TECHNICAL MANUAL

OPERATOR'S, AVIATION UNIT, AND AVIATION INTERMEDIATE MAINTENANCE MANUAL FOR MAINTENANCE PLATFORM ADJUSTABLE, MECHANICAL, AIRCRAFT TYPE B-1 (PART NO. 1560-EG-100) NSN 1730-00-529-6235

This copy is a reprint which includes current pages from Change 1.

HEADQUARTERS, DEPARTMENT OF THE ARMY

7 JUNE 1982

CHANGE NO. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 18 August 1989

Operator's, Aviation Unit, and Aviation Intermediate
Maintenance Manual
For
Maintenance Platform
Adjustable, Mechanical, Aircraft
TYPE B-1
(Part No. 1560-EG-100)
NSN 1730-00-529-6235

TM 55-1730-223-13, 7 June 1982, is changed as follows:

1. Remove and insert pages as indicated below. New or changed text material is indicated by a vertical bar in the margin. An illustration change is indicated by a miniature pointing hand.

Remove pages	Insert pages
i and ii	i and ii
1-1 and 1-2	1-1 and 1-2
2-3 and 2-4	2-3 and 2-4
3-1 and 3-2	3-1 and 3-2
3-21 and 3-22	3-21 and 3-22
A-1/A-2	A-1/A-2
B-3 through B-6	B-3 through B-6
Index 1/Index 2	Index 1/Index 2

2. Retain this sheet in front of manual for reference purposes.

By Order of the Secretary of the Army:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:

WILLIAM J. MEEHAN II
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:
To be distributed in accordance with DA Form 12-31, -10 and CL, AVUM and AVIM Maintenance requirements for All Fixed and Rotary Wing Aircraft.

WARNING

Personnel performing instructions involving operation procedure and practices included in this manual shall observe the following warnings.

WARNING

CLEANING SOLVENT. Cleaning solvent may be toxic. Use only in well-ventilated areas. Avoid prolonged inhalation of fumes or direct contact with the skin. Do not use solvent near open flame or in an area where very high temperatures prevail.

WARNING

SAFETY LOCKS. Always install safety locking devices when platform is in desired position.

WARNING

STANDING ON PLATFORM. Do not raise or lower platform while standing on ladder or platform.

WARNING

TOWING. Do not exceed 25 mph when towing. Ensure that wheel brakes are released before towing.

WARNING

LOAD CAPACITY. Do not exceed 500 lb. load limit.

WARNING

GUARD RAILS. Do not work from platform without side and end rails properly installed.

WARNING

DEFECTS NOTED. Stop operating platform immediately if a defect is noted that could cause injury to personnel.

WARNING

STATIC GROUND. Be sure platform is properly grounded to prevent static discharge from causing fuel fire and to prevent possible electric shock to personnel.

WARNING

INJURY. For first aid to injuries, refer to FM 21-11.

WARNING

DISCHARGE REEL. Do not raise platform without static discharge cable connected. Sparks can cause a fuel fire.

WARNING

JACKS. Hold platform with immobilizing jacks before raising platform.

WARNING

LIFTING. Do not raise platform with power tool until handle on hand wheel is folded in. Keep hands and clothing clear.

WARNING

ELECTRIC TOOLS. Use only tools with 3-prong ground plug.

WARNING

LOWERING. Before lowering platform, be sure all steps are clear of debris, tools and power cables.

TECHNICAL MANUAL
No. 55-1730-223-13

OPERATOR'S, AVIATION UNIT, AND AVIATION INTERMEDIATE MAINTENANCE MANUAL
MAINTENANCE PLATFORM ADJUSTABLE, MECHANICAL, AIRCRAFT
TYPE B-1
PART NUMBER 1560-EG-100
NSN 1730-00-529-6235

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, U.S. Army Troop Support & Aviation Materiel Readiness Command, ATTN: DRSTS-MPSD, 4300 Goodfellow Blvd., St. Louis, MO 63120. A reply will be furnished directly to you.

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LIST OF ILLUSTRATIONS

CHAPTER 1

INTRODUCTION

Section I GENERAL INFORMATION

1-1. Scope. The type of manual, equipment identification, and purpose of equipment is as follows.

a. Type of Manual: Operator's, Aviation Unit, and Aviation Intermediate Maintenance.

b. Equipment Identification: Aircraft Maintenance Platform, Mechanical, adjustable, Type B-1; Part Number 1560-EG-100; NSN 1730-00-529-6235. See Figure 1-1.

c. Purpose of Equipment. Raises aircraft maintenance personnel to work level.

1-2. MAINTENANCE FORMS, RECORDS AND REPORTS. Maintenance forms, records and reports which are to be used by maintenance personnel at all maintenance levels are listed and prescribed by DA PAM 738-751, Functional Users Manual for the Army Maintenance Management Systems (TAMMS).

1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE. Instructions for destroying this equipment are contained in TM 750-244-1-3, Procedure for Destruction of Aviation Support (FSC 1700).

1-4. PREPARATION FOR STORAGE AND SHIPMENT. Procedures for preparing the equipment for storage and shipment are contained in Chapter 3, Section VI.

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR). An EIR 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. Simply tell why the design is unfavorable or why a procedure is difficult. The EIR will be submitted SF 368 (Quality Deficiency Report) in accordance with DA PAM 738-751. Mail directly to: Commander, Aviation Systems Command, ATTN: AMSAV-MMD, 4300 Goodfellow Blvd., St. Louis, Missouri 63120-1798. A reply will be furnished to you.

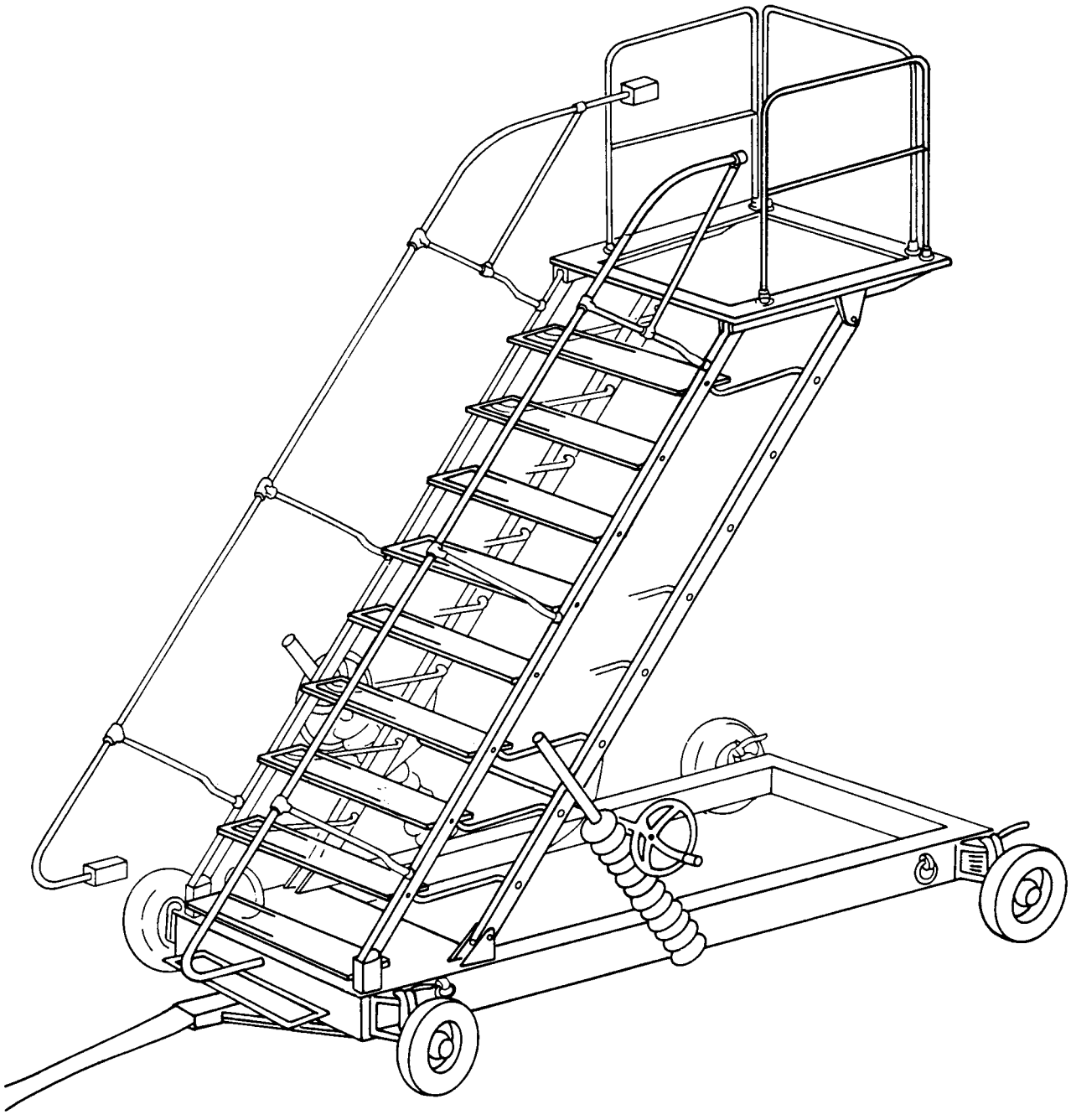


Figure 1-1. Aircraft Maintenance Platform

Section II. EQUIPMENT DESCRIPTION AND DATA

1-6. CHARACTERISTICS, CAPABILITIES AND FEATURES.

a. Characteristics. The maintenance platform can be raised or lowered to allow maintenance personnel to work at various heights. The platform is provided with side and end rails which must be properly installed prior to raising the platform. The physical characteristics are listed in table 1-1.

b. Capabilities. The maintenance platform can be raised by hand or by power tool and can be towed from one maintenance location to another.

c. Features. The maintenance platform can be folded for transport and storage. Platform design requires minimum maintenance.

Table 1-1. Physical Characteristics

Characteristic	Remarks
Capacity	500 pounds (maximum)
Weight	600 pounds
Height Lowered, Less Railing	33.89 inches
Height Extended, Less Railing	123.0 inches
Length Overall, Less Tongue	169.47 inches
Width	69.08 inches
Towing Speed	25 mph max.
Wheels	16 inches
Tires	Airless Cushion Tread 7.85 x 1.62 inches
Brakes	Lever operated, self-adjusting.
Elevation Jacks	Wormscrew type, self-locking.
Wheel Jacks	Intergral part of mount assembly; reversible rachet operated.
Hitch and Steering Bar	
Steering	Ackerman type, tongue controlled
Hitch	Tongue Lunette
Suspension	Vertical Coil Spring

1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS. Major components are described in the following paragraphs and shown in figure 1-2.

a. Frame. The frame provides attaching points for the four wheel assemblies, tongue, platform stairway, and two jackscrews.

b. Wheel Assembly. The wheel assembly consists of a wheel, tire, lever operated brake (front wheels only), wheel swivel lock-pin and an integral rachet-operated wheel jack.

c. Jackscrews. The jackscrews are wormscrew-type and incorporate a self-locking feature.

d. Handwheel. The handwheel is used to position the jackscrews when raising or lowering the maintenance platform.

e. Platform. The platform supports the maintenance personnel when positioned at the proper work height.

f. Platform Rails. The platform rails are a safety feature incorporated to protect maintenance personnel from falling while performing work.

g. Handrails. The handrails are a safety feature incorporated to protect maintenance personnel when ascending or descending the stairway.

h. Static Discharge Reel. The static discharge reel is used to stow the static discharge wire when not in use and provides platform safety ground point when static wire is in use.

i. Tongue. The tongue is used to tow the platform and to help position it for maintenance.

