

TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL, AND
DIRECT SUPPORT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS
AND SPECIAL TOOLS LIST**

**JACK, HYDRAULIC
PART NUMBER 50J25178 (TYPE B6)
(FEDERAL STOCK NUMBER 1730-516- 2019)**

This manual supersedes TM 55-1730-208-15, 15 February 1966.

**HEADQUARTERS, DEPARTMENT OF THE ARMY
22 JUNE 1971**

WARNING
PRECAUTIONARY DATA

Personnel performing instructions involving operations, procedures, and practices which are included in this technical manual shall observe the following instructions. Disregard of these warnings and precautionary information can cause serious injury, death or an aborted mission.

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

COMPRESSED AIR. Do not direct compressed air near or directly against skin. Do not use air under high pressure, or from a source not having a moisture-trap for cleaning bearings.

SCREW EXTENSION. Do not extend extension screw more than 18 inches.

CLEAR AREA BENEATH AIRCRAFT. Clear area beneath airplane of equipment and personnel prior to lowering airplane.

CONTROL LOWERING SPEED. The lowering speed is controlled by the release assembly. Do not open the release assembly too quickly.

DEFECT NOTED. Stop raising operation immediately if a defect is noted that could cause damage to the equipment by continuing operation.

SAFETY RELIEF VALVE. The safety relief valves are preset at assembly. Do not attempt to move adjusting nut.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. Scope.

This technical manual comprises instructions required by operator's, organizational, and direct support maintenance personnel responsible for the operation and maintenance of the hydraulic jack, part number 50J25178 (type B6), (see figure 1-1), manufactured by the Department of the Air Force. Chapters 1 through 3 of this technical manual contain instructions required for operation, preventative maintenance services, troubleshooting, and maintenance as prescribed by the maintenance allocation chart.

Appendix A, References, contains a standard list of all publications applicable to this manual and available to operators and maintenance personnel.

Appendix B contains the maintenance allocation chart. This chart assigns maintenance functions and repair operations to be performed by the applicable maintenance level.

1-2. Equipment Records.

The Army Maintenance Management System in TM 38-750 applies to this equipment.

The applicable forms as required by TM 38-750 shall be used.

1-3. Reporting of Improvements.

Report of errors, omissions and recommendations for improving this publication is encouraged. Use DA Form 2028 (Recommended Changes to DA Publications) and forward directly to the Commanding General, U. S. Army Aviation Systems Command, ATTN: AMSAV-R-M, P. O.

Box 209, St. Louis, Missouri 63166.

Section II. DESCRIPTION AND LEADING PARTICULARS

1-4. Description.

The hydraulic jack, part no. 50J25178 (type B6), is a hand-operated, hydraulic, folding tripod jack, used as an aircraft jack. The purpose of the hydraulic jack is to provide up to 10 tons of lifting effort through a range of 36 inches fully collapsed, to approximately 152 inches fully extended. Descriptions of the major components of the hydraulic jack are provided in paragraphs 1-5 through 1-10.

1-5. Clamp Assembly.

The clamp assembly is used in mounting the hydraulic pump assembly to a leg or leg extension of the hydraulic jack. A clamp cam handle is provided which locks into the upper end of the pump assembly. The lower end of the pump assembly mounts on one of the foot assemblies.

1-6. Pump Assembly.

The pump assembly consists of a hydraulic reservoir and a hydraulic pump. The reservoir provides a storage place for hydraulic fluid required during jack operation and also provides mounting points for the pump assembly. The pump forms the lower end of the pump

