAOZZ	98255	16944A	. BOLT AND LANYARD	2
11	PAOZZ	98255	19643P2	. . END, LANYARD	2
12	PAOZZ	98255	19643P1	. . LANYARD ASSEMBLY	2
13	PAOZZ	96906	MS51095-444	. . SCREW, CAP, HEXAGON H	2
14	PAOZZ	96906	MS51967-20	. . NUT, PLAIN, HEXAGON	2
15	XDOFF	98255	16635A	. TINE ASSEMBLY	1
16	PAOZZ	96906	MS35207-263	. SCREW, MACHINE	2
17	PAOZZ	96906	MS35338-43	. WASHER, LOCK	2
18	PAOZZ	71286	7C27-10BA	. CLAMP, LOOP	1
19	PAOZZ	71286	7C1-14W	. CLAMP, LOOP	1
20	PAOZZ	96906	MS24629-56	. SCREW, TAPPING, THREA	8
21	PAOZZ	96906	MS35338-44	. WASHER, LOCK	8
22	PAOZZ	96906	MS35387-1	. REFLECTOR, INDICATIN	4
23	PAOZZ	96906	MS51967-14	. NUT, PLAIN, HEXAGON	8
24	PAOZZ	96906	MS35338-48	. WASHER, LOCK	8
25	PAOZZ	96906	MS51095-416	. SCREW, CAP, HEXAGON H	8
26	PAOZZ	98255	16650A2	. SUSPENSION ASSEMBLY , RIGHT	1
27	PAOZZ	98255	16650A1	. SUSPENSION ASSEMBLY , LEFT	1
28	XDOFF	98255	16772A-2	. HUB ASSEMBLY, RIGHT	1
29	XDOFF	98255	16772A-1	. HUB ASSEMBLY, LEFT	1
30	PAOZZ	05842	P147-70	. HANDLE, JACK	1

END OF FIGURE

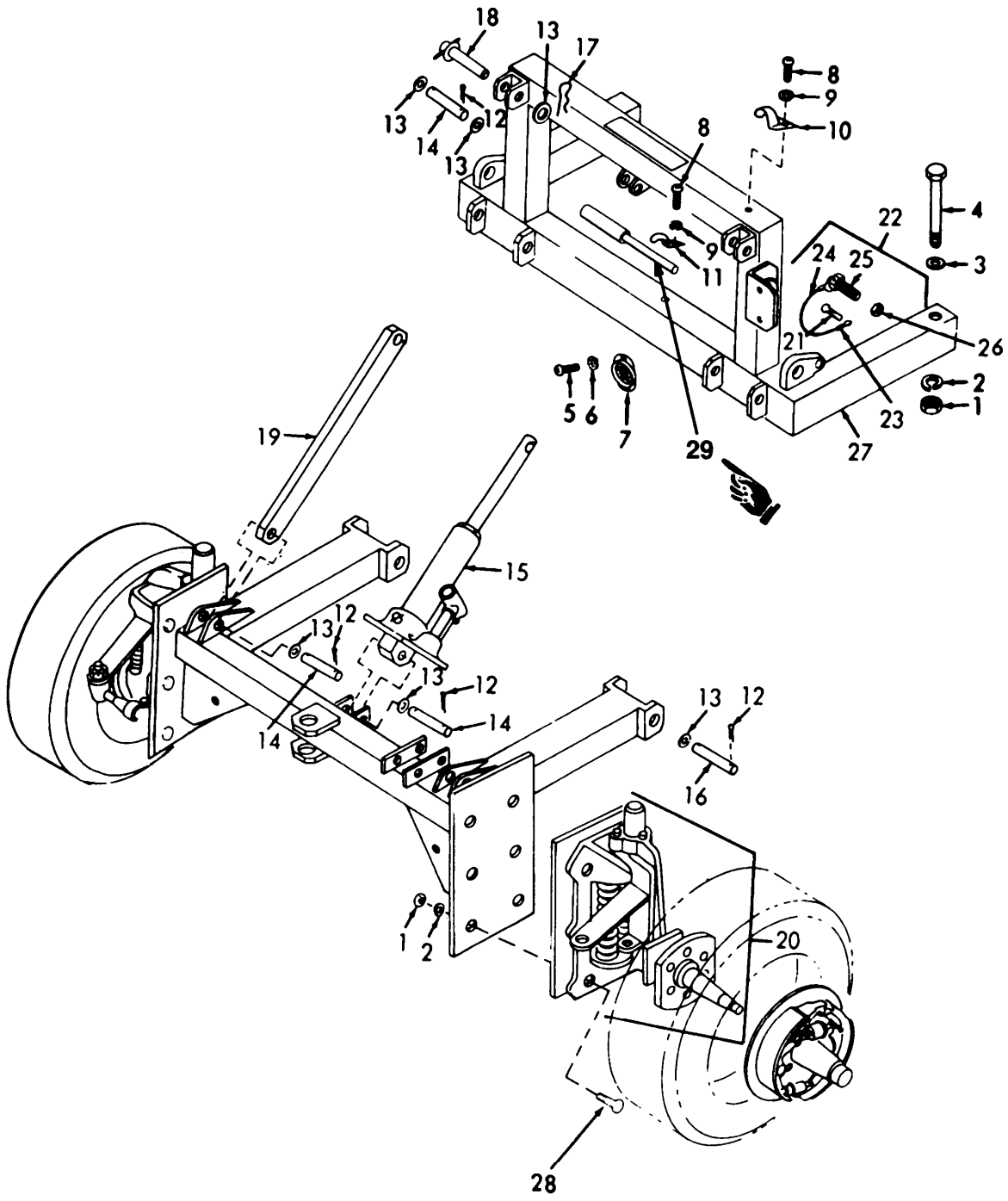


Figure 3. Front Frame Assembly.

SECTION II

TM 55-1740-203-13&P

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
FIGURE 3. FRONT FRAME ASSEMBLY					
	XDOFF	98255	16707A	FRAME ASSEMBLY, FRONT SEE FIG 1 FOR NHA	1
1	PAOZZ	96906	MS51967-20	. NUT, PLAIN, HEXAGON	12
2	PAOZZ	96906	MS35338-50	.WASHER, LOCK	10
3	PAOZZ	96906	MS27183-21	.WASHER, FLAT	2
4	PAOZZ	96906	MS90725-176	.SCREW, CAP, HEXAGON H	1
5	PAOZZ	96906	MS24629-56	.SCREW, TAPPING, THREA	8
6	PAOZZ	96906	MS35338-44	.WASHER, LOCK	8
7	PAOZZ	96906	MS35387-2	. REFLECTOR, INDICATIN	4
8	PAOZZ	96906	MS35207-263	.SCREW, MACHINE	2
9	PAOZZ	96906	MS35338-43	.WASHER, LOCK	2
10	PBOZZ	71286	7C27-10BA	.CLAMP, LOOP	1
11	PAOZZ	71286	7C1-14W	.CLAMP, LOOP	1
12	PAOZZ	96906	MS24665-292	PIN, COTTER	12
13	PAOZZ	96906	MS27183-23	WASHER, FLAT	12
14	PAOZZ	98255	16683M	PIN, STRAIGHT HEADLE	4
15	PAOZZ	98255	16606P	:JACK, HYDRAULIC, HAND	1
16	PAOZZ	98255	16611M	. PIN, STRAIGHT, HEADLE	2
17	PAOZZ	19207	11602356-1	. PIN, LOCK	2
18	PAOZZ	98255	16628A	. PIN, STRAIGHT, HEADI)	2
19	PAOZZ	98255	16618M	.STRUT	2
20	XDOFF	98255	SW16645P	.SUSPENSION	2
21	PAOZZ	96906	MS24629-46	.SCREW, TAPPING, THREA LANYARD MTG	2
22	PAOZZ	98255	19644A	. BOLT AND LANYARD	2
23	PAOZZ	98255	19643P2	.. END, LANYARD	2
24	PAOZZ	98255	19643P1	.. LANYARD ASSEMBLY	2
25	PAOZZ	96906	MS51095-444	.. SCREW, CAP, HEXAGON H	2
26	PAOZZ	96906	MS51967-20	NUT, PIAIN, HEXAGON	1
27	XDOFF	98255	16635A	.TINE ASSEMBLY	1
28	PAOZZ	96906	MS51095-416	.SCREW, CAP, HEXAGON H	12
29	PAOZZ	05842	P147-70	.HANDLE, JACK	1