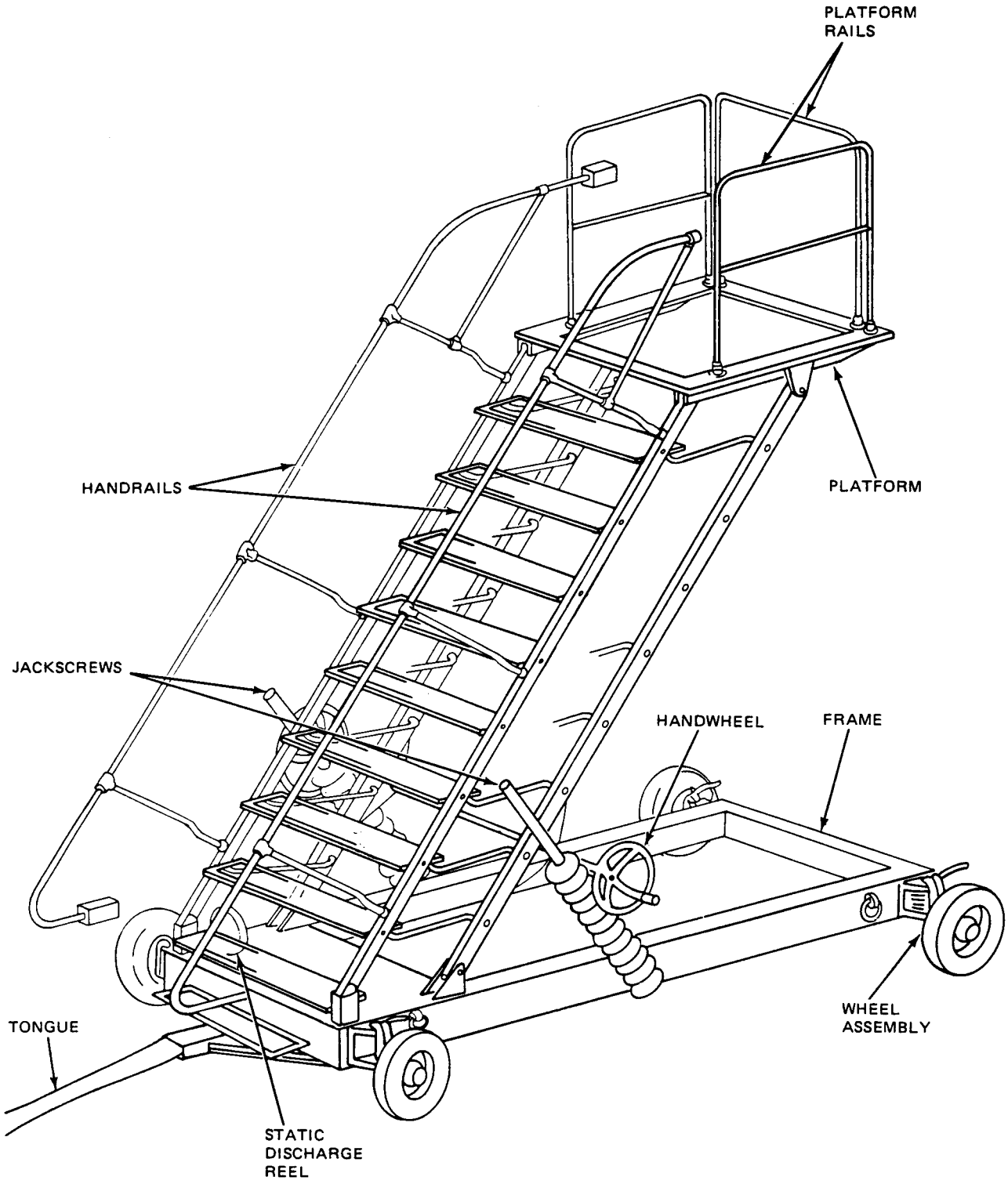


Figure 1-2. Major Components

Section III. TECHNICAL PRINCIPLES OF OPERATION

1-8. TONGUE. The tongue steers the front wheels and allows the operator to move the platform into position more easily. The tongue can be removed when the platform is in position.

1-9. WHEELS. The wheels swivel or can be locked to roll in one direction. This allows the operator to move the platform sideways to get it close to the work. Movement of the platform can be stopped by hand operated brakes on the front wheels. The platform can be immobilized by jacking the wheels off the ground, using the immobilizing jack handles located at each corner of the frame.

1-10. JACKSCREWS. The jackscrews are positioned by means of a handwheel and support the load of the platform. No additional locking is required.

1-11. STATIC DISCHARGE REEL. After the platform is positioned and immobilized, the static wire is pulled from the reel and attached to an earth ground by means of alligator clips. After use, the static wire is returned to the reel.

CHAPTER 2

OPERATING INSTRUCTIONS

Section I. DESCRIPTION AND USE OF OPERATOR'S CONTROLS

2-1. OPERATOR'S CONTROLS. The location of each operator's control is shown in figure 2-1 and the purpose of each operator's control is listed in table 2-1.

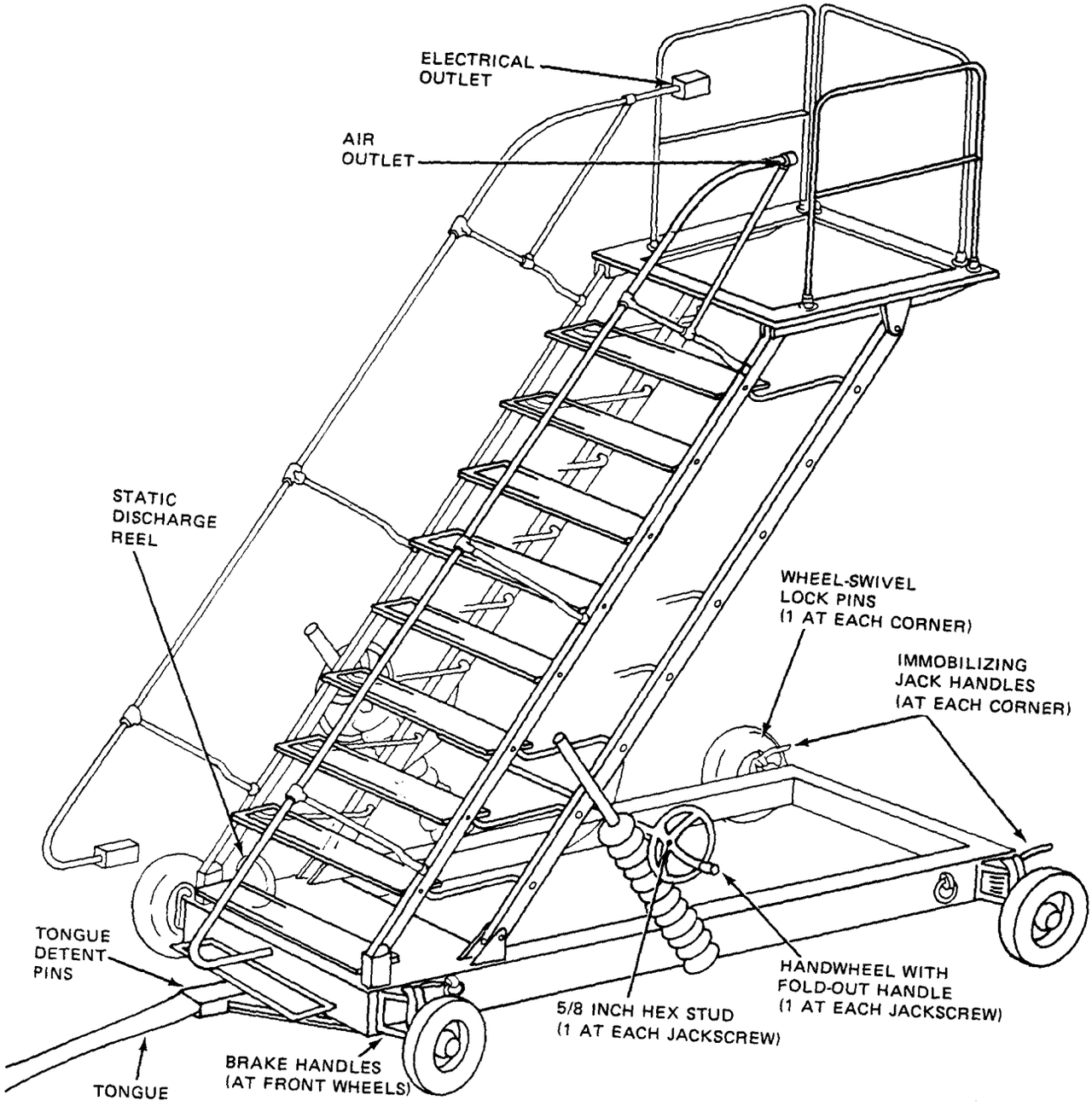


Figure 2-1. Operator Controls

Table 2-1. Operator’s Controls

Name	Purpose
Wheel-swivel lockpins	Allows wheels to swivel when moving platform sideways if disengaged.
Immobilizing jacks	Lifts frame to prevent wheels from rolling.
Handwheel	Turns jackscrew to lift platform.
5/8 Inch hex stud	Turns handwheel when used with air or electric tool.
Brake handle	Stops front wheels.
Tongue	Steers platform when towing or positioning near aircraft.
Tongue detent pin	Detaches tongue for storing under platform.
Static discharge reel	Grounds static charge from aircraft. Provides ground for electrical tools.
Electrical Outlet	Provides power for electric tools.
Air Outlet	Provides power for air tools.
Lunette Assembly	Provides means of steering front wheels when moving platform.

Section II. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

2-2. BEFORE YOU OPERATE. Before you operate read all warnings located at front of this manual. Perform the "Before" PMCS listed in table 2-2.

2-3. WHILE YOU OPERATE. While operating the maintenance platform, perform the "During" PMCS listed in table 2-2.

2-4. AFTER YOU OPERATE. After operating the platform, perform the "After" PMCS listed in table 2-2.

2-5. IF YOUR EQUIPMENT FAILS TO OPERATE. Determine the specific symptom and troubleshoot with proper equipment. Report any deficiencies using proper forms in accordance with DA PAM 738-751.

Table 2-2. Operator PMCS

In inteval column:
B=Before Operation A=After Operation M=Monthly
D=During Operation W=Weekly C=Combat Operability Check

ITEM No.	INTERVAL B	D	A	W	M	C	ITEM TO BE INSPECTED	PROCEDURES: CHECK FOR AND HAVE REPAIRED OR ADJUSTED AS NECESSARY	EQUIPMENT WILL BE REPORTED NOT READY (RED) IF:
1	X		X		X		Frame	Defects, cracks, bent members, corrosion.	Structural member is defective.
2	X		X				Wheel Assy	Defective wheel swivel lock pin, brake lever (front wheels only) , wheel jack ratchet.	Wheel jack ratchet is defective.
3	X	X	X	X			Jackscrew	Cracks in bellows, noise or binding when operated, proper lubrication.	Binding or immobile when operated.
4	X	X	X	X			Handwheel	Broken collapsible handle, binding when turned, noisy when turned, proper lubrication.	Binding or immobile when operating.
5	X	X	X				Handrails & Platform Rails.	Broken, cracked, bent members, corrosion.	Defective rails cannot be installed on platform.
6	X	X	X		X		Static Discharge Reel	Broken alligator clips, frayed or damaged static wire, inoperative reel.	Static wire clips are missing or will not make proper ground connection.

Section III. OPERATION UNDER USUAL CONDITIONS

2-6. PARKING AND UNPARKING.

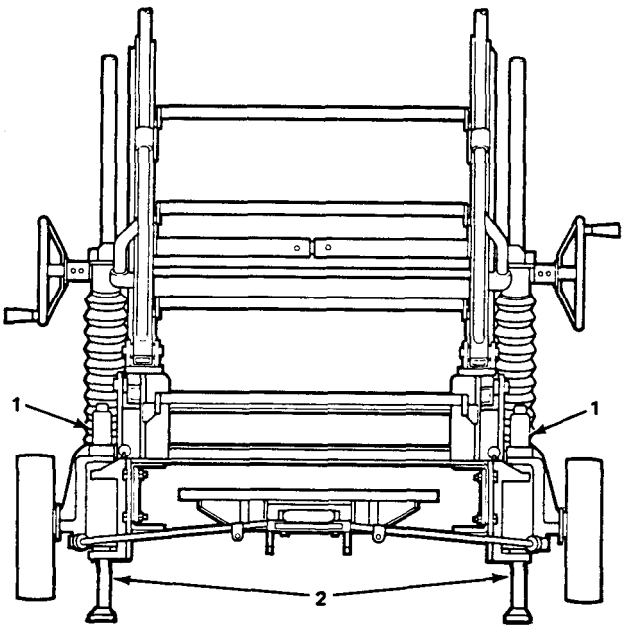
a. To park the maintenance platform, rotate brake lever to BRAKE ON position and operate handgrip to lock brake lever.

b. To unpark the maintenance platform, operate handgrip to unlock brake lever and rotate brake lever to BRAKE OFF position.

2-7. IMMOBILIZING AND MOBILIZING.

a. To immobilize the maintenance platform, operate the four immobilizing jack ratchets (1) to lower the jackscrews (2) until the wheels are off the ground and the platform is level.

b. To mobilize the maintenance platfrom, operate the four immobilizing jack ratchets to raise the jackscrews until the wheels are on the ground and jackscrews are retracted completely.



WARNING

Do not tow maintenance platform faster than 25 mph.

2-8. MOVING MAINTENANCE PLATFORM.

a. Ensure work platform is lowered before moving platform. (See para 2-14 to lower work platform.)

b. Raise immobilizing jacks. (See para 2-7b to mobilize the platform.)

c. Connect tongue to platform with detent pins and tie rod pins. (See para 2-15 to unstore the tongue.)

d. Release platform brakes. (See para 2-6b to unpark the platform.)

e. Tow to new maintenance location or to storage location. Maximum towing speed 25 mph.

2-9. POSITIONING MAINTENANCE PLATFORM.

a. Tow platform until it is next to the engine to be worked on.

b. Remove locking pins from top of wheel mounts.

c. Turn wheels one quarter turn and install locking pins.

d. Push platform sideways until it is in position at engine.

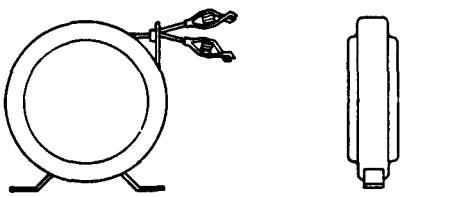
e. Ground the maintenance platform. (See para 2-10 to ground platform.)

f. Immobilize the maintenance platform. (See para 2-7a to immobilize the platform.)

g. Raise work platform to proper working level. (See para 2-11 or 2-12 to raise work platform.)

2-10. GROUNDING AND UNGROUNDING PLATFORM.

a. To ground the maintenance platform, pull cable from static discharge reel (see Fig. 2-1 for location), connect one alligator clip to earth ground and the other to ground connection on the platform.



SIDE VIEW END VIEW

b. To unground the maintenance platform, disconnect the alligator clips from the ground on the platform and earth ground; store cable by winding onto the static discharge reel.