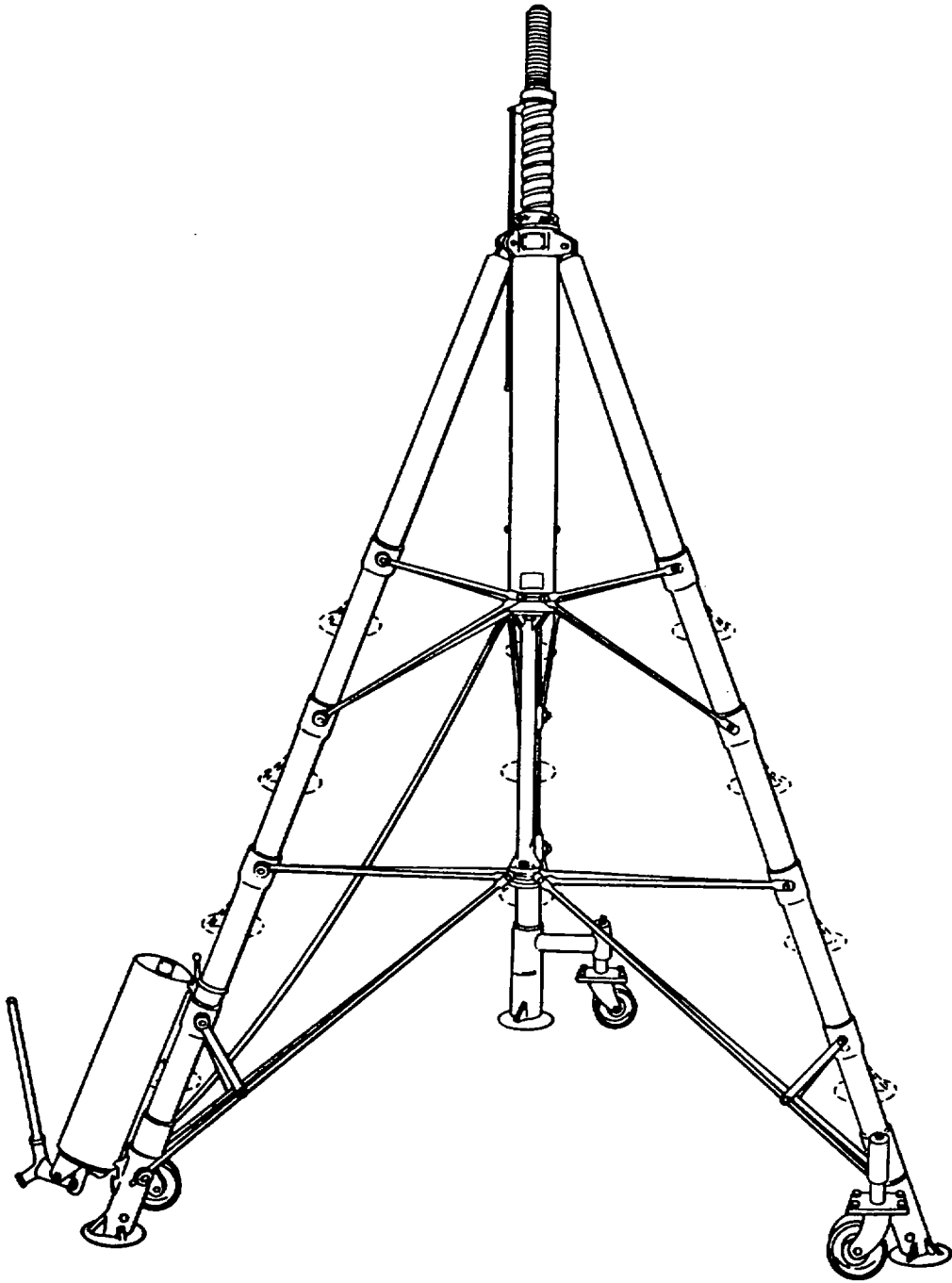
assembly and supplies hydraulic fluid under pressure (2235 psi) through a hose assembly into the cylinder and ram assembly.

The hydraulic pump is manually operated by a pump handle which moves a pump piston inside a pump cylinder. When the pump piston is pulled down, hydraulic fluid from the reservoir is drawn into the pump cylinder by unseating the intake valve ball. When the pump piston is pushed up, the intake valve ball seats, and the discharge valve ball unseats. Fluid under pressure is then supplied to the cylinder and ram assembly which, in turn, moves upward providing the required lifting force.

Additional parts of the hydraulic pump assembly and their functions are defined in the following paragraphs.

a. Vent Assembly. The vent is located near the top edge of the reservoir. The vent assembly prevents a vacuum inside the reservoir during raising operations and allows air to escape during lowering operations.

b. Safety Relief Valve (No. 1). The safety relief valve is self-contained and is located in the submerged end of the pump. It is provided to bypass hydraulic fluid into the reservoir when the 20,000-pound capacity limit is exceeded during raising operations.



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Figure 1-1. Hydraulic Jack.

c. *Safety Relief Valve (No. 2).* The safety relief valve is self-contained and is also located in the submerged end of the pump. This safety relief valve provides an additional safety feature, its function is to bypass hydraulic fluid to the reservoir when excessive pressure is encountered inside the cylinder and ram assembly. A sudden load increase or thermal expansion of the hydraulic fluid will cause the safety relief valve to open.

d. *Intake and Discharge Valves.* The intake and discharge valves consist of two balls and two springs assembled in tandem in the pump passage between the intake port and pump cylinder. The intake valve is the first valve in the pump passage and permits hydraulic fluid to be drawn from the reservoir into the pump cylinder. The discharge valve is the second valve in the pump passage and permits hydraulic fluid, under pressure (2235 psi), to pass from the pump cylinder to the cylinder and ram assembly.

e. *Release Assembly and Associated Components.* The release assembly and associated components are located near the pump mounting flange at the right-hand side of the pump handle socket. The release assembly controls the raising and lowering of the cylinder and ram assembly ram.

1-7. Cylinder and Ram Assembly.