END OF FIGURE

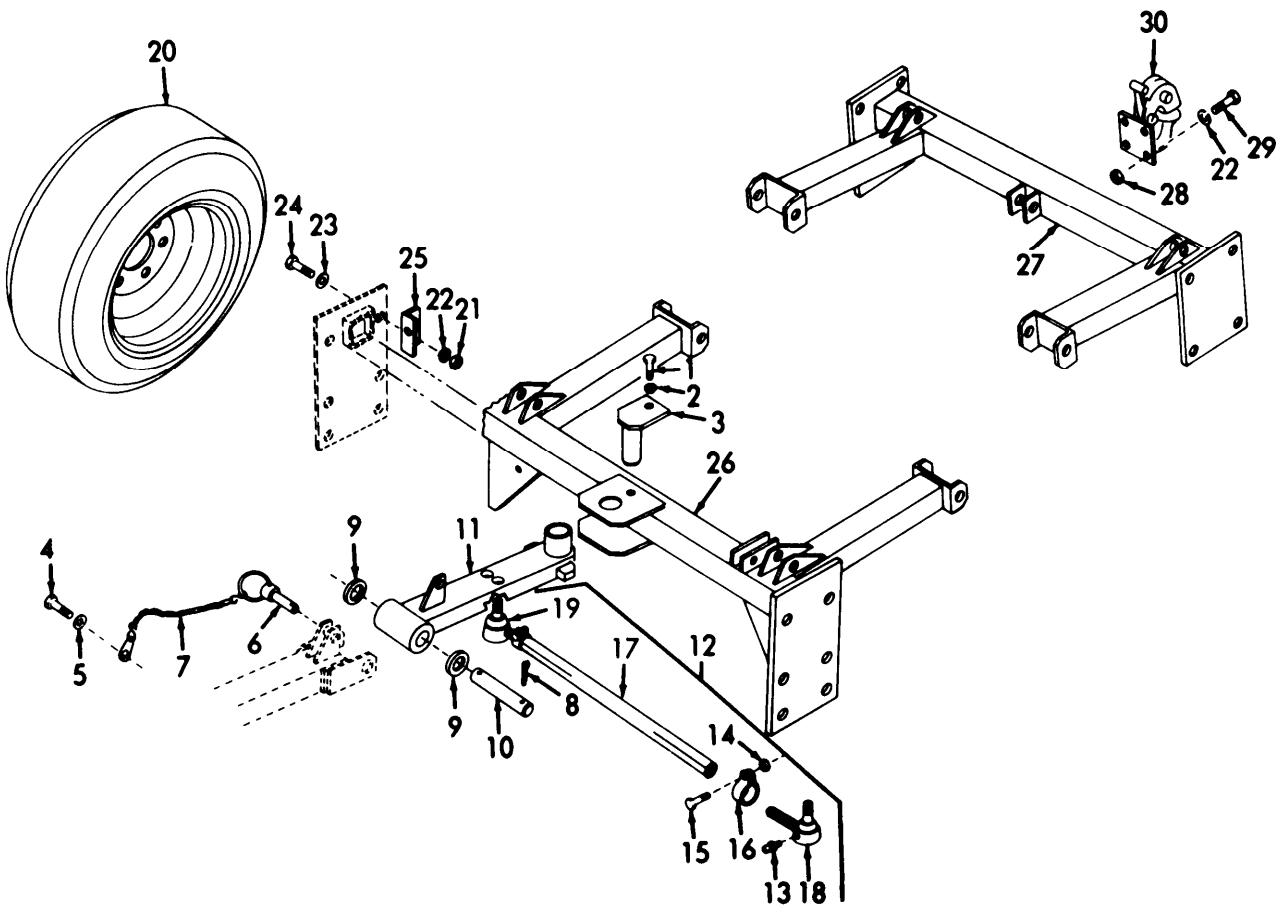


Figure 4. Front and Rear Axle Assembly.

SECTION II			TM 55-1740-203-13&P			
(1)	(2)	(3)	(4)	(5)	(6)	
ITEM	SMR		PART			
No	CODE	FSCM	NUMBER	DESCRIPTION AND USABLE ON	CODES(UOC)	QTY
FIGURE 4. FRONT AND REAR AXLE ASSEMBLY						
1	PAQZZ	96906	MS90725-6	SCREW,CAP,HEXAGON H.....		1
2	PAQZZ	96906	MS35338-44	WASHER,LOCK.....		1
3	PAQZZ	98255	16679A	PIN,STEERING ARM.....		1
4	PAQZZ	96906	MS35207-260	SCREW,MACHINE.....		1
5	PAQZZ	96906	MS35338-43	WASHER,LOCK.....		1
6	PAQZZ	84256	BLDC8-11L4	PIN AND CHAIN,QUICK.....		1
BOI:1 PER 10-25 END ITEMS						
7	PAQZZ	84256	1504-5	CHAIN ASSEMBLY,SING.....		1
8	PAQZZ	96906	MS24665-292	PIN,COTTER.....		2
9	PAQZZ	96906	MS27183-23	WASHER,FLAT.....		2
10	PAQZZ	98255	16684M	PIN,STRAIGHT,HEADLE.....		1
11	XDOFF	98255	16661A	ARM,STEERING ASSY.....		1
12	PBQZZ	98255	16666A	TIE ROD,STEERING.....		2
13	PAQZZ	96906	MS15003-1	.FITTING,LUBRICATION.....		2
14	PAQZZ	96906	MS21044N6	.NUT,SELF-LOCKING,HE.....		2
15	PAQZZ	96906	MS90726-65	.SCREW,CAP,HEXAGON H.....		2