WARNING

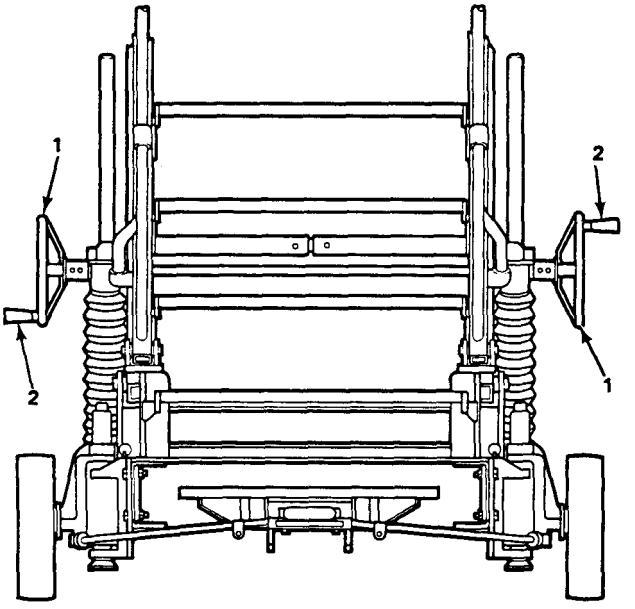
- Do not raise platform without static discharge cable connected. Sparks can cause fuel fire.
- Hold platform with immobilizing jacks before raising work platform.
- Do not raise platform with a power tool until handle on handwheel is folded in. Keep hands and clothing clear.

2-11. RAISING WORK PLATFORM BY HAND .

a. Immobilize the platform before raising the work platform. (See para 2-7a to immobilize platform.)

b. Ensure that platform is grounded before raising work platform. (See para 2-10a to ground platform.)

c. Fold out handle (1) on handwheel (2) and rotate handwheel to raise the work platform to the proper level.



2-12. RAISING WORK PLATFORM WITH POWER TOOL.

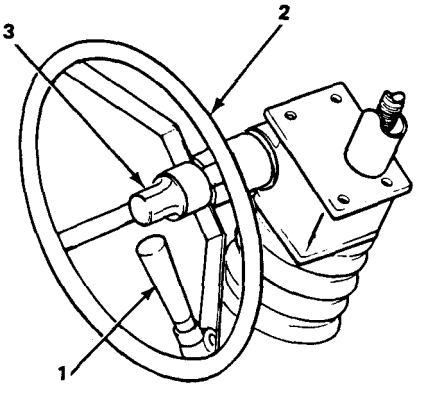
a. Immobilize the platform before raising the work platform. (See para 2-7a to immobilize platform.)

b. Ensure that platform is grounded before raising work platform. (See para 2-10a to ground platform.)

c. Fold in handle (1) on handwheel (2).

d. Connect power tool to 5/8 inch hex stud (3) at center of handwheel.

e. Operate power tool to turn the hex stud and raise the work platform to the proper level.



WARNING

- Use only electric tools with 3-prong ground plugs.
- Connect static discharge cable to platform frame and earth ground.
- Use handrails when going up or down steps.
- Do not use platform with load of more than 500 pounds.
- Be sure platform rails are in place.

2-13. USING WORK PLATFORM.

a. Electrical outlets are provided for using electrical tools.

b. An air outlet is provided for using air tools.

WARNING

Before lowering platform, be sure all steps are clear of debris, tools and power cables.

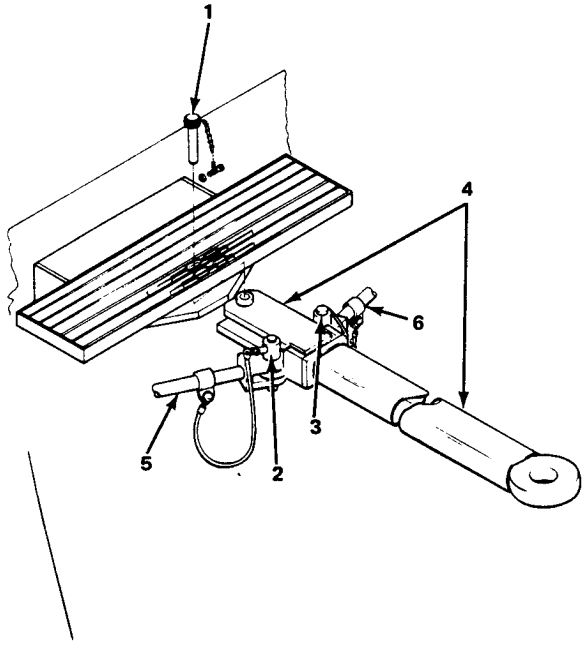
2-14. LOWERING WORK PLATFORM.

a. Ensure that all debris, tools and power cables are removed.

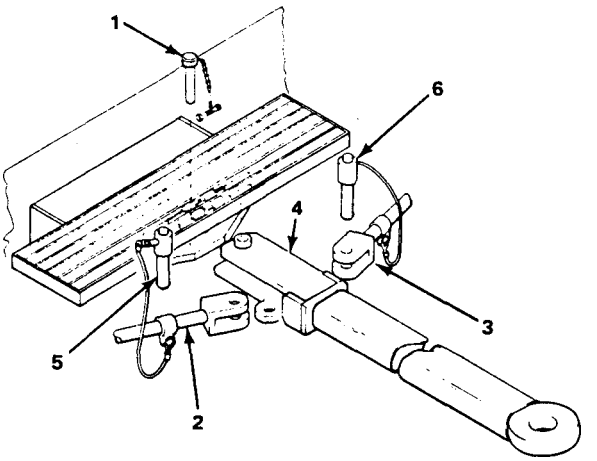
b. Rotate handwheel manually to lower work platform.

2-15. STORING AND UNSTORING TONGUE .

a. To store tongue and steering bar remove 3 detent pins (1, 2 and 3). Remove tongue and steering bar (4) from frame. Hang tie rod ends (5 and 6) in hooks provides under main frame. Store tongue and steering bar (4) under main frame.



b. To unstore, pull tongue and steering bar from frame. Align hole in steering bar with holes in mainframe. Secure with detent pin (1). Align holes in tie rods (2 and 3) with holes in steering bar (4). Secure with detent pins (5 and 6).



2-16. MOVING PLATFORM LONG DISTANCES.

a. Tow the platform to the long distance carrier.

b. Remove tongue from platform and store under platform frame. (See para 2-15a to store tongue.)

c. Load platform onto carrier using the lifting rings located at each corner of the frame.

d. Secure platform to carrier and transport to desired location.

Section IV. OPERATION UNDER UNUSUAL CONDITIONS

2-17. OPERATION UNDER UNUSUAL CONDITIONS. The platform is intended for use on smooth, level surfaces. Operating on rough, soft or uneven ground is not recommended.

CHAPTER 3

MAINTENANCE INSTRUCTIONS (AVUM and AVIM)

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

3-1. COMMON TOOLS AND EQUIPMENT. The authorized common tools and equipment are listed in the Modified Table of Organization and Equipment (MTOE) applicable to your unit. The required common tools are listed by Tools Kit or Shop Set in table 3-1.

Table 3-1. Common Tools

NAME OF TOOL SET	NEEDED FOR		NSN
	AVUM	AVIM	
Tool Kit, Aircraft Mechanics, General	x	x	5180-00-323-4692
Tool Kit, Instrument Repairman	x		5180-00-323-4913
Shop Set, AVIM, Recip Eng, Suppl.		x	4920-00-464-0222
Shop Set, AVIM, Propeller Suppl.		x	4920-00-001-4132
Shop Set, AVIM, Hydraulic		x	4920-00-165-1454
Shop Set, AVIM, Sheet Metal		x	4920-00-166-5505

3-2. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT. No special tools required.

3-3. REPAIR PARTS, Repair parts are listed and illustrated in the repair parts and special tools list, TM 55-1730-223-23P, covering AVUM and AVIM maintenance for this equipment.

Section II. SERVICE UPON RECEIPT

3-4. UNPACKING OF EQUIPMENT.

a. Remove all restraining straps.

b. Use lifting rings on frame to lower platform to ground.

c. Unstrap hand rails.

d. Refer to tale 3-2 and perform actions listed.

Table 3-2. Service Upon Receipt

LOCATION	ITEM	ACTION	REMARKS
Container	Components	Inspect for damage	Paragraph 3-5a.
Packing Slip, contents of container	List, parts shipped	Compare list to what was shipped	Paragraph 3-5b.
Contents of container	All parts	Check for modified parts	Paragraph 3-5c.

3-5. CHECKING UNPACKED EQUIPMENT.

a. Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on DD Form 6, Packaging Improvement Report.

b. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with instructions in DA PAM 738-751.

c. Check to see whether the equipment has been modified.

3-6. ASSEMBLY OF EQUIPMENT.

a. Place handrails in sockets and secure with setscrews.

b. Install air hose inside right handrail with fishtape in accordance with paragraph 3-27.

c. Install electrical wires inside left handrail in accordance with paragraph 3-27.

d. Install outlet boxes to ends of wires and make wire connections as shown in figure 3-1.

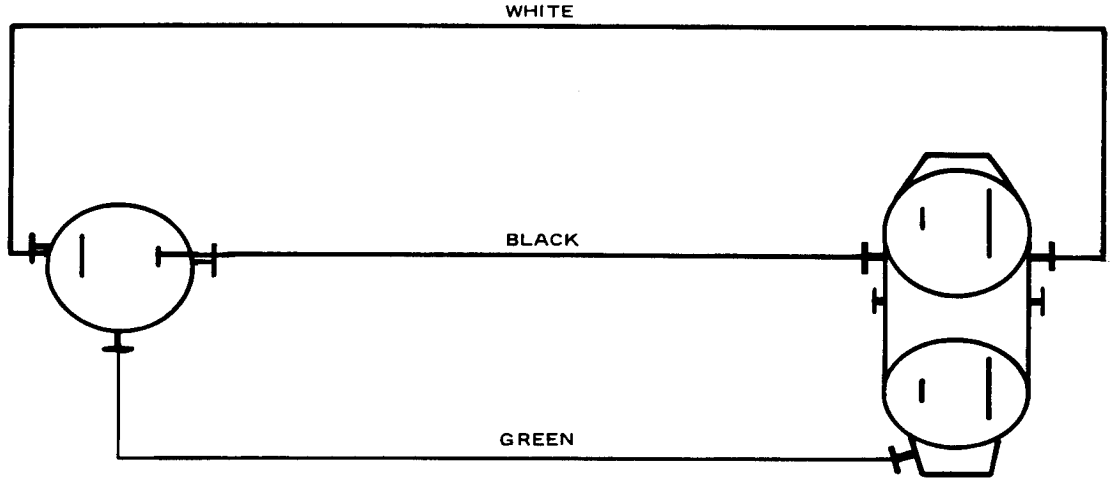


Figure 3-1. Electrical Connections

3-7. PRELIMINARY SERVICING OF EQUIPMENT. Perform the checks and services listed in table 3-3 before placing platform in service.

Table 3-3. Preliminary Service

ITEM	ACTION	REMARKS
Structure	Check for damaged parts	Paragraph 3-9
Attaching parts	Check for loose nuts, cap-screws or setscrews	Paragraph 3-9
Surfaces	Check for scratches. Paint as necessary	Paragraph 3-9

3-8. LUBRICATION. Lubrication is not required during the preliminary servicing of the platform.

Section III. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

3-9. PREVENTIVE MAINTENANCE. The preventive maintenance checks and services for AVUM and AVIM are listed in table 3-4. The ITEM NO. column contains a number for each task and is used to fill in TM number column on DA Form 2404, Equipment Inspection and Maintenance Work Sheet.

Table 3-4. AVUM and AVIM PMCS

In inteval column:
B=Before Operation A=After Operation M=Monthly
D=During Operation W=Weekly C=Combat Operability Check

ITEM NO.	INTERVAL B	D	A	W	M	C	ITEM TO BE INSPECTED	PROCEDURES: CHECK FOR AND HAVE REPAIRED OR ADJUSTED AS NECESSARY	EQUIPMENT WILL BE REPORTED NOT READY (RED) IF:
1	x		x		x		Frame	Defects, cracks, bent members, corrosion.	Structural member is defective.
2	x		x				Wheel Assy	Defective wheel swivel lock pin, brake lever (front wheels only), wheel jack ratchet.	Wheel jack ratchet is defective.
3	x	x	x	x			Jackscrew	Cracks in bellows, noise or binding when operated, proper lubrication.	Binding or immobile when operated.
4	x	x	x	x			Handwheel	Broken collapsible handle, binding when turned, noisy when turned, proper lubrication.	Binding or immobile when operating.
5	x	x	x				Handrails & Platform Rails.	Broken, cracked, bent members, corrosion.	Defective rails cannot be installed on platform.
6	x	x	x		x		Static Discharge Reel	Broken alligator clips, frayed or damaged static wire, inoperative reel.	Static wire clips are missing or will not make proper ground connection.
7	x		x		x		Lunette Assy	Damaged steering bar, tie rods, detent pins, tie rod pins, tongue.	Broken tie rod, steering bar or tongue.

Section IV. TROUBLESHOOTING

3-10. TROUBLESHOOTING. Troubleshooting procedures for the maintenance platform are contained in table 3-5.

Table 3-5. Troubleshooting Procedures

	MALFUNCTION	INSPECTION	CORRECTIVE ACTION
1.	Noise from wheels.	Check for worn or damaged parts.	Replace or repair wheel assembly. (See para 3-24; AVIM only)
2.	Noise from jack-screws.	Check for worn or damaged parts.	Replace or repair jack-screw assembly. (See para 3-33; AVIM only)
3.	Brakes will not hold platform.	Check for worn or damaged parts.	Repair brake assembly. (See para 3-24; AVIM only)
4.	Air tool does not operate or operates slowly.	Air pressure at air outlet.	Repair or replace hose. (See para 3-27)
5.	Electric tool does not operate.	Step 1. Loose connection at boxes.	Repair connection. (See para 3-30; AVIM only)
		Step 2. Short circuit.	Repair wire or replace insulation. (See para 3-30; AVIM only)

Section V. MAINTENANCE PROCEDURES

3-11. IDENTIFYING ASSEMBLIES FOR MAINTENANCE. The assemblies of the maintenance platform are identified in figure 3-2 and listed in the maintenance summary in table 3-6. Table 3-6 provides references to paragraphs containing the required maintenance instructions.

Table 3-6. Maintenance Summary

ASSEMBLY	REF MAINT PARAGRAPHS
Lunette Assembly - Includes Tongue, Steering Bar, Tie Rods, Detent Pin & Tie Rod Pins.	3-12 thru 3-16
Handrails, Work Platform and Steps	3-17 thru 3-23
Brakes, Wheels, Immobilizing Jacks and Locking Pins	3-24 and 3-25
Electrical, Pneumatic Appliances	3-26 and 3-27
Static Discharge Reel and Hardware	3-28 thru 3-30
Handwheel and Jackscrew	3-31 thru 3-33

3-12. LUNETTE ASSEMBLY MAINTENANCE. The Lunette assembly consists of a tongue, steering bar, tie rods, detent pin and tie rod pins. The removal, repair, and installation instructions are as follows:

a. Refer to paragraph 3-13 for removal, repair, and installation of the tongue.

b. Refer to paragraph 3-16 for removal, repair, and installation of the steering bar.

c. Refer to paragraph 3-14 for removal, repair, and installation of the tie rods and tie rod pins.

d. Refer to paragraph 3-15 for removal, repair, and installation of the detent pin.

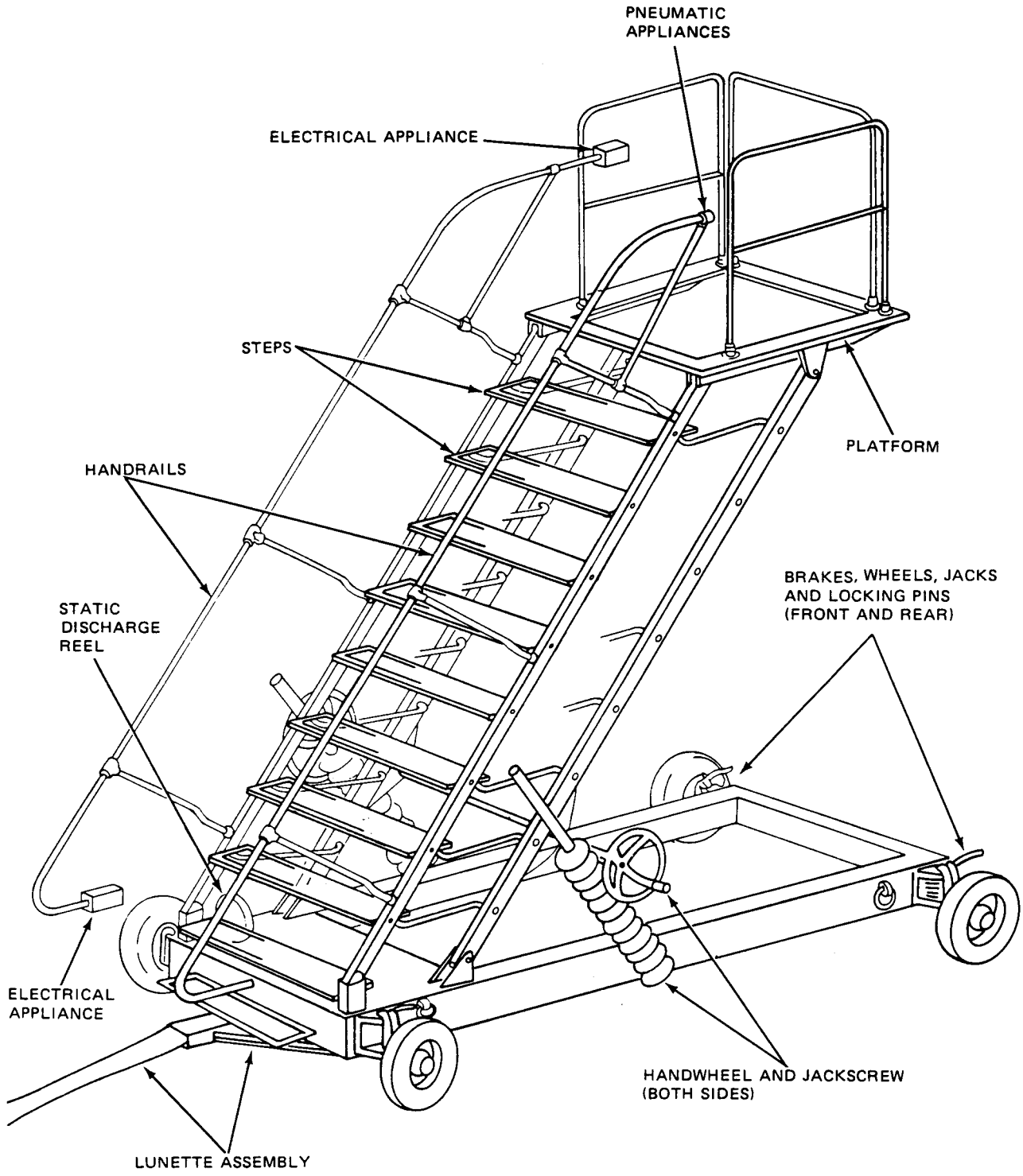


Figure 3-2. Assemblies for Maintenance

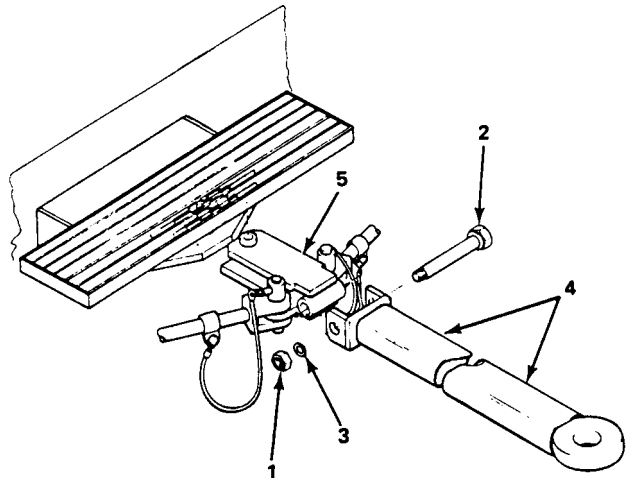
3-13. REMOVAL, REPAIR, AND INSTALLATION OF TONGUE

a. Support tongue (4), remove nut (1), washer (3), and bolt (2). (AVUM)

b. Remove tongue (4). (AVUM)

c. Repair tongue by welding and painting as required. Replace any defective hardware. (AVIM)

d. To install, align tongue (4) with steering bar (5), insert bolt (2), and install washer (3) and nut (1). (AVUM)



3-14. REMOVAL, REPAIR, AND INSTALLATION OF TIE RODS

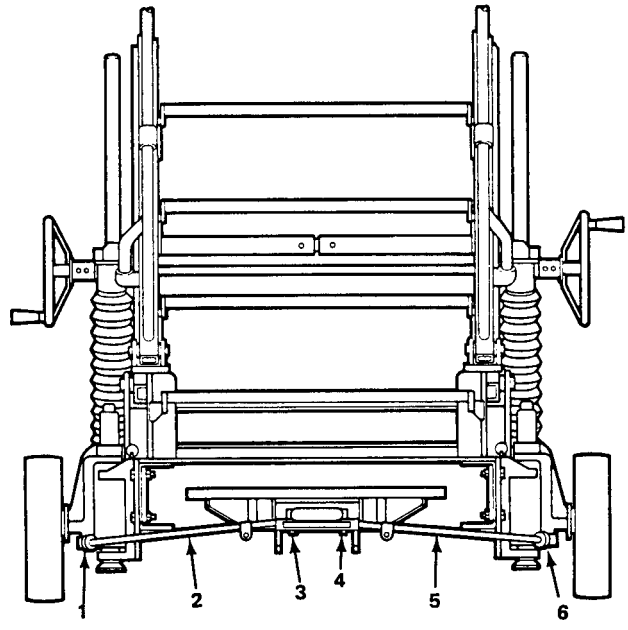
a. Remove tie rod pins (3 and 4) (AVUM)

b. Remove screws (1 and 6). (AVUM)

c. Pull tie rods (2 and 5).(AVUM)

d. Repair tie rods and replace defective hardware as required. Repair at AVIM.

e. Install tie rods (2 and 5) and secure with screws (1 and 6) and tie rod pins (3 and 4). (AVUM)

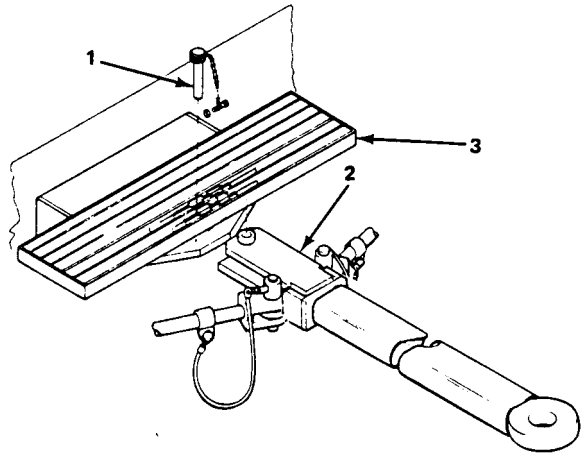


3-15. REMOVAL, REPAIR, AND INSTALLATION OF DETENT PIN

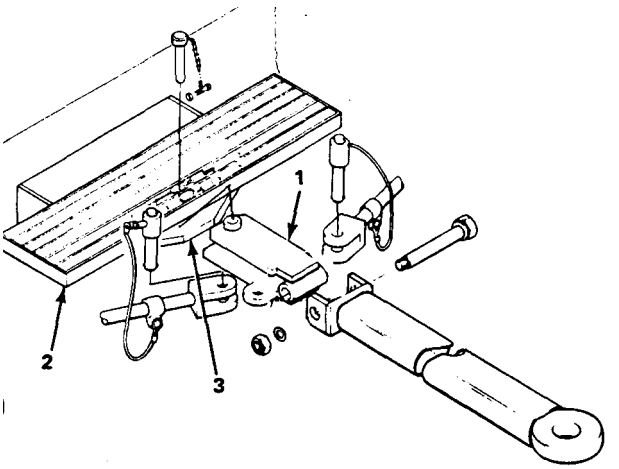
a. Remove detent pin (1) from steering bar (2). (AVUM)

b. Repair detent pin by refinishing or replace if beyond repair. Repair at AVIM.

c. Install detent pin (1) by inserting through bottom platform step (3) and steering bar (2). (AVUM)



3-16. REMOVAL, REPAIR, AND INSTALLATION OF STEERING BAR.



NOTE

Steering bar can be replaced at AVUM but must be repaired at AVIM.

a. Remove tongue. (See para 3-13)

b. Remove tie rods. (See para 3-14)

c. Remove detent pin.(See para 3-15)

d. Pull steering bar (1) from beneath platform step (2) and the main frame (3).

e. Repair the steering bar by welding. Replace steering bar if beyond repair.

f. To install, insert steering bar (1) beneath bottom platform step (2) and align with hole in main frame (3).

g. Install detent pin. (See para 3-15)

h. Install tie rods. (See para 3-14)

i. Install tongue. (See para 3-13)

3-17. MAINTENANCE OF HANDRAILS, PLATFORM, AND STEPS. The removal, repair, and installation instructions are as follows:

a. Refer to paragraph 3-18 for removal, repair, and installation of the handrails for the work platform.

b. Refer to paragraph 3-19 for removal, repair, and installation of the handrails for the steps.

c. Refer to paragraph 3-20 for removal, repair, and installation of the work platform.

d. Refer to paragraph 3-21 for removal, repair, and installation of rear legs.

e. Refer to paragraph 3-22 for removal, repair, and installation of steps.

f. Refer to paragraph 3-23 for removal, repair, and installation of front legs.

3-18. REMOVAL, REPAIR, AND INSTALLATION OF HANDRAILS (PLATFORM).

NOTE

Handrails can be replaced at AVUM but must be repaired at AVIM.

a. Lower work platform to perform all maintenance.