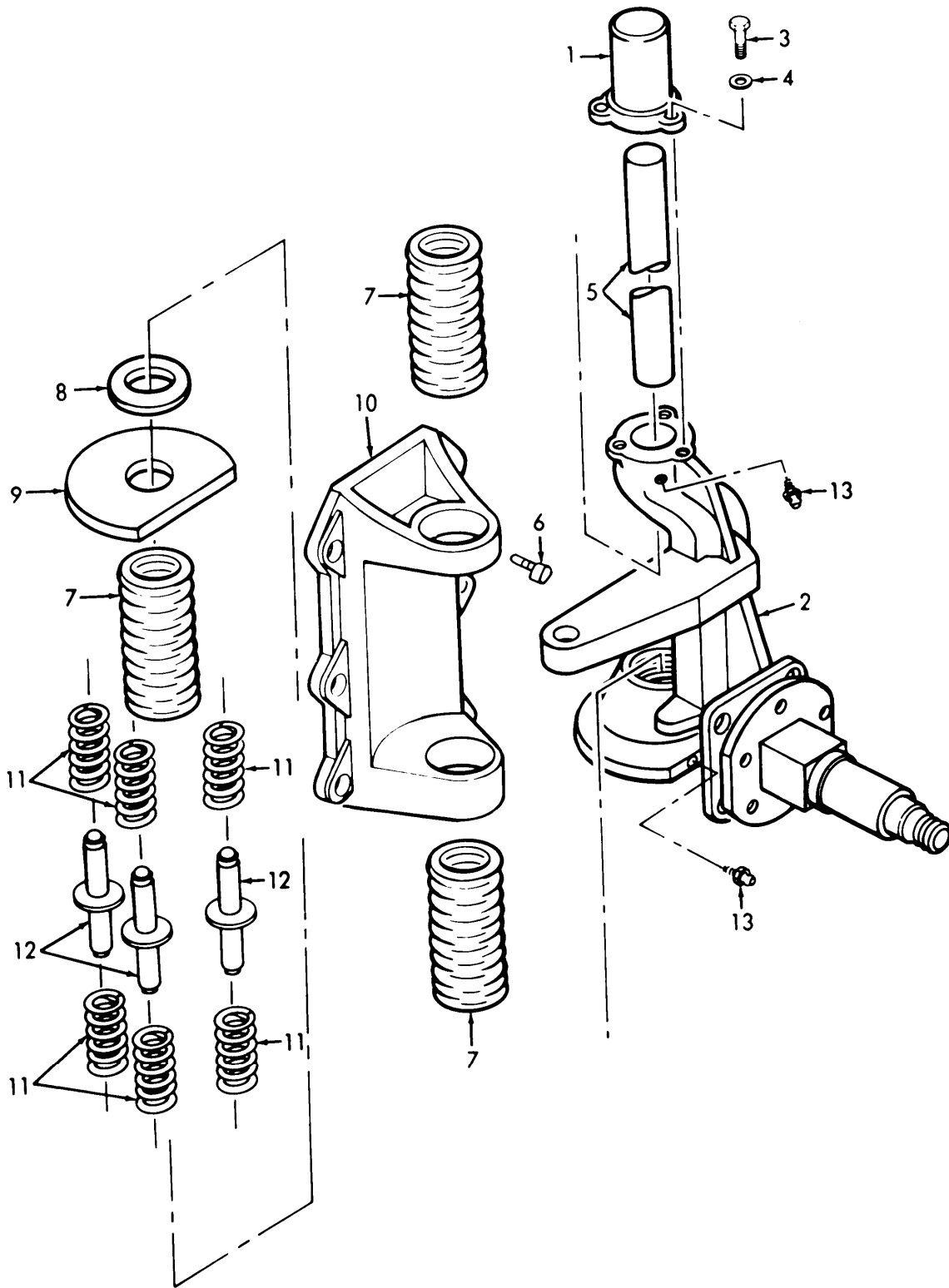


Figure 5. Shock Absorbing Spring Assembly.

SECTION II					(6)
(1)	(2)	(3)	PART	DESCRIPTION AND USABLE ON CODES(UOC)	QTY
ITEM NO	SMR CODE	FSCM	NUMBER		
FIGURE 5. SHOCK ABSORBING ASSEMBLY					
1	PAFZZ	83445	51536	CAP.....	1
2	XDOZZ	98255	16796M-1	KNUCKLE ASSY,L.....	1
2	XDOZZ	98255	16796M-2	KNUCKLE ASSY,R.....	1
3	PAOZZ	83445	AS65-4-6	SCREW.....	3
4	PAOZZ	96906	MS122032	WASHER,LOCK.....	3
5	PAFZZ	83445	51519-1525	KINGPIN.....	1
6	PAOZZ	83445	59001	SCREW,CAP.....	1
7	PAOZZ	83445	51598	COVER,DUST.....	3
8	PAFZZ	83445	11143	WASHER.....	1
9	PAOZZ	83445	82057-3	SUPPORT,SPRING.....	1
10	XDOZZ	83445	82009-1	BRACKET.....	1
11	PAFZZ	83445	55021	SPRING.....	6
12	PAFZZ	83445	51658	GUIDE,SPRING.....	3
13	PBOZZ	96906	MS15001-1	FITTING,LUBRICATION.....	4

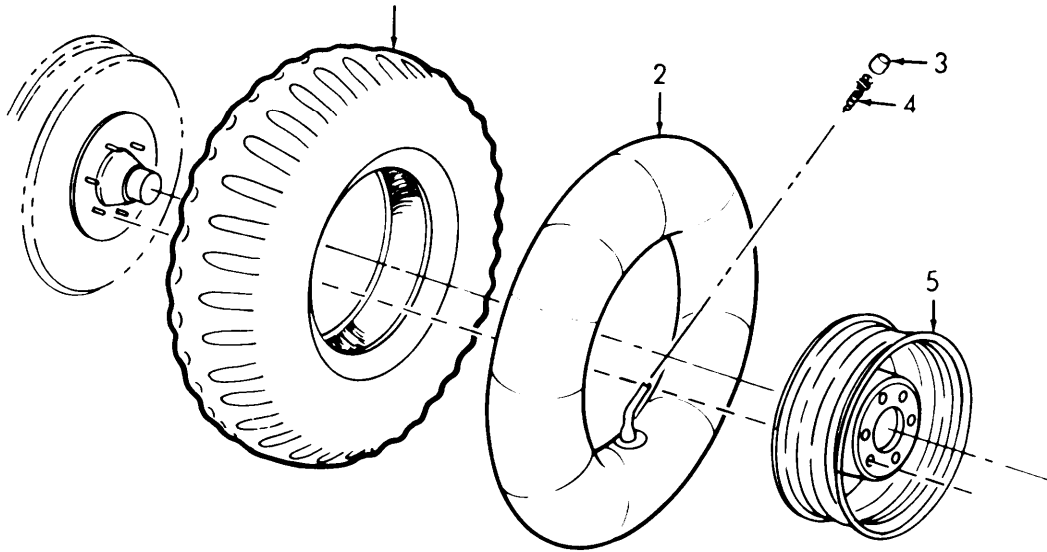


Figure 6. Tire and Wheel Assembly.

SECTION II

TM 55-1740-203-13&P

(1)	(2)	(3)	(4)	(5)	(6)
ITEM	s m		PART		
No	CODE	FSCM	NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY

GROUP 02s AXLE ASSYS. FRONT AND REAR

FIGURE 6. TIRE AND WHEEL ASSEMBLY

XDOFF	98255	16777A	WHEEL AND TIRE ASSY SEE FIG 4 FOR	1
			NHA.....	
PAOZZ	19207	7342996	.TIRE,PNEUMATIC.....	1
PAOZZ	96906	MS35392-8	.INNER TUBE,PNEUMATI.....	1
PAOZZ	96906	MS51375-1	.CAP,PNEUMATIC VALVE.....	1
PAOZZ	96906	MS51377-1	.VALVE CORE.....	1
XDOZZ	98255	SW19011P	.WHEEL ASSY.....	1

END OF FIGURE

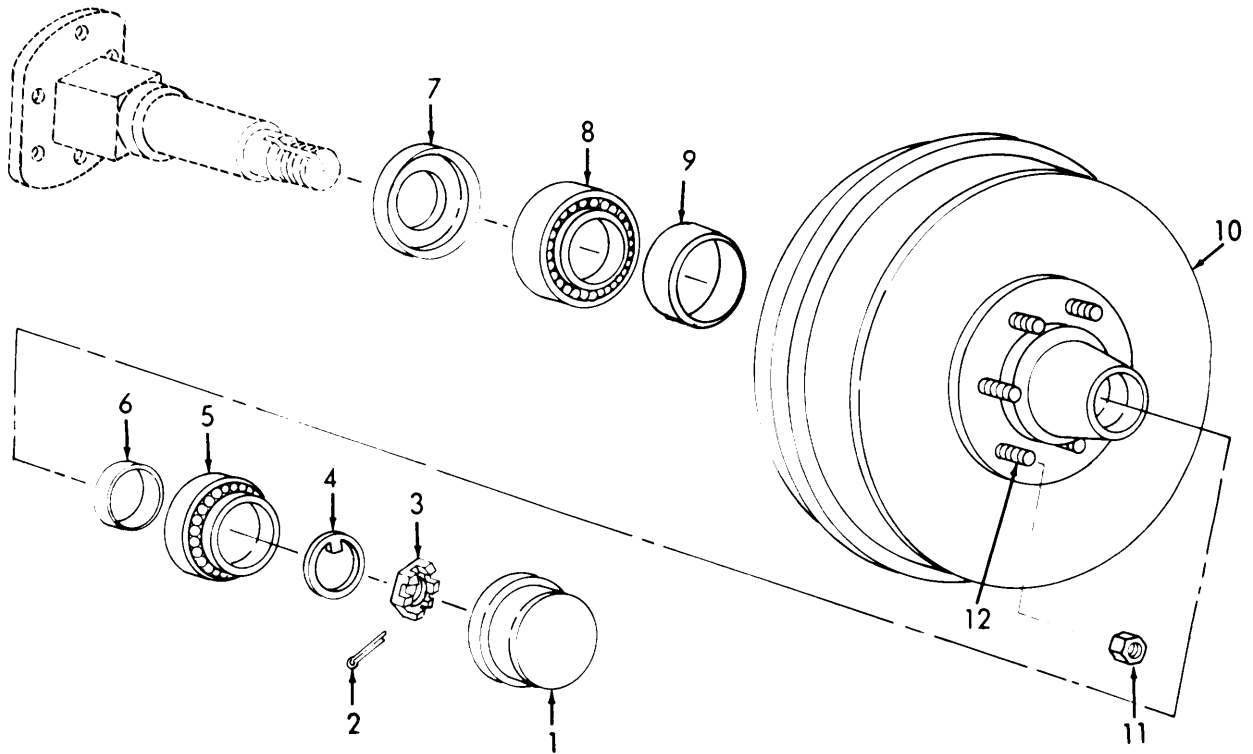


Figure 7. Front and Rear Brake Drums and Wheel Bearings.