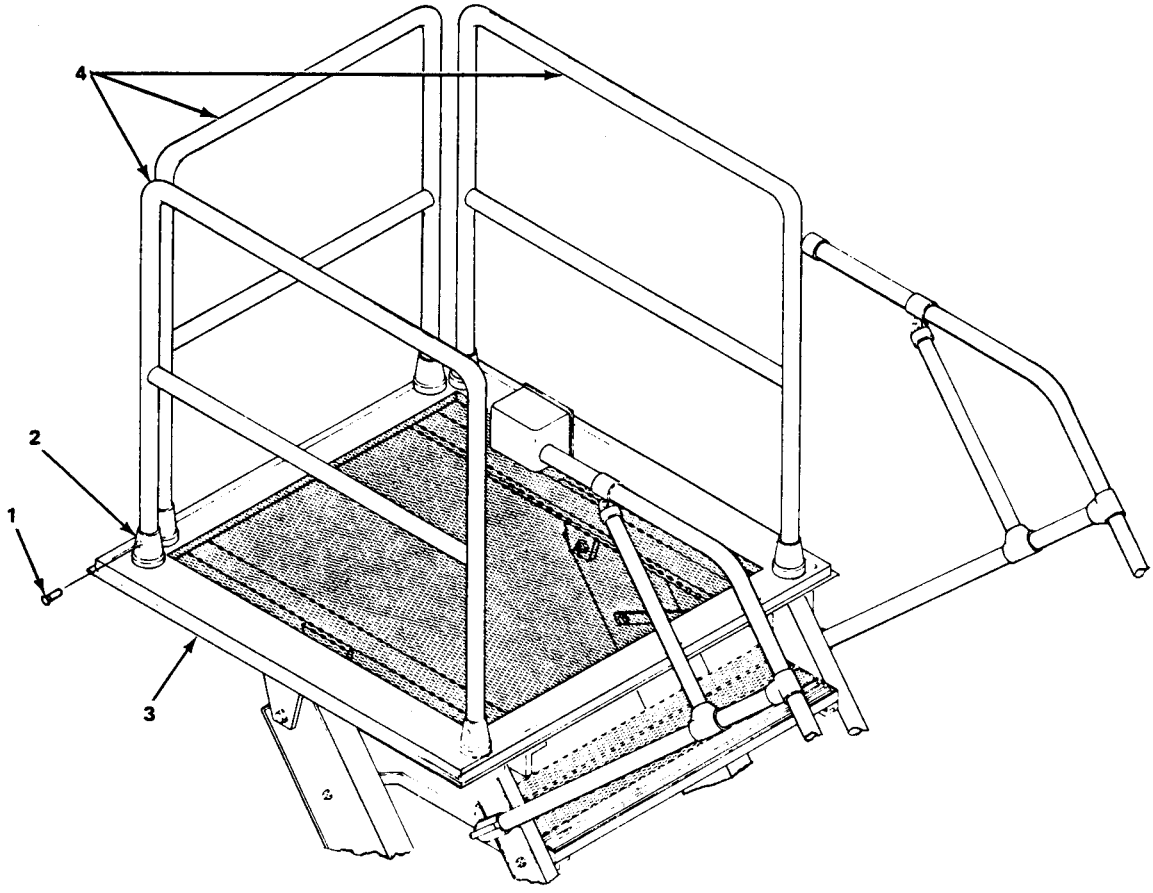
b. Remove six square-head setscrews (1) from base flanges (2)on floor of platform (3).

c. Lift handrails (4) and remove from base flanges (2).

d. Repair handrails by welding and painting. Replace if beyond repair. Replace defective hardware as required.

e. To install, insert handrails (4) into base flanges (2).

f. Install six square-head setscrews (1) into base flanges (2) and tighten.



3-19. REMOVAL, REPAIR, AND INSTALLATION OF HANDRAILS (STEPS)

NOTE

Handrails (steps) may be replaced at AVUM but must be repaired at AVIM.

a. The platform must be lowered to perform all maintenance.

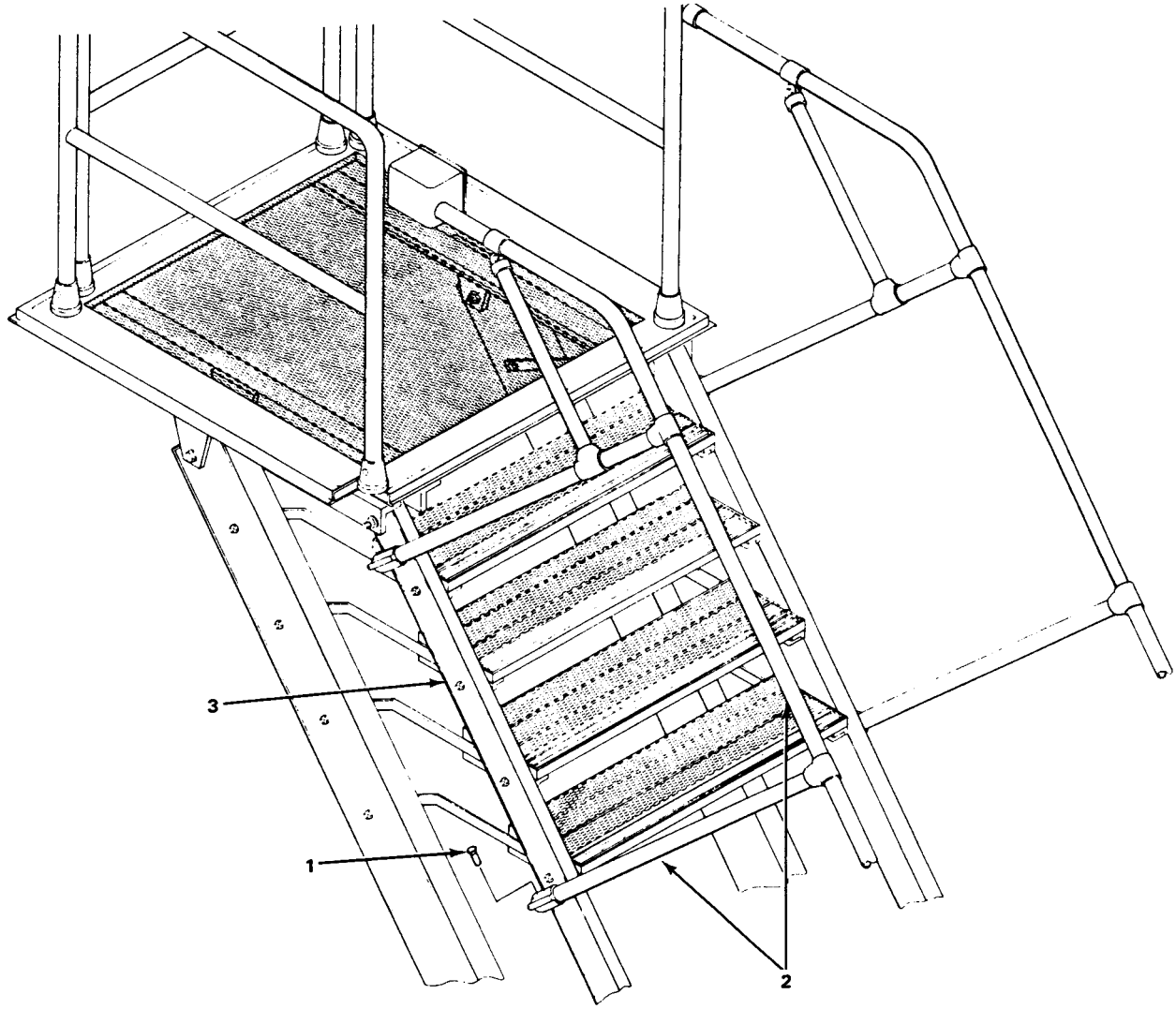
b. Loosen setscrews (1) and disconnect handrail and supports (2) from rear leg (3).

c. Lift handrail and supports (2) away from rear legs (3).

d. Repair handrails and supports by welding. Replace defective hardware as required.

e. Lift handrail and supports into position and align supports (2) with mounting points at rear legs (3).

f. Secure supports to rear legs by tightening setscrews (1).



3-20. REMOVAL, REPAIR, AND INSTALLATION OF WORK PLATFORM.

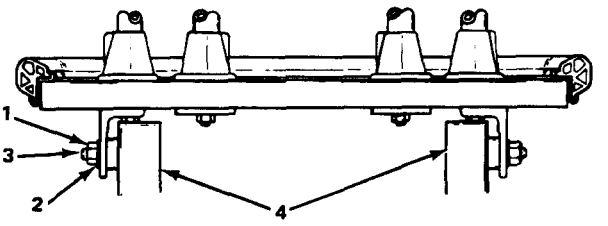
NOTE

The platform can be replaced at AVUM but must be repaired at AVIM.

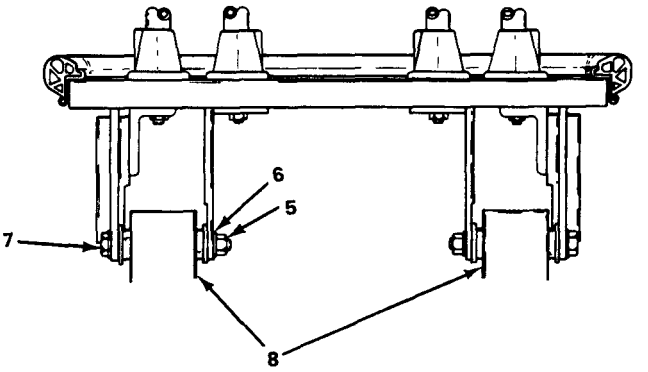
a. The platform must be lowered to perform all maintenance.

b. Remove handrails from platform. (See para 3-18)

c. Remove two nuts (1), two washers (2), and two shoulder screws (3) from both rear legs (4).



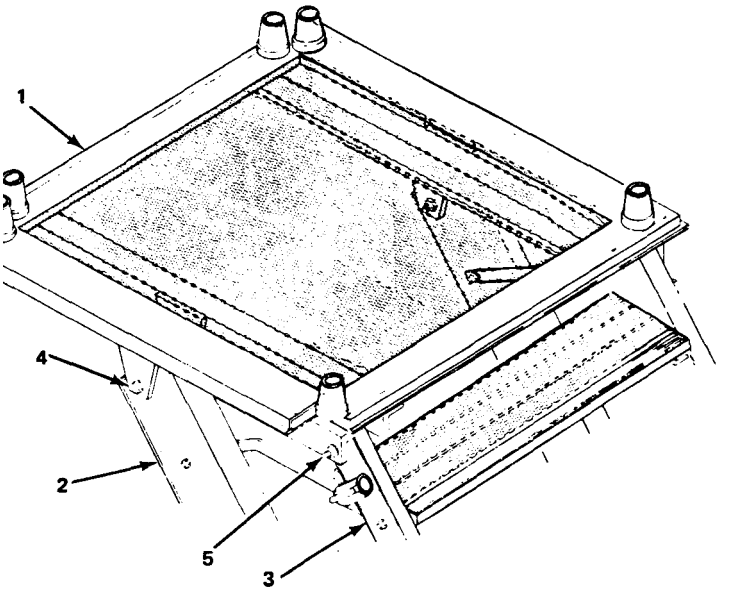
d. Remove two self-locking nuts (5), two washers (6) and two shoulder screws (7) from both front legs (8).



e. Lift platform (1) from front legs (2) and rear legs (3).

f. Repair platform by welding and painting. Replace defective hardware as required.

g. To install, lift platform (1)and align holes with front legs (2) and rear legs (3).



h. Insert shoulder screws (4) through both front legs (2) and platform (1), and install washers and self-locking nuts. Do not tighten nuts at this time.

i. Install shoulder screw (5), washer, and nut at each rear leg (3) and connect to platform (1).

j. Tighten the nuts installed in steps h and i.

3-21. REMOVAL, REPAIR, AND INSTALLATION OF REAR LEGS.

NOTE

Rear legs may be replaced at AVUM, but must be repaired at AVIM.

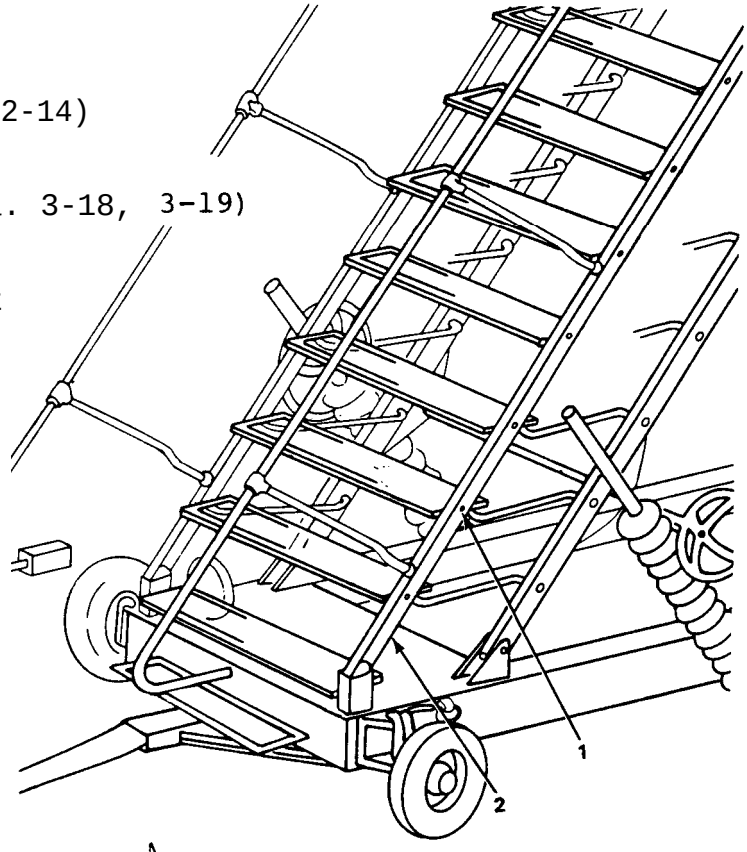
a. Lower platform. (See para. 2-14)

b. Remove handrails. (See para. 3-18, 3-19)

c. Remove platform from front and rear legs. (See para. 3-20)

d. Remove sixteen nuts, washers and shoulder screws (1) from rear legs and steps (2).

e. Let steps rest on main frame.



f. Remove four capscrews (1) four lockwashers (2) and two pivot pins (3) from both rear legs (4).

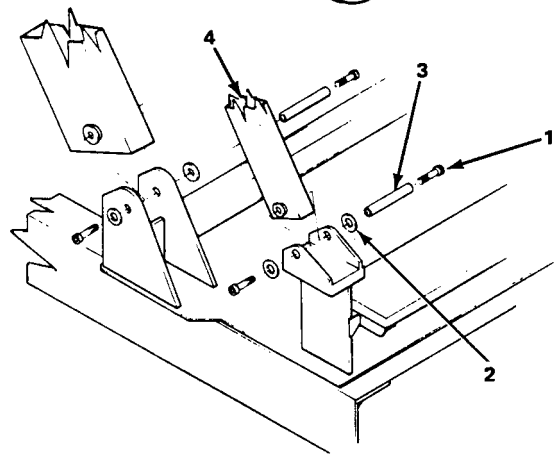
g. Pull rear legs away from steps and main frame.

h. Straighten, weld and repaint as needed.

i. Reinstall rear legs in place on main frame. Align holes.

j. Install new hardware as needed.

k. Secure legs with two pivot pins (3) four washers (2) and four capscrews (1).

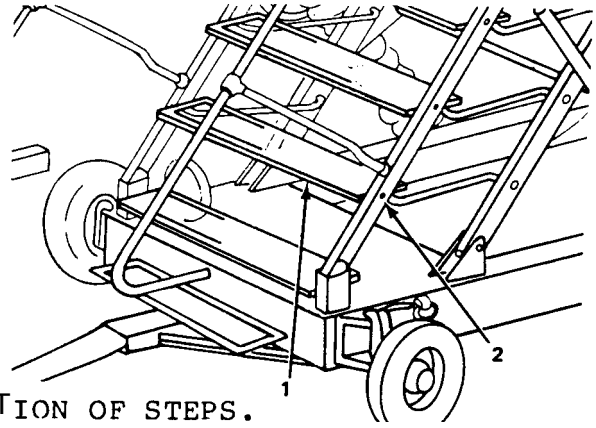


VIEW ROTATED 180°

l. Reinstall steps (1). Align holes.

m. Secure with shoulder screws, washers and self-locking nuts(2).

n. Reinstall platform and handrails. (Para. 3-20, 3-18 and 3-19)



3-22. REMOVAL, REPAIR AND INSTALLATION OF STEPS.

NOTE

Steps may be replaced at AVUM but must be repaired at AVIM.

a. Remove handrails, platform and rear legs. (See paras. 3-18 through 3-21.)

b. Remove sixteen self locking nuts, flatwashers and shoulder screws (1) at front legs.

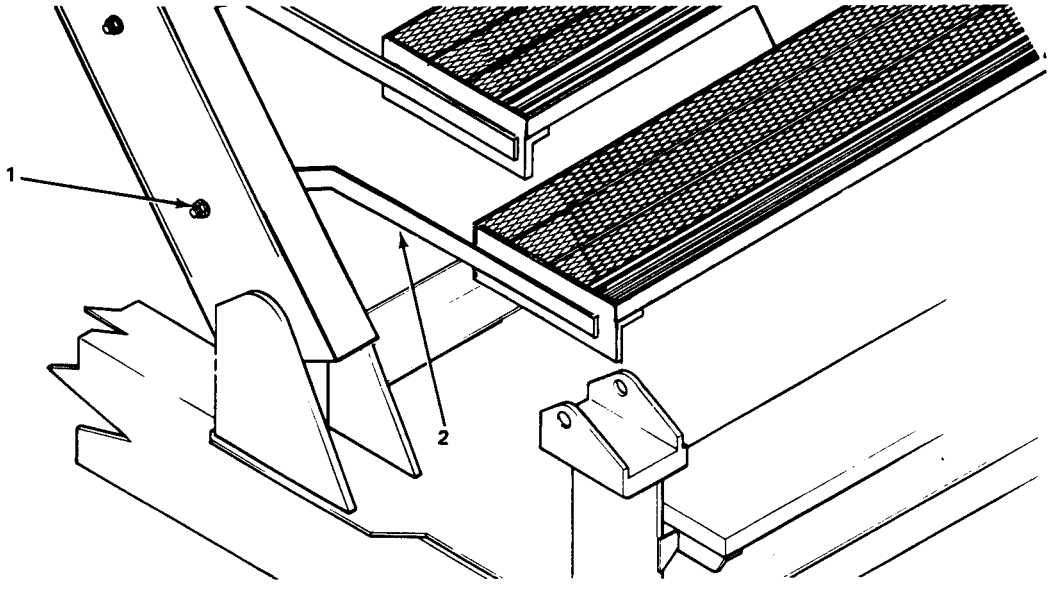
c. Pull out step braces (2).

d. Straighten, weld and repaint steps as needed.

e. Install step at front leg. Align holes.

f. Secure with shoulder screw, washers and self-locking nut (1).

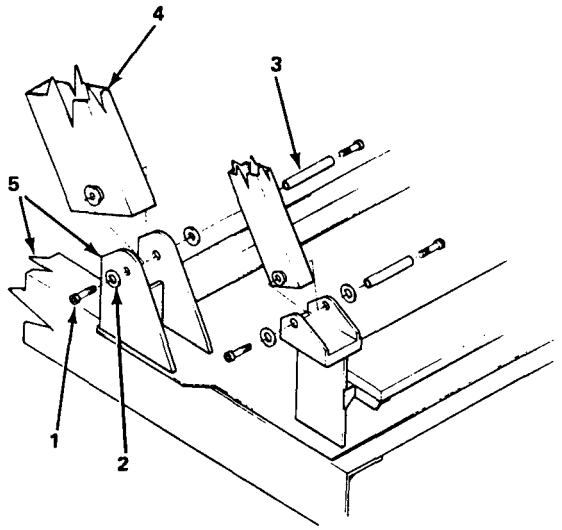
g. Reinstall rear legs, platform and handrails. (See paras. 3-18 through 3-21.)



3-23. REMOVAL, REPAIR AND INSTALLATION OF FRONT LEGS.

NOTE

Front legs may be replaced at AVUM but must be repaired at AVIM.



a. Remove handrails, platform, rear legs and steps. (See paras. 3-18 through 3-22.)

b. Remove four capscrews (1), four lockwashers (2) and two pivot pins (3) from front leg (4) and main frame (5).

c. Install front legs (4) in main frame (5).

d. Straighten, weld and repaint as needed.

e. Reinstall two pivot pins (3) thru main frame (5) and front legs (4). Secure with capscrews (1) and washers (2).

3-24. BRAKES, WHEELS, IMMOBILIZING JACKS AND LOCKING PINS ASSEMBLY MAINTENANCE. The Brakes, Wheels, Immobilizing Jacks and Locking Pins Assembly will be repaired using common bench stock and standard shop practices. No repair parts are stocked. Refer to paragraph 3-25 for removal, repair, and installation of the wheel assembly units.

3-25. REMOVAL, REPAIR AND INSTALLATION OF WHEEL ASSEMBLIES (AVIM).

a. Lower platform to perform all maintenance. (See para 2-14.)

b. Lock brakes on all four wheels. (See para 2-6.)

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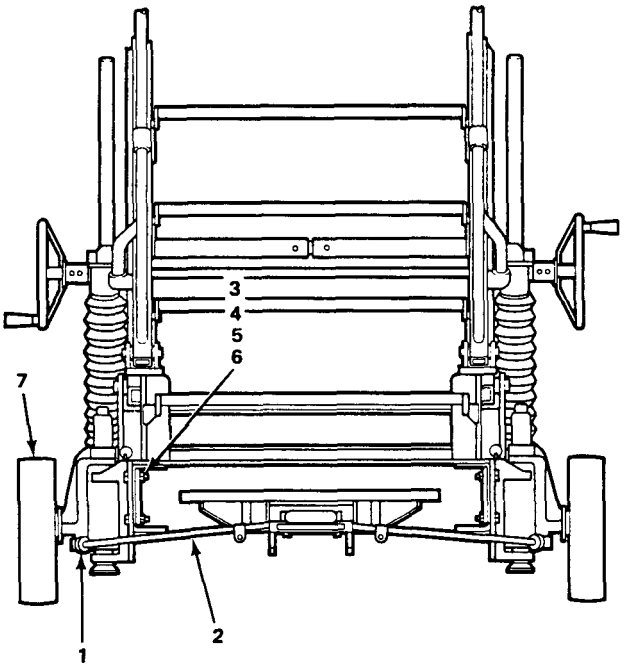
c. Raise the corner of the platform to be worked on using a suitable jack placed under the main frame.

NOTE

Do not use the immobilizing jack integral with the wheel assembly to be removed.

d. Loosen tie rod attaching screw (1) and remove tie rod (2) (front only). Loosen four wheel assembly attaching nuts (3). Remove washers (4 and 5) and screws (6) and remove wheel assembly (7) .



e. Straighten bent locking pins. Weld any cracked suspension parts. Replace any stripped or broken nuts or bolts.

f. Place wheel assembly (7) in position on main frame. Align holes. Place screws (6) washers (4 and 5) and nuts (3). Tighten nuts. Position tie rod (2) on suspension unit. Attach with screw (1).

g. Lower corner of platform with jack.

3-26. ELECTRICAL AND PNEUMATIC APPLIANCES ASSEMBLY MAINTENANCE. The Electrical and Pneumatic Appliances Assembly consists of outlet boxes for air and electric power, connecting wire and hoses and attaching hardware. The removal, repair and installation instructions are as follows: Refer to paragraph 3-27 for removal, repair and installation of air hose and wire.

3-27. REMOVAL, REPAIR AND INSTALLATION OF AIR HOSE AND WIRES (AVUM).

a. Remove upper appliance box (1) from top of handrail (2).

b. Disconnect hose or wires from box.

c. Attach fish wire to upper end of hose or wires.

d. Remove lower appliance box (3) from bottom of handrail (2).

e. Disconnect hose or wires from appliance box (3).

f. Pull lower end of hose or wires out of handrail. This will pull fish wire into handrail.

g. Repair or replace defective parts.

h. Attach hose or wires to fish wire.

NOTE

See figure 3-1 for electrical connections.

i. Pull fish wire and hose or wires into handrail.

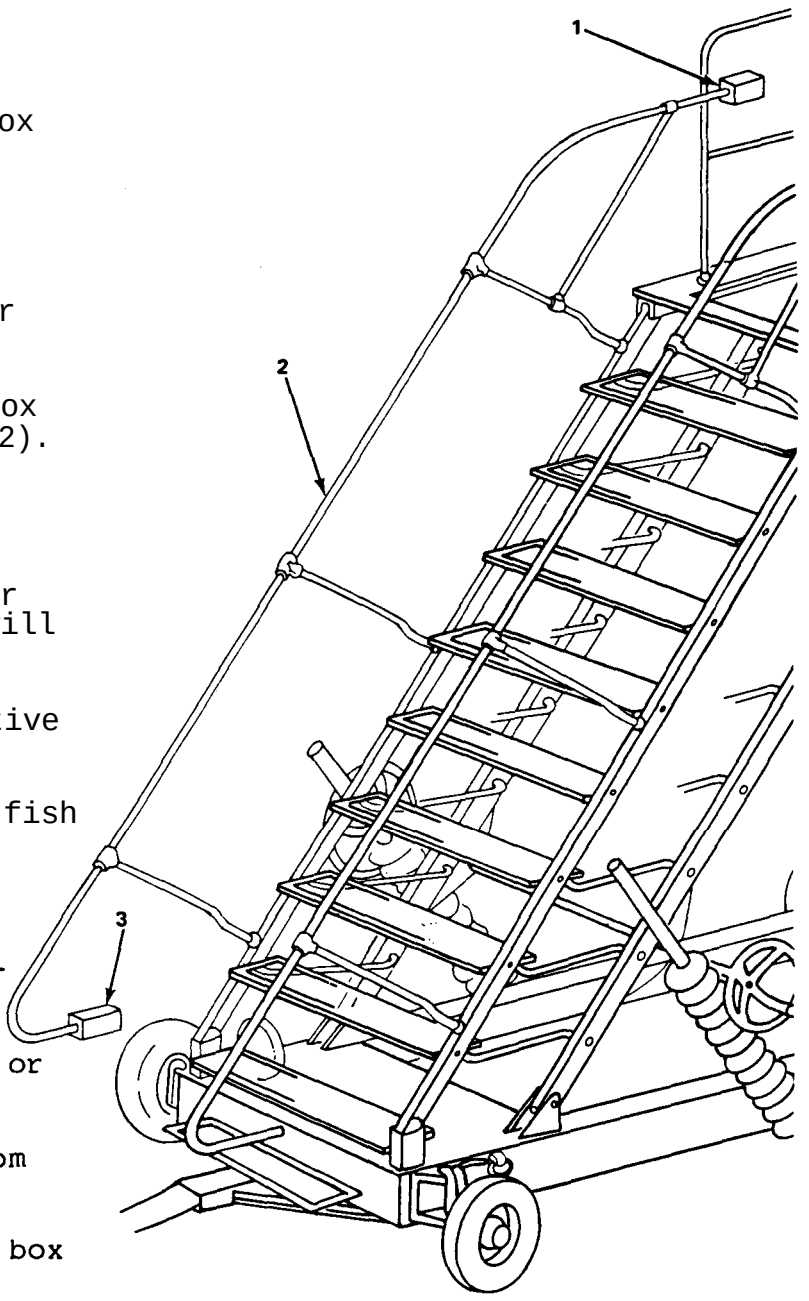
j. Disconnect fish wire from hose or wires.

k. Connect lower appliance box (3) to hose or wires.

l. Connect lower appliance box (3) to handrail (2).

m. Connect hose or wires to appliance box (3).

n. Connect upper appliance box (1) to upper handrail (2).