C-20 Change 1

SECTION II			TM 55-1740-203-13&P		
(1)	(2)	(3)	(4)	(5)	(6)
ITEM NO	SMR CODE	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODES(UOC)	QTY
FIGURE 7. FRONT AND REAR BRAKE DRUMS AND WHEEL BEARINGS					
1	PAOZZ	94189	14286	CAP,DUST.....	1
2	PAOZZ	94189	7994	PIN,SPRING HUB BEARING.....	1
3	PAOZZ	94189	7977	NUT,SELF-LOCKING,S HUB BEARING.....	1
4	PAOZZ	94189	8248	WASHER,LOCK WHEEL BEARING.....	1
5	PAOZZ	94189	8019	BRNG ROLLER 11/16.....	1
6	PAOZZ	94189	8017	BRNG CUP 1 1/16.....	1
7	PAOZZ	94189	15529	SEAL,PLAIN ENCASED.....	1
8	PAOZZ	94189	15480	BRNG ROLLER 1 3/8.....	1
9	PAOZZ	94189	15481	CUP,TAPERED ROLLER.....	1
10	XDOZZ	19207	11625503	BRAKE DRUM.....	1
11	PAOZZ	94189	5082	NUT,PLAIN,CONE SEAT.....	5
12	PAOZZ	94189	5081	BOLT,RIBBED SHOULDE.....	5

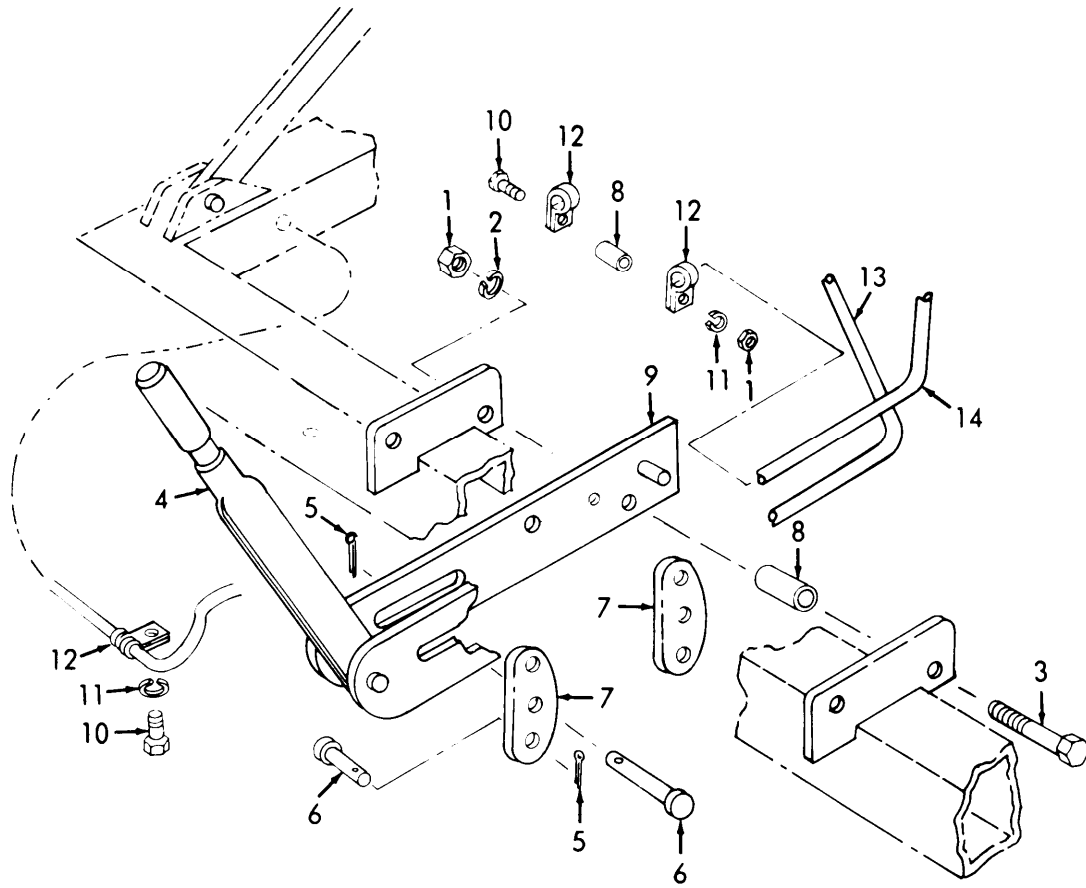


Figure 8. Hand Brake Assembly.

SECTION II			TM55-1740-203-13&P		
(1)	(2)	(3)	(4)	(5)	(6)
ITEM	SMR		PART		
NO	CODE	FSCM	NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY

GROUP 03. BRAKE SYSTEM

FIGURE 8. HAND BRAKE ASSEMBLY

1	PAOZZ	96906	MS51968-5	NUT, PLAIN, HEXAGON.....	2
2	PAOZZ	96906	MS35338-45	WASHER, LOCK.....	2
3	PAOZZ	96906	MS90727-39	BOLT, MACHINE.....	2
4	PAOZZ	92867	01060500	LEVER, MANUAL CONTRO.....	1
5	PAOZZ	96906	MS24665-134	PIN, COTTER.....	4
6	PAOZZ	19207	11663354	PIN, STRAIGHT, HEAD.....	2
7	PAOZZ	19207	11602316	CLAMP, LOOP.....	2
8	PAOZZ	19207	11612256	SPACER, SLEEVE.....	2
9	PAOZZ	19207	10947449	SPACER, SLEEVE.....	2
10	PBOZZ	96906	MS35206-279	SCREW, MACHINE.....	2
11	PAOZZ	96906	MS35338-44	WASHER, LOCK.....	2
12	PAOZZ	96906	MS9025-07	CLAMP, LOOP.....	2
13	PAOZZ	19207	11602357-2	CONTROL ASSEMBLY, PU.....	1
14	PAOZZ	19207	11602357-1	CONTROL ASSEMBLY, PU.....	1