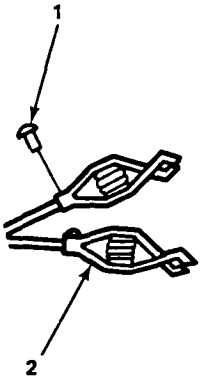


3-28. STATIC DISCHARGE REEL ASSEMBLY MAINTENANCE. The Static Discharge Reel Assembly consists of the reel and attaching hardware, the wires and the clips. The removal, repair and installation instructions are as follows:

a. Refer to paragraph 3-29 for removal, repair and installation of clips.

b. Refer to paragraph 3-30 for removal repair and installation of static discharge reel.

3-29. REMOVAL, REPAIR AND INSTALLATION OF CLIPS. (AVUM)



a. Loosen setscrews (1) on clips (2).

b. Remove clips from wires.

c. Replace damaged clips.

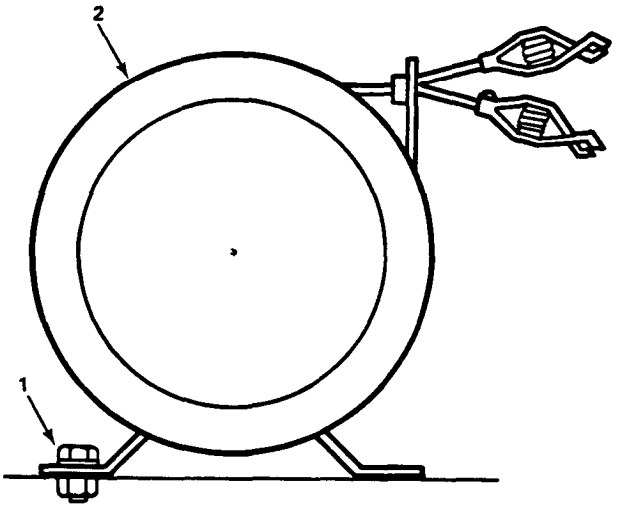
d. Install wires inside clips (2).

e. Tighten screws.

3-30. REMOVAL, REPAIR AND INSTALLATION OF STATIC DISCHARGE REEL.

NOTE

Static Discharge Reel can be replaced AVUM but must be repaired at AVIM.



a. Loosen four screws (1). Keep washers and nuts to use again.

b. Lift static discharge reel (2) up and away from main frame.

c. Inspect reel for worn or damaged parts. Replace parts as needed.

d. Position discharge reel (2) on main frame. Align holes.

e. Position screws (1) thru holes in reel and main frame.

f. Secure screws with washers and nuts.

3-31. MAINTENANCE OF HANDWHEEL AND JACKSCREW ASSEMBLY. The removal, repair and installation instructions are as follows:

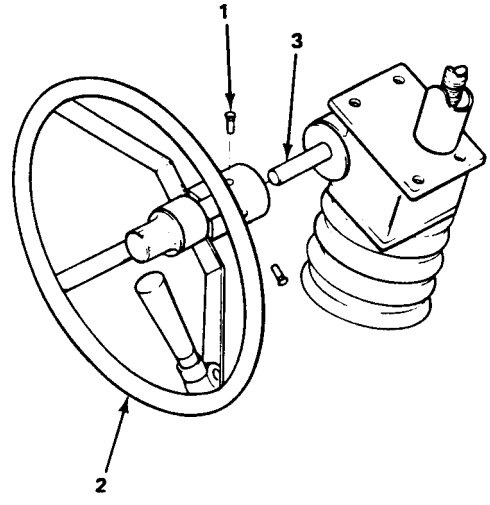
a. Refer to paragraph 3-32 for removal, repair and installation of the handwheel.

b. Refer to paragraph 3-33 for removal, repair and installation of the jackscrews.

3-32. REMOVAL, REPAIR AND INSTALLATION OF HANDWHEEL.

NOTE

The handwheel can be replaced at AVUM but must be repaired at AVIM.



a. Loosen two setscrews (1).

b. Pull handwheel (2) away from shaft (3).

c. Straighten any bent areas. Weld all cracks. Replace stripped setscrews. Re-tap stripped setscrew holes.

d. Install handwheel (2) on shaft (3). Align setscrew (1) with flat on shaft (3).

e. Tighten setscrew (1).

3-33. REMOVAL, REPAIR AND INSTALLATION OF JACKSCREW.

NOTE

Jackscrew can be replaced at AVUM but must be repaired at AVIM.

a. Lower platform to perform all maintenance. (See para. 2-11.)

b. Remove handrails. (See para. 3-18 and 3-19.)

c. Remove platform. (See para. 3-20.)

d. Remove rear legs. (See para. 3-21.)

e. Remove steps. (See para. 3-22.)

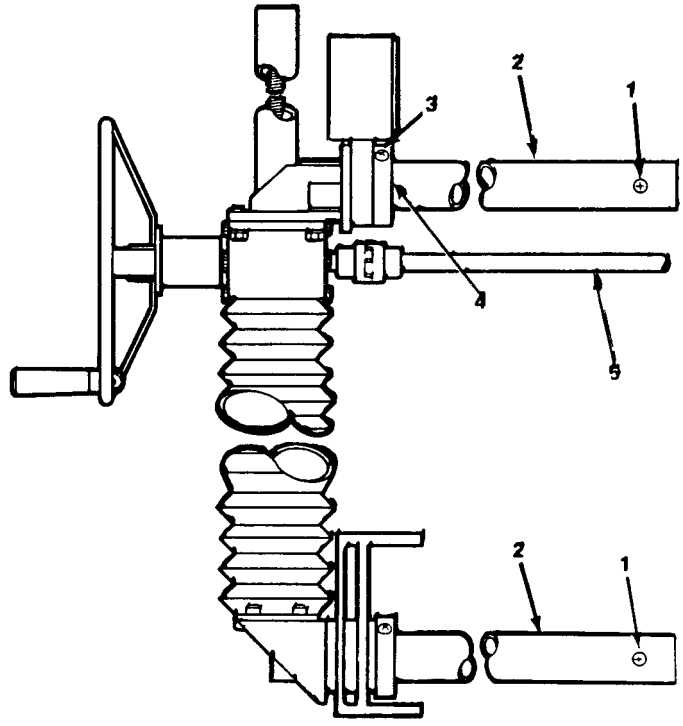
f. Rotate handwheel to raise front leg 12 inches. Support securely with safety stands between main frame and front leg.

g. Loosen self-locking nuts (1) and capscrews from upper tubing and mount (2).

h. Loosen capscrew (3) to release tension on clamp (4). Support drive shaft (5) to prevent it from falling.

i. Loosen self-locking nuts (1) and capscrews and remove from lower tubing and mount (2).

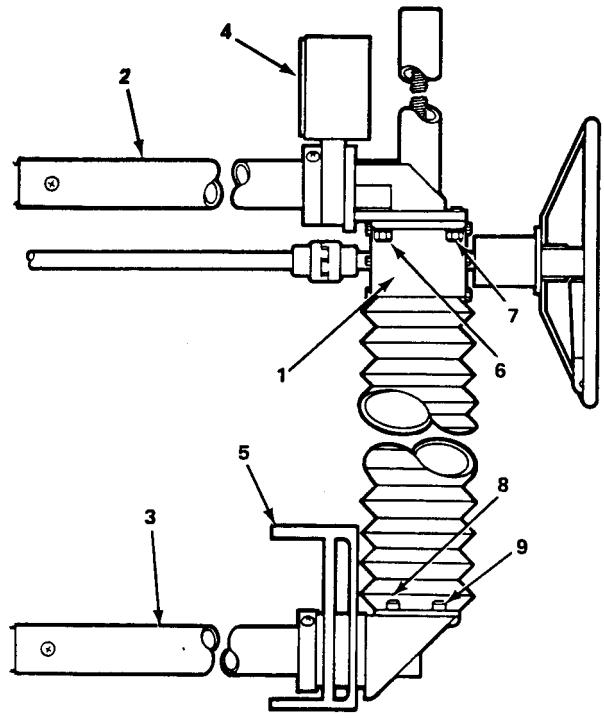
j. Loosen capscrew (3) to release tension on clamp (4).



k. Pull jackscrew (1) so that upper tubing and mount (2) and lower tubing and mount (3) slides thru front leg (4) and main frame (5).

l. When jackscrews are free from frame and front leg, loosen two capscrews (6 and 7) and two self-locking screws (8 and 9) on both jackscrews. Remove both upper and lower tubing and mounts (2 and 3) from both jackscrews.

m. Straighten any bent parts. Weld any cracks that appear.



n. Install upper and lower tubing and mount (1 and 2) on each jackscrew (3). Align holes.

o. Start capscrews (4 and 5) and self-locking screws (6 and 7) in jackscrew. Tighten capscrews and self-locking screws.

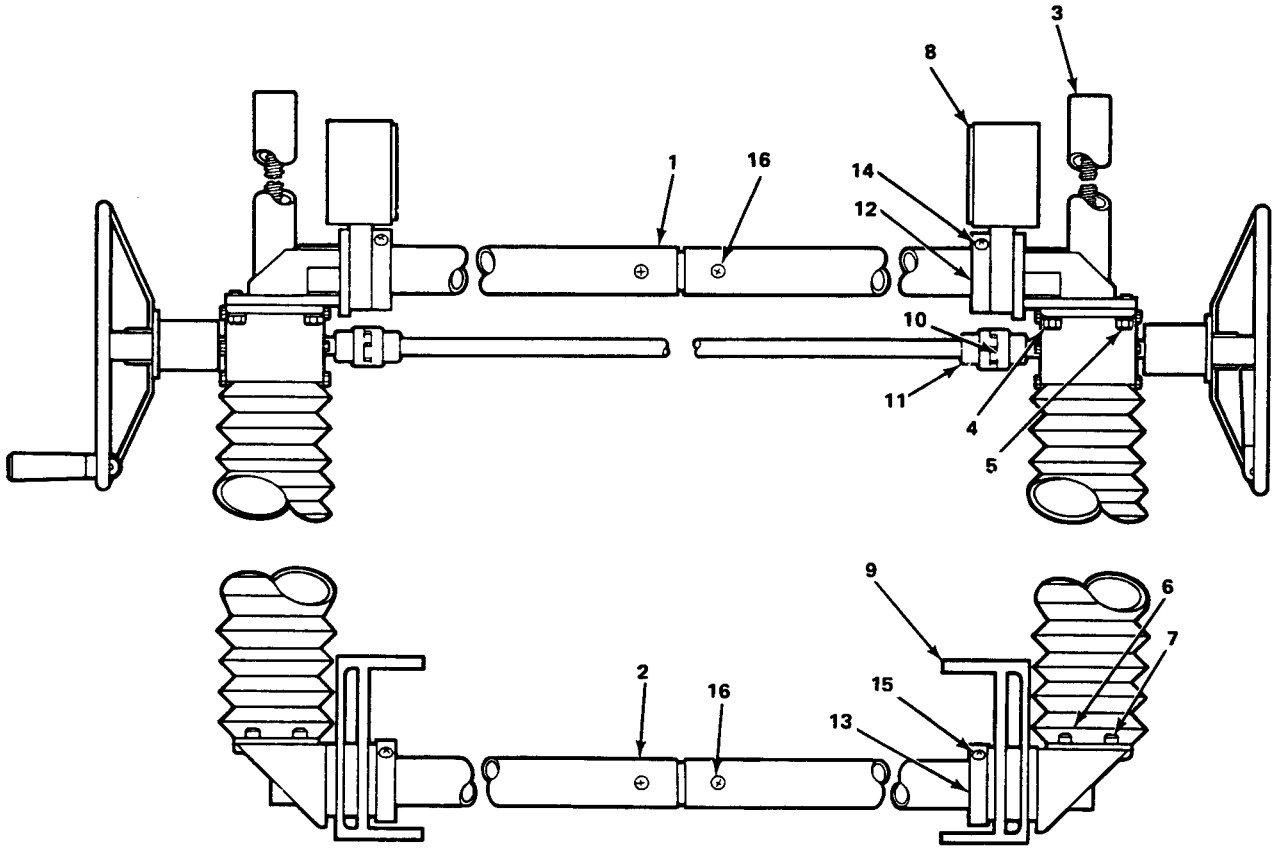
p. Slide upper and lower tubing and mount (1 and 2) thru front leg (8)and main frame (9).

q. Connect drive shaft coupling halves (10 and 11).

r. Secure upper and lower tubing and mount one jackscrew to main frame and front leg using clamps (12 and 13). Tighten capscrews (14 and 15) .

s. Align holes at the centers of both upper and lower tubing and mount (1 and 2).

t. Secure with capscrews (16) and nuts.