END OF FIGURE

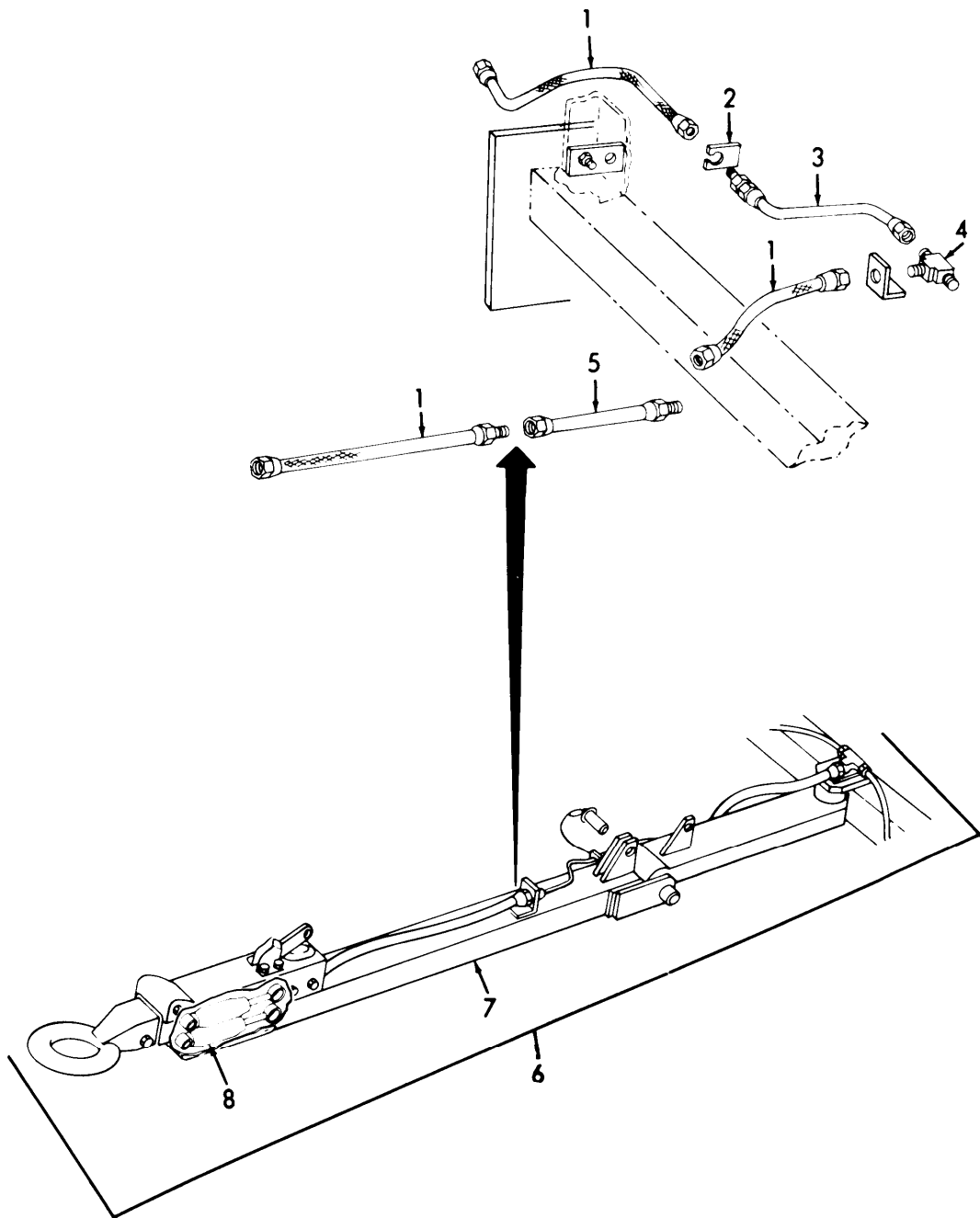


Figure 9. Actuator and Tubes, Brake.

SECTION II
 (1) (2) (3) (4) (5) (6)
 ITEM SMR FSCM PART NUMBER DESCRIPTION AND USABLE ON CODES (UOC) QTY
 NO CODE FSCM NUMBER

FIGURE 9. ACTUATOR AND TUBES,
 BRAKE

1	PAOZZ	94189	7765	HOSE ASSEMBLY, NONME.....	4
2	PACZZ	94189	7764	CLIP.....	4
3	PAOZZ	94189	12073	TUBE, BRAKE.....	2
4	PAOZZ	94189	7785	CONNECTOR, MULTIPLE.....	1
5	PAOZZ	94189	10741	TUBE, BRAKE.....	1
6	XDOFF	98255	16677A	DRAWBAR ASSEMBLY.....	1
7	PBOFF	98255	16676A	.TUBE ASSY, DRAWER.....	1
8	XDOFF	94189	16645	.ACTUATOR, SURGE BRK.....	1

END OF FIGURE

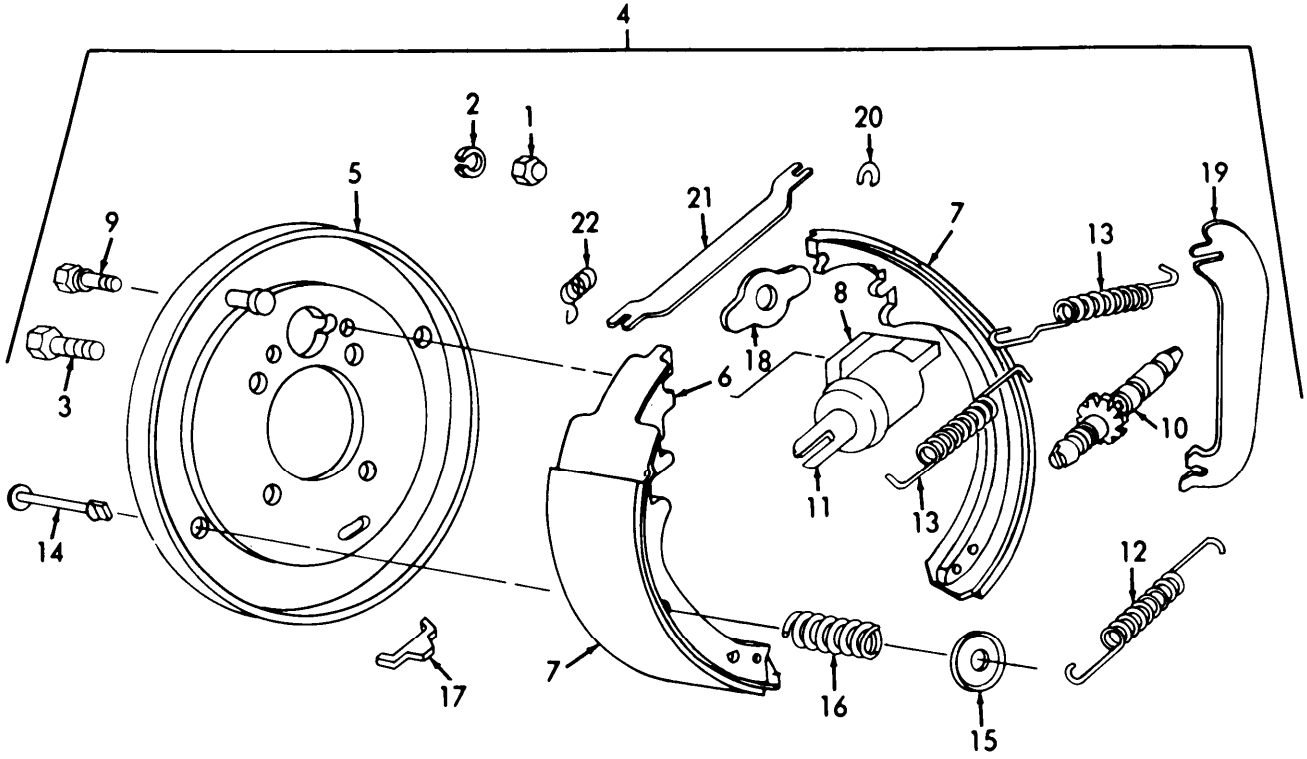


Figure 10. Service Brake Assembly.

SECTION II			TM 55-1740-203-13&P	(5)	(6)
(1)	(2)	(3)	(4)		
ITEM	SMR		PART		
NO	CODE	FSCM	NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY

FIGURE 10. SERVICE BRAKE ASSEMBLY

1	PAOZZ	96906	MS51922-21	NUT, SELF-LOCKING, HE.....	
2	PAOZZ	96906	MS35338-46	WASHER, LOCK.....	
3	PAOZZ	96906	MS90726-60	SCREW, CAP, HEXAGON H.....	
4	XDOFF	94189	18791	BRAKE ASSEMBLY, RH.....	
4	XDOFF	94189	18792	BRAKE ASSEMBLY, LH.....	
5	XDOZZ	94189	10951	.PLATE ASSEMBLY, BACK LEFT SIDE	
				
5	XDOZZ	94189	10950	.PLATE ASSEMBLY, BACK RIGHT SIDE	
				
6	PAOZZ	94189	10952	.BRAKE SHOE.....	
7	PAOZZ	94189	10953	.BRAKE SHOE SET, INTE.....	
8	PAOZZ	94189	9776	.CYLINDER ASSEMBLY, H , RIGHT	
				
8	PAOZZ	94189	9777	.CYLINDER ASSEMBLY, H , LEFT	
				
9	PAOZZ	94189	9778	.SCREW, ASSEMBLED.....	
10	PAOZZ	94189	10954	.SCREW ASSEMBLY, ADJU.....	
11	XDOZZ	94189	9783	.ROD, PUSH.....	
12	PAOZZ	19207	12275101	.SPRING, HELICAL, EXTE.....	
13	PAOZZ	94189	10958	.SPRING, HELICAL, EXTE.....	
14	XDOZZ	94189	10959	.PIN.....	
15	XDOZZ	94189	9789	.CUP.....	
16	PAOZZ	94189	10960	.SPRING.....	
17	PAOZZ	94189	9254	.COVER.....	
18	XDOZZ	94189	10961	.GUIDE, SHOE.....	
19	XDOZZ	94189	16092	.BRAKE LEVER, R.....	
19	XDOZZ	94189	16093	.BRAKE LEVER, L.....	
20	XDOZZ	94189	9795	.RETAINER.....	
21	XDOZZ	94189	16756	.STRUT, BRAKE.....	
22	XDOZZ	94189	16090	.SPRING.....	

END OF FIGURE

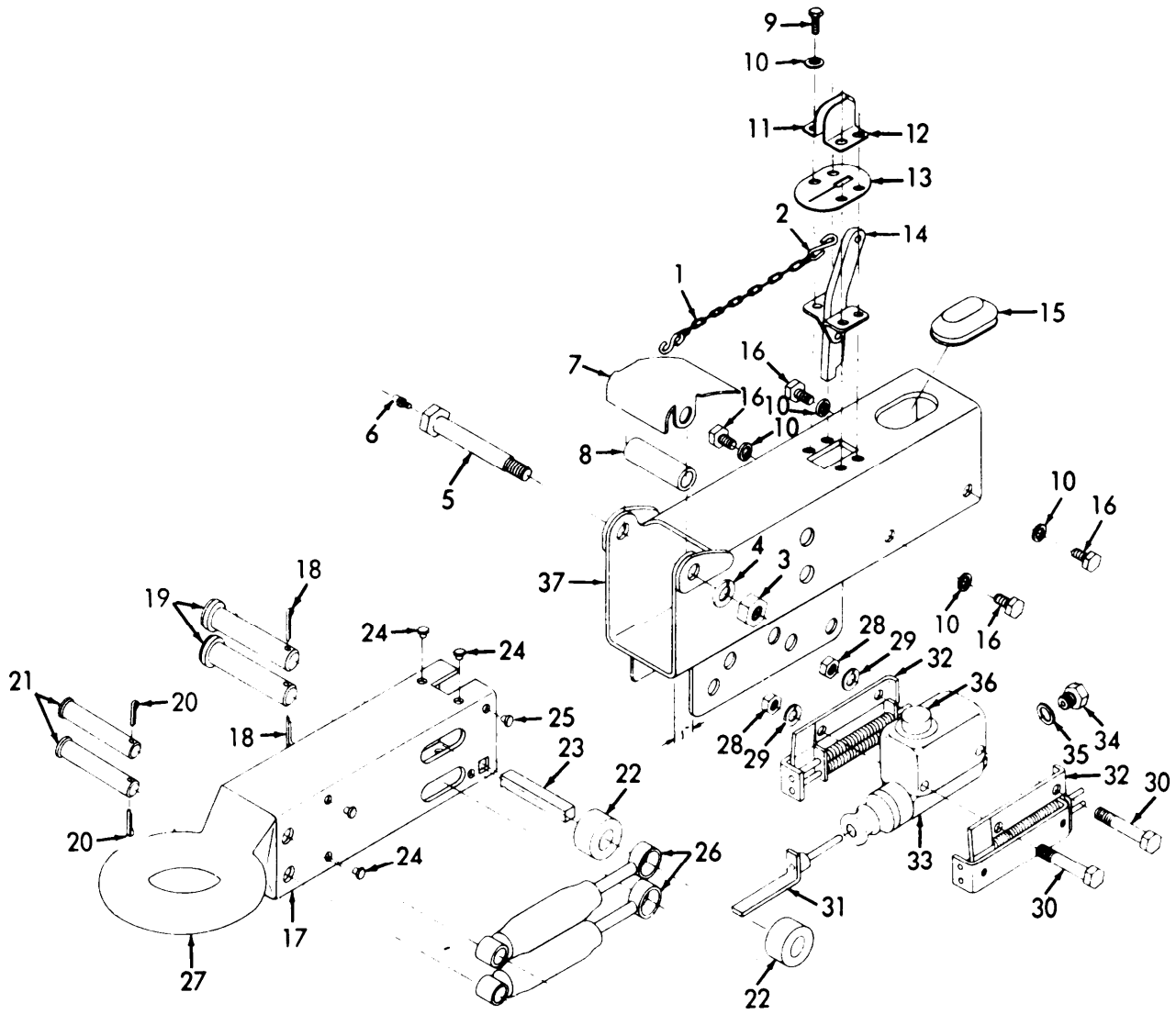


Figure 11. Surge Brake Actuator Assembly.

SECTION II
 (1) (2) (3)
 ITEM SMR
 NO CODE FSCM

TM 55-1740-203-13&P
 (4)
 PART
 NUMBER

(5)

(6)

DESCRIPTION AND USABLE ON CODES) QTY

FIGURE 11. SURGE BRAKE ACTUATOR ASSEMBLY

1	PAOZZ	94189	7768	CHAIN BREAKAWAY.....	1
2	PAOZZ	94189	10555	HOOK,CHAIN,S.....	2
3	PAOZZ	94189	7985	NUT.....	1
4	PAOZZ	94189	7937	WASHER,LOCK.....	1
5	PAOZZ	94189	8288	BOLT,MACHINE ROLLER.....	1
6	PAOZZ	94189	1449A	FITTING,LUBRICATION.....	1
7	XDOZZ	94189	16018	COVER,ROLLER.....	1
8	XDOZZ	94189	16019	ROLLER,FRONT.....	1
9	XDOZZ	94189	7949	BOLT.....	4
10	XDOZZ	94189	7938	WASHER,LOCK 5/16.....	4
11	XDOZZ	94189	10527	LOCK,BREAKAWAY,RT.....	1
12	XDOZZ	94189	10526	LOCK,BREAKAWAY,LFT.....	1
13	XDOZZ	94189	10552	WEATHER SEAL.....	1
14	XDOZZ	94189	10541	LEVER ASSEMBLY BREAKAWAY.....	1
15	PAOZZ	94189	15070	CAP,PROTECTIVE,DUST.....	1
16	XDOZZ	94189	7948	BOLT.....	4
17	XDOZZ	94189	15933	SLIDE ASSEMBLY INNER.....	1
18	PAOZZ	94189	8152	PIN,COTTER.....	2
19	XDOZZ	94189	15935	PIN.....	2
20	PAOZZ	94189	7997	PIN,COTTER.....	2
21	XDOZZ	94189	15934	PIN.....	2
22	XDOZZ	94189	8291	ROLLER.....	2
23	XDOZZ	94189	8301	BLOCK,PUSH ROD.....	1
24	PAOZZ	94189	10209	BEARING TOP AND BOTTOM.....	4
25	XDOZZ	94189	12427	BEARING,SIDE SIDE.....	4
26	PAOZZ	94189	12426	DAMPER.....	2
27	XDOZZ	94189	16086	SLIDE ASSEMBLY.....	1
28	PAOZZ	94189	7976	NUT.....	2
29	XDOZZ	94189	7933	WASHER,LOCK.....	2
30	XDOZZ	94189	8271	BOLT.....	2
31	XDOZZ	94189	16097	BRACKET ASSEMBLY MASTER CYLINDER PUSH ROD.....	1
32	XDOZZ	94189	8388	BRACKET ASSEMBLY CYLINDER,RIGHT....	1
33	PAOZZ	94189	8420	CYLINDER ASSEMBLY,H.....	1
34	PAOZZ	94189	7744	REDUCER,BOSS.....	1
35	PAOZZ	94189	7745	WASHER,FLAT.....	1
36	XDOZZ	94189	12503	CAP,FILLER MASTER CYLINDER.....	1
37	XDOZZ	94189	16855	CASE ASSEMBLY.....	1