Section VI. Preparation for Storage and Shipment

a. Preparation for storage or shipment will be in accordance with instructions given in figure 3-3.

b. For general technical information on preparation for storage and shipment refer to TM 55-1500-204-25/1. For regulatory requirements pertaining to equipment placed in administrative storage refer to AR 750-1.

PRESERVATION, PACKAGING, PACKING AND MARKING REQUIREMENTS

NOMENCLATURE	STOCK NUMBER		
Aircraft Maintenance Platform, Type B-1	1730-00-529-6235		
	PART NUMBER		
	1560-EG-100		
NET WEIGHT	DIMENSIONS	GROSS WEIGHT	CUBIC FEET
	15' x 6' x 3'	1450 lb.	270

All specifications and standards applicable to the requirements herein shall be the issue in effect on date of invitation for bids.

PACKAGING

☒ LEVEL A ☐ LEVEL C

☒ PACKAGING SHALL BE IN ACCORDANCE WITH SPECIFICATION MIL-P-116, THE FOLLOWING DETAILED REQUIREMENTS SHALL APPLY:

UNIT PKG QTY	METHOD	PRESERVATIVE	WRAP	DUNNAGE	CONTAINER
1	I	P11 or P-6	MIL-B-121 on Preserved Areas	As Required	PPP-C-650 Style-A

☐ OTHER

☐ PRESERVATION AND PACKAGING SHALL BE SUCH AS TO PREVENT DETERIORATION OR DAMAGE DURING HANDLING AND SHIPMENT TO THE FIRST DESTINATION

PACKING ☒ LEVEL A ☐ LEVEL C

☒ ITEMS SHALL BE PACKED IN CONTAINERS CONFORMING TO SPECIFICATION NO. PPP-C-650, Style-A

☐ PLYWOOD USED SHALL BE STANDARD GRADE WITH EXTERIOR GLUE OF GROUP B OF NN-P-530. THIS PLYWOOD SHALL BE TREATED WITH A WATER REPELLANT CONFORMING TO TT-W-572. PLYWOOD CONTAINERS SHALL BE CONSTRUCTED WITH FILLER CLEATS ON ALL PANELS: EITHER BE BEVELED OR NOTCHED 1/4 INCH ON THE BOTTOM OF EACH END, OR SHALL BE OF SUCH LENGTH AS TO LEAVE A 1/4 INCH CHANNEL FOR DRAINAGE ON EACH END. PER PPP-B-601.

☐ ITEM SHALL BE PACKED IN A MANNER TO INSURE CARRIER ACCEPTANCE AND SAFE DELIVERY AT DESTINATION. CONTAINERS SHALL BE IN ACCORDANCE WITH UNIFORM FREIGHT CLASSIFICATION RULES OR REGULATIONS OF OTHER CARRIERS APPLICABLE TO THE MODE OF TRANSPORTATION.

☐ OTHER.

MARKING

☒ a. MARKING FOR SHIPMENTS (1968 JUN)
THE CONTRACTOR SHALL MARK ALL SHIPMENTS UNDER THIS CONTRACT IN ACCORDANCE WITH THE EDITION OF MIL-STD-129, "MARKING FOR SHIPMENT AND STORAGE," IN EFFECT AS OF THE DATE OF THIS SOLICITATION. (ASPR 7-104.68) IN ADDITION, PART NUMBER AND SERIAL NUMBER, IF ANY, SHALL BE MARKED ON UNIT CONTAINER.

☐ b. ADDITIONAL MARKING REQUIREMENTS. EACH INTERIOR PACKAGE SHALL BE MARKED ON AT LEAST TWO (2) SIDES WITH A SILHOUETTE OF THE AIRCRAFT. (WHERE THE SIZE OF THE UNIT CONTAINER IS TOO SMALL TO PERMIT THE APPLICATION OF TWO (2) LABELS, A SINGLE LABEL SHALL BE APPLIED. IF THE PACKAGE IS TOO SMALL FOR ONE (1), NONE WILL BE REQUIRED.) WHEN THE UNIT CONTAINER IS THE SHIPPING CONTAINER AND THE ITEM IS PACKED "LEVEL A", EACH CONTAINER SHALL BE MARKED ON TWO (2) SIDES, TOP AND ONE (1) END WITH A SILHOUETTE OF THE AIRCRAFT. THE SIZE OF THE SILHOUETTE MAY VARY, BUT WILL BE LARGE ENOUGH TO FACILITATE EASY VISUAL IDENTIFICATION WITHOUT OBSCURING OTHER MARKINGS. THE NOMENCLATURE OF THE MAJOR COMPONENTS SHALL BE EXTENDED TO INDICATE THE END ITEM APPLICATION AND THE POSITION OF THE PART: e.g., GEAR BOX, MAIN FOR (APPLICABLE AIRCRAFT); WING ASSEMBLY, RIGHT, FOR (APPLICABLE AIRCRAFT). REQUESTS FOR SILHOUETTES SHOULD BE SUBMITTED AT LEAST 20 DAYS PRIOR TO SHIPMENT, TO: COMMANDING OFFICER, TOBYHANNA ARMY DEPOT, ATTN: AMXTO-TI, TOBYHANNA, PA. 18466.

☒ c. MATERIEL CONDITION MARKING SHALL BE APPLIED IN ACCORDANCE WITH PARAGRAPH 5.5.16 OF MIL-STD-129. A MATERIEL CONDITION TAG OF THE APPLICABLE TYPE WILL BE SECURELY ATTACHED DIRECTLY TO ALL UNINSTALLED OR STORED AERONAUTICAL OR AIR DELIVERY ITEMS. WHEN SUCH ITEMS ARE PLACED OR STORED IN CARTONS, PACKAGES, CRATES OR METAL SHIPPING CONTAINERS, A DUPLICATE MATERIEL CONDITION TAG OR LABEL WILL BE SECURELY ATTACHED TO THE EXTERIOR OF THE PACKAGE OR CONTAINER IN SUCH A MANNER THAT WILL AFFORD MAXIMUM PROTECTION FROM HANDLING AND WEATHER. TAGS WILL BE COMPLETED EITHER BY TYPEWRITTEN OR PRINTED BLACK LEAD PENCIL ENTRIES. ITEMS OF A COMMON OR NONTECHNICAL NATURE (i.e., COMMON HARDWARE, BULK MATERIALS, ETC.) THE SERVICEABILITY OF WHICH IS OBVIOUS, AND THE IDENTITY AND INSPECTION REQUIREMENTS ADEQUATELY INDICATED BY COMMERCIAL TAGS, LABELS OR MARKINGS, MAY BE RECEIVED, STORED, ISSUED OR SHIPPED WITHOUT MATERIEL CONDITION TAGS.

☐ d. OTHER

AV 010274

Figure 3-3. Preservation, Packaging, Packing and Marking Requirements.

APPENDIX A

REFERENCES

A-1. Dictionaries of Terms and Abbreviations.

AR 310-25	Dictionary of United States Army Terms
AR 310-50	Authorized Abbreviations and Brevity Codes

A-2. Publication Index.

DA PAM 25-30	Consolidated Index of Army Publications and Blank Forms.

A-3. Logistics and Storage.

TM 743-200-1	Storage and Materials Handling

A-4. Maintenance of Supplies and Equipment.

AR 750-1	Army Materiel Maintenance Concepts and Policies
DA PAM 738-751	Functional User Manual for the Army Maintenance Management System-Aviation (TAMMS)
TM 9-213	Painting Instructions for Field Use

A-5. Other Publications.

TM 750-244-1-3	Procedures for the Destruction of Aviation Ground Support Equipment (FSC 1700) to Prevent Enemy Use
AR 420-90	Fire Preventive and Protective
TM 55-1500-204-25/1	General Aircraft Maintenance Manual
TM 55-1730-223-23P	Repair Parts and Special Tools List for Maintenance Platform Adjustable, Mechanical, Aircraft Type B-1 (Part No. 1560-EG-100) NSN 1730-00-529-6235

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 Organizational maintenance
AVIM which corresponds to Field repair.
DEPOT which corresponds to Depot repair.

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). Replace worn or damaged modules/components which do not require complex adjustments 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 UNITS. 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, stop drilling, minor adjustments, module/component fault diagnosis and replacement of selected modules/components. Repair functions will 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. Inspects, troubleshoots, tests, diagnoses, repairs, adjusts, calibrates, and aligns 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.
(The aircraft maintenance company within the maintenance battalion of a division will perform AVUM functions consistent with air mobility requirements and conservation of personnel and equipment resources. Additional intermediate maintenance support will be provided by the supporting non-divisional AVIM unit.)

B-2. USE OF THE MAINTENANCE ALLOCATION CHART.

a. The MAC assigns maintenance functions to the lowest level of maintenance based on past experience and the following considerations:

(1) Skill available.
(2) Time required.
(3) Tools and test equipment required 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 construed 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 a repair parts and special tools list.

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 of 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 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 and on-site inspection.

(3) If the authorization will be granted.

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 an analysis by responsible technical personnel and on reports received from field activities.

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. ALIGN. To adjust specified variable elements of an item to bring to 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.

j. 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.

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

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 “-.-”. 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 tool 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.

Section II. MAINTENANCE ALLOCATION CHART

NOMENCLATURE OF END ITEMS

MAINTENANCE PLATFORM ADJUSTABLE
P/N 1560-EG-100 TYPE B-1 NSN 1730-00-529-6235

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY AVUM	AVIM	DEPOT	(5) TOOLS AND EQUIPMENT	(6) REMARKS
00	MAINTENANCE PLATFORM ADJUSTABLE Type B-1						
03	Maintenance P form Frame						
0301	Lunette Assy	Inspect	0.1				
		Repair		0.5		117	
		Replace	0.3			102	
0302	Hand Rails, Platf and S	Inspect	0.2				
		Repair		0.5		117	
		Replace	0.5			102	
0303	Brakes, Wheels, Jacks and Lock P	Inspect	0.2				
		Repair		1.0		102	
		Replace		1.0		115	
0304	Electrical, Pneumat Appliances	Inspect	0.1				
		Repair	0.3			107	
		Replace	0.3			102	
0305	Stat Discharge Reel and Hardware	Repair		1.5		114	
		Replace	1.0			102	
0306	Handwheel and Jackscrew	Inspect	0.1				
		Repair		1.5			
		Replace	1.0			102	

Section III. Tools and Test Equipment

(1) TOOL OR TEST EQUIPMENT REFERENCE CODE	(2) MAINTENANCE CATEGORY	(3) NOMENCLATURE	(4) NATIONAL/NATO STOCK NUMBER	(5) TOOL NO.
102	O	Tool Kit, Aircraft Mechanics, General	5180-00-323-4692	
107	O	Tool Kit, Electrical Repairmans	5180-00-323-4915	
114	F	Shop Set, AVIM, Propeller Suppl	4920-00-224-3681	
115	F	Shop Set, AVIM, Recip Eng, Suppl	4920-00-464-0222	
117	F	Shop Set, AVIM, Sheet Metal	4920-00-166-5505	

APPENDIX C

EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

C-1. SCOPE. This appendix lists expendable supplies and materials you will need to operate and maintain the Maintenance Platform.

These items are authorized to you by CTA 50-970, Expendable Items (except Medical, Class V, Repair Parts, and Heraldic Items).

C-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

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 part number followed by the Federal Supply Code for Manufacturer (FSCM) in parentheses, if applicable.

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.

Expendable Supplies and Materials List

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION	(5) U/M
1	O	9150-00-689-4138	Lubricating Oil, General purpose MIL-M-l5016B	qt.
2	O	9150-00-190-0904	Grease, Automotive and Artillery, MIL-G-l0924B	lb.
3	O	6810-00-274-5421	Solvent, P-D-680, Type II	gal.

ALPHABETICAL INDEX

By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:
To be distributed in accordance with DA Form 12-31, Operator maintenance requirements for All Fixed and Rotor Wing Aircraft.

☆U.S. GOVERNMENT PRINTING OFFICE : 1993 O – 342–421 (81450)

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THEN. . JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)
PFC JOHN DOE
COA, 3d ENGINEER BN
FT. LEONARDWOOD, MO 63108

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 55-1730-223-13	7 June 1982	Maintenance Platform Adjustable, Mechanical, Aircraft

BE EXACT. . . PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
6	2-1 a		
B1		4-3	
125	line 20		

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

In line 6 of paragraph 2-1a the manual states the engine has 6 Cylenders. The engine on my set only has 4 Cylenders. Clenge the manual to show 4 Cylenders.

Callout 16 on figure 4-3 is pointing at a bolt. In key to figure 4-3, item 16 is called a shim - Please Correct one or the Other.

I ordered a gasket, item 19 on figure B-16 by NSN 2910-00-762-3001. I got a gasket bit it doesn't fit. Supply says I got what I ordered, so the NSN is wrong. Please give me a good NSN

SAMPLE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER
JOHN DOE, PFC (268) 317-7111

SIGN HERE John Doe
JOHN DOE

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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	1.365	metric tons	short tons	1.102
pound-inches	mewton-meters	.11375			

Temperature (Exact)

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

PIN : 051265-000