END OF FIGURE

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

STOCK NUMBER	NATIONAL STOCK NUMBER INDEX		STOCK NUMBER	FIG.	ITEM
	FIG.	ITEM			
4730-00-004-8078	11	34	2610-00-678-1363	6	1
5305-00-042-6417	4	29	4010-00-720-4591	1	3
5310-00-045-3296	2	17	5305-00-724-6758	3	4
	3	9	5340-00-751-9754	2	18
	4	5		3	10
4730-00-050-4203	5	13	5310-00-761-3706	4	28
4730-00-050-4208	4	13	3110-00-763-0259	7	8
5340-00-051-2668	8	12	5310-00-763-8920	2	14
5306-00-051-4081	8	3		3	1
5305-00-052-6920	2	20		3	26
	3	5	3110-00-769-1426	7	9
2640-00-060-3550	6	3	4010-00-780-8083	4	7
5305-00-068-0502	4	1	5310-00-809-5997	4	23
2530-00-068-6570	4	19	5310-00-809-8533	2	2
2530-00-068-6571	4	18		3	13
2530-00-069-9427	8	4		4	9
5305-00-071-2070	4	24	2640-00-810-5861	6	4
2590-00-077-0447	8	14	5310-00-820-6653	3	2
2590-00-077-0448	8	13	5310-00-823-8803	3	3
5305-00-088-9044	4	4	2540-00-835-9039	4	30
5310-00-119-2090	7	11	5315-00-839-5820	8	5
2530-00-137-7143	11	33	5315-00-849-9851	2	1
4720-00-147-1746	9	1		3	12
4030-00-153-8711	11	2		4	8
5340-00-155-5185	11	15	5305-00-855-0957	2	9
5310-00-159-6209	5	4		3	21
2530-00-161-7575	10	8	5310-00-880-7746	8	1
2530-00-161-7576	10	8	3110-00-926-1379	7	5
5305-00-175-3230	1	12		7	6
9905-00-202-3639	3	7	5310-00-950-0039	4	14
9905-00-205-2795	2	22	5310-00-959-1488	10	1
5340-00-253-1910	7	1	5305-00-964-0589	2	25
4030-00-266-0085	1	7		3	28
5305-00-269-2803	10	3	5305-00-988-1723	8	10
5305-00-269-2808	4	15	5305-00-989-7434	2	16
2610-00-269-7332	6	2		3	8
5310-00-275-6635	11	35	2540-01-011-0614	11	26
5310-00-407-9566	8	2	5340-01-013-8118	2	19
4730-00-473-9836	9	4		3	11
5305-00-490-1851	2	13	4010-01-046-1293	1	2
	3	25	5340-01-047-7486	1	1
5306-00-554-4767	11	5	2530-01-052-5238	10	6
5310-00-582-5965	2	21	2530-01-052-6019	10	7
	3	6	5360-01-054-5023	10	13
	4	2	5365-01-054-5042	8	9
	8	11	5330-01-055-3870	7	7
5310-00-584-5272	2	24	5306-01-055-6876	7	12
	4	22	5340-01-056-1823	4	16
4010-00-618-5473	1	8	5340-01-056-7370	8	7
5310-00-637-9541	10	2	5365-01-057-0710	8	8

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

STOCK NUMBER	NATIONAL STOCK NUMBER INDEX		STOCK NUMBER	FIG.	ITEM
	FIG.	ITEM			
2530-01-058-7486	10	10			
5310-01-070-2105	2	23			
	4	21			
5340-01-086-3947	9	2			
5360-01-086-8876	10	12			
5340-01-087-9679	10	17			
5315-01-100-5154	7	2			
4730-01-100-5505	11	6			
5310-01-100-8767	11	4			
5315-01-114-9109	2	6			
	3	17			
4030-01-127-8698	1	6			
1730-01-146-5274	9	3			
1730-01-146-5276	9	5			
5310-01-177-8036	7	3			
2530-01-178-6638	4	17			
5305-01-179-2304	10	9			
5315-01-179-9569	4	10			
5315-01-180-0936	4	3			
1740-01-180-0969	11	1			
5360-01-180-2292	10	16			
5120-01-180-5889	2	4			
	3	15			
5340-01-181-7845	1	4			
4010-01-182-8928	1	5			
5315-01-185-2038	8	6			
5315-01-185-3412	2	7			
	3	18			
5315-01-185-3419	2	3			
	3	14			
5315-01-185-5829	2	8			
	3	16			
9905-01-189-9611	1	13			
5340-01-195-7741	2	11			
	3	23			
4710-01-211-3298	9	7			
5340-01-211-3300	3	22			
5340-01-211-3301	2	12			
	3	24			
2530-01-216-0956	4	12			
5310-01-218-6532	7	4			

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

FSCM	PART NUMBER	PART NUMBER INDEX STOCK NUMBER	FIG.	ITEM
83445	AS65-4-6		5	3
84256	BLDC8-11L4		4	6
81285	ES150L	2530-00-068-6570	4	19
81285	ES150R	2530-00-068-6571	4	18
81348	FFT276	4030-00-266-0085	1	7
96906	MS122032	5310-00-159-6209	5	4
96906	MS15001-1	4730-00-050-4203	5	13
96906	MS15003-1	4730-00-050-4208	4	13
96906	MS21044N6	5310-00-950-0039	4	14
96906	MS21318-14	5305-00-175-3230	1	12
96906	MS24629-46	5305-00-855-0957	2	9
			3	21
96906	MS24629-56	5305-00-052-6920	2	20
			3	5
96906	MS24665-134	5315-00-839-5820	8	5
96906	MS24665-292	5315-00-849-9851	2	1
			3	12
			4	8
96906	MS27183-17	5310-00-809-5997	4	23
96906	MS27183-21	5310-00-823-8803	3	3
96906	MS27183-23	5310-00-809-8533	2	2
			3	13
			4	9
96906	MS35206-279	5305-00-988-1723	8	10
96906	MS35207-260	5305-00-088-9044	4	4
96906	MS35207-263	5305-00-989-7434	2	16
			3	8
96906	MS35338-43	5310-00-045-3296	2	17
			3	9
			4	5
96906	MS35338-44	5310-00-582-5965	2	21
			3	6
			4	2
			8	11
96906	MS35338-45	5310-00-407-9566	8	2
96906	MS35338-46	5310-00-637-9541	10	2
96906	MS35338-48	5310-00-584-5272	2	24
			4	22
96906	MS35338-50	5310-00-820-6653	3	2
96906	MS35387-1	9905-00-205-2795	2	22
96906	MS35387-2	9905-00-202-3639	3	7
96906	MS35392-8	2610-00-269-7332	6	2
96906	MS51095-416	5305-00-964-0589	2	25
			3	28
96906	MS51095-444	5305-00-490-1851	2	13
			3	25
96906	MS51335-2	2540-00-835-9039	4	30
96906	MS51375-1	2640-00-060-3550	6	3
96906	MS51377-1	2640-00-810-5861	6	4
96906	MS51844-90	4030-01-127-8698	1	6
96906	MS51922-21	5310-00-959-1488	10	1

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

FSCM	PART NUMBER	PART NUMBER INDEX STOCK NUMBER	FIG.	ITEM
96906	MS51967-14	5310-01-070-2105	2	23
			4	21
96906	MS51967-15	5310-00-761-3706	4	28
96906	MS51967-20	5310-00-763-8920	2	14
			3	1
			3	26
96906	MS51968-5	5310-00-880-7746	8	1
96906	MS9025-07	5340-00-051-2668	8	12
07860	MS90725-113	5305-00-042-6417	4	29
96906	MS90725-176	5305-00-724-6758	3	4
96906	MS90725-6	5305-00-068-0502	4	1
96906	MS90726-60	5305-00-269-2803	10	3
96906	MS90726-65	5305-00-269-2808	4	15
96906	MS90727-39	5306-00-051-4081	8	3
96906	MS90728-114	5305-00-071-2070	4	24
81348	RRW410TYICL2	4010-00-618-5473	1	8
98255	SW16645P		3	20
98255	SW19011P		6	5
92867	01060500	2530-00-069-9427	8	4
94189	10209		11	24
94189	10526		11	12
94189	10527		11	11
94189	10541		11	14
94189	10552		11	13
94189	10555	4030-00-153-8711	11	2
94189	10741	1730-01-146-5276	9	5
19207	10947449	5365-01-054-5042	8	9
94189	10950		10	5
94189	10951		10	5
94189	10952	2530-01-052-5238	10	6
94189	10953	2530-01-052-6019	10	7
94189	10954	2530-01-058-7486	10	10
94189	10958	5360-01-054-5023	10	13
94189	10959		10	14
94189	10960	5360-01-180-2292	10	16
94189	10961		10	18
83445	11143		5	8
19207	11602316	5340-01-056-7370	8	7
19207	11602356-1	5315-01-114-9109	2	6
			3	17
19207	11602357-1	2590-00-077-0447	8	14
19207	11602357-2	2590-00-077-0448	8	13
19207	11612234	5340-01-056-1823	4	16
19207	11612256	5365-01-057-0710	8	8
19207	11625503		7	10
19207	11663354	5315-01-185-2038	8	6
19207	11669139	5340-01-047-7486	1	1
19207	11669314	4010-01-046-1293	1	2
94189	12073	1730-01-146-5274	9	3
19207	12275101	5360-01-086-8876	10	12
94189	12426	2540-01-011-0614	11	26

FSCM	PART NUMBER	PART NUMBER INDEX STOCK NUMBER	FIG.	ITEM
94189	12427		11	25
94189	12503		11	36
94189	14286	5340-00-253-1910	7	1
94189	1449A	4730-C1-100-5505	11	6
84256	1504-5	4010-00-780-8083	4	7
94189	15070	5340-00-155-5185	11	15
94189	15480	3110-00-763-0259	7	8
94189	15481	3110-00-769-1426	7	9
94189	15529	5330-01-055-3870	7	7
94189	15933		11	17
94189	15934		11	21
94189	15935		11	19
94189	16018		11	7
94189	16019		11	8
94189	16086		11	27
94189	16090		10	22
94189	16092		10	19
94189	16093		10	19
94189	16097		11	31
98255	16606P	5120-01-180-5889	2	4
			3	15
98255	16611M	5315-C1-185-5829	2	8
			3	16
98255	16618M		2	5
			3	19
98255	16628A	5315-01-185-3412	2	7
			3	18
98255	16635A		2	15
			3	27
98255	16637A		4	27
98255	16640A		4	26
94189	16645		9	8
98255	16650A1		2	27
98255	16650A2		2	26
98255	16661A		4	11
98255	16666A	2530-01-216-0956	4	12
98255	16667M	2530-01-178-6638	4	17
98255	16676A	4710-01-211-3298	9	7
98255	16677A		9	6
98255	16679A	5315-01-180-0936	4	3
98255	16681M		4	25
98255	16683M	5315-01-185-3419	2	3
			3	14
98255	16684M	5315-01-179-9569	4	10
98255	16706A		1	10
			2	
98255	16707A		1	11
			3	
94189	16756		10	21
98255	16772A-1		2	29
98255	16772A-2		2	28

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

FSCM	PART NUMBER	PART NUMBER INDEX STOCK NUMBER	FIG.	ITEM
98255	16777A		4	20
			6	
98255	16791P	4010-01-182-8928	1	5
98255	16796M-1		5	2
98255	16796M-2		5	2
98255	16797P	9905-01-189-9611	1	13
94189	16855		11	37
98255	16944A		2	10
94189	18791		10	4
94189	18792		10	4
98255	19643P1	5340-01-211-3301	2	12
			3	24
98255	19643P2	5340-01-195-7741	2	11
			3	23
98255	19644A	5340-01-211-3300	3	22
98255	2159P	5340-01-181-7845	1	4
98255	2443P		1	9
94189	5081	5306-01-055-6876	7	12
94189	5082	5310-00-119-2090	7	11
83445	51519-1525		5	5
83445	51536		5	1
83445	51598		5	7
83445	51658		5	12
83445	55021		5	11
83445	59001		5	6
71286	7C1-14W	5340-01-013-8118	2	19
			3	11
71286	7C27-108A	5340-00-751-9754	2	18
			3	10
19207	7342996	2610-00-678-1363	6	1
94189	7744	4730-00-004-8078	11	34
94189	7745	5310-00-275-6635	11	35
94189	7764	5340-01-086-3947	9	2
94189	7765	4720-00-147-1746	9	1
94189	7768	1740-01-180-0969	11	1
94189	7785	4730-00-473-9836	9	4
94189	7933		11	29
94189	7937	5310-01-100-8767	11	4
94189	7938		11	10
94189	7948		11	16
94189	7949		11	9
94189	7976		11	28
94189	7977	5310-01-177-8036	7	3
94189	7985		11	3
94189	7994	5315-01-100-5154	7	2
94189	7997		11	20
94189	8017	3110-00-926-1379	7	6
94189	8019	3110-00-926-1379	7	5
94189	8152		11	18
83445	82009-1		5	10
83445	82057-3		5	9

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

FSCM	PART NUMBER	PART NUMBER INDEX STOCK NUMBER	FIG.
94189	8248	5310-01-218-6532	7
94189	8271		11
94189	8288	5306-00-554-4767	11
94189	8291		11
94189	8301		11
94189	8388		11
94189	8420	2530-00-137-7143	11
18876	8527586	4010-00-720-4591	1
94189	9254	5340-01-087-9679	10
94189	9776	2530-00-161-7575	10
94189	9777	2530-00-161-7576	10
94189	9778	5305-01-179-2304	10
94189	9783		10
94189	9789		10
94189	9795		10

APPENDIX D

EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

D-1. SCOPE.

This appendix lists expendable supplies and materials you will need to operate and maintain the transporter. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

D-2. EXPLANATION OF COLUMNS.

- a. Column(1) -Item number. This number is assigned to the entry in the listing.
- b. Column (2) -Level. This column identifies the lowest level of maintenance that requires the listed item.
 - C-Operator/Crew
 - O-Aviation Unit Maintenance
 - F-Aviation Intermediate Maintenance Instructions
- c. Column (3) -National Stock Number. This is the National stock number assigned to the item; use it to request or requisition the item.
- d. Column (4)-Description. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the Federal Supply Code for Manufacturer (FSCM) in parentheses followed by the part number.
- e. Column (5) -Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Section II. EXPENDABLE SUPPLIES AND MATERIALS LIST

Item Number	Level	National Stock Number	Description	U/M
1	0	9150-01-059-2586	Brake Fluid, MIL-B-46176	gl.
2	0	9150-00-252-6383	Hydraulic Fluid, MIL-H-5606	qt.
3	0	9150-00-190-0904	Grease, Automotive and Artillery MIL-G-10924	lb.
4	0	8520-00-228-0598	Soap PS-624	gl.
5	0	6850-00-285-8011	Solvent, Dry Cleaning P-D-680	gl.
6	0	5350-00-224-7203	Sandpaper, Fine P-P-101	320 grit sht.
7	0	8010-00-161-7425	Primer, TT-P-636	gl.
8	0	8010-01-039-5939	Paint, MIL-E-52798 Forest Green	qt.
9	0		Hose	ea.
10	0		Quart Container	ea.
11	0		Cloth	rl.
12	0		Bristle Brush	ea.

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6	2-1 a			<i>In line 6 of paragraph 2-1a the manual states the engine has <u>6</u> cylinders. The engine on my set only has <u>4</u> cylinders. Change the manual to show <u>4</u> cylinders.</i>
B1		4-3		<i>Callout 16 on figure 4-3 is pointing at a <u>bolt</u>. In key to figure 4-3, item 16 is called a <u>shim</u> - Please correct one or the other.</i>
125	line 20			<i>I ordered a gasket, item 19 on figure B-16 by NSN 2 910-00-762-3001. I got a gasket but it doesn't fit. Supply says I got what I ordered, so the NSN is wrong. Please give me a good NSN</i>

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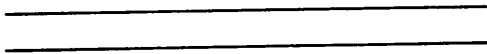
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TEAR ALONG PERFORATED LINE

The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigram = .035 ounce
 1 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	To	Multiply by	To change	To	Multiply by
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit	5/9 (after	Celsius	°C
	temperature	subtracting 32)	temperature	