The cylinder and ram assembly consists basically of an outer cylinder and inner ram with extension screw. The cylinder mounts on the tripod assembly to form the upper part of the hydraulic jack. The ram contains one longitudinal and one spiral groove extending from the top of the ram to the top of the upper bearing ring. The ram is guided during raising and lowering operations by a key in the ram upper bearing. A ram lock nut assembly rotates downward on the spiral groove of the ram as the ram is being raised. The ram lock nut assembly is provided to afford protection to personnel and equipment in event of hydraulic failure or slipping of load. An 18-inch extension screw is housed inside the ram and may be manually raised to take up clearance between closed height of the hydraulic jack and airplane.

WARNING

Do not extend extension screw more than 18 inches.

1-8. Hose.

The hose connects at the discharge port of the pump assembly and inlet port of the cylinder and ram assembly. The flexible hose is provided to transfer hydraulic fluid, under pressure (2235 psi), during raising operations and to return hydraulic fluid during lowering operations.

1-9. Foot Assemblies.

Each foot assembly consists of a caster, caster mount, and caster arm assembly. The three foot assemblies mount on the leg, or leg extension, of the tripod assembly for ease of movement and to prevent the hydraulic jack from shifting.

1-10. Tripod Assembly,

The tripod assembly is the mounting base for the cylinder and ram assembly. The tripod assembly consists of three tubular legs, four sets of three leg extensions, five sets of six braces, six brace links, and one tension bar. By adding or removing leg extension, the hydraulic jack may be assembled to any one of five basic closed heights configurations.

1-11. Identification.

The identification nameplate is located between two attachment lugs at the top of the cylinder and ram assembly. The assembly decal is centered on the cylinder of the cylinder and ram assembly. A capacity decal is located on the side of the pump assembly. The instruction decal is located on the top of the pump assembly near the air vent. (See figure 1-2,)

1-12. Leading Particulars.

Refer to table 1-1 for leading particulars.

1-13. Differences in Models.

This manual covers only the hydraulic jack, part number 50J25178 (type B6). No known differences exist for the design covered by this manual.

1-14. Painting Requirements.

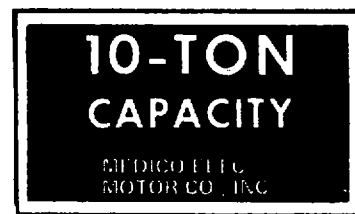
Paint tripod assembly in accordance with TM 55-1500-204-25 / I.



INSTRUCTION DECAL



NAMEPLATE



HYDRAULIC JACK
CAPACITY DECAL

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Figure 1-2. Hydraulic Jack Decals and Nameplate.

Table 1-1. Leading Particulars

Manufacturer	Department of the Air Force
Type	B6
Part Number	50J25178
Performance	
Rated Capacity.....	10 tons
Hydraulic Lift.....	26 inches
Working Pressure.....	2235 psi
Dimensions	
Collapsed Height.....	36 inches
Extension Height (max.).....	152 inches
Extension Screw	18 inches
Leg Extensions (sets).....	18 inches
Leg Extensions (lengths).....	18 inches
Weight (approximate).....	371 pounds

Section III. TEST EQUIPMENT, SPECIAL TOOLS, AND MATERIAL

1-15. Introduction.

This section contains a list of test equipment, special tools, and material required for maintenance of the hydraulic jack.

1-16. Test Equipment.

(Not applicable.)

1-17. Special Tools

(Not applicable.)

1-18. Consumable Materials.

Consumable materials required for maintenance of the hydraulic jack are listed in table 1-2.

Table 1-2. Consumable Materials

ITEM NO.	MATERIAL	TYPE OR GRADE	GOVERNMENT SPECIFICATION
1	Dry cleaning solvent		P-D-680
2	Lubricating oil, general purpose, low temperature		MIL-L-7870A
3	Enamel, gloss		MIL-E-7729B
4	Hydraulic fluid petroleum base, missile and ordnance		MIL-H-5606B
5	White lead, basic-carbonate, dry, paste-in-oil and semipaste containing volatile thinner		TT-W-251G
6	Cloth, abrasive, crocus		P-C-458
7	Steel, corrosion resistant, (18-8) plate, sheet and strip (Asg.)		MIL-S-5059C
8	Coating compound, strippable, sprayable		MIL-C-16555C
9	Desiccant, activated, bagged, packaging use and static dehumidification		MIL-D-3464D
10	Barrier material, greaseproofed, waterproofed, flexible		MIL-B-121D
11	Tape pressure-sensitive adhesive waterproof for packaging		PPP-T-60B(1)
12	Crate, wood, open and cover		PPP-C-650
13	Naphtha, aliphatic		TT-N-95B

CHAPTER 2 OPERATING INSTRUCTIONS

Section I. OPERATION UNDER USUAL CONDITIONS

2-1. Erection.

The hydraulic jack may be assembled or changed to any of five basic closed height configurations (see figure 2-1) by the use of leg extensions and additional braces. The hydraulic jack may be assembled or changed to a height of 36, 54, 72, 90, or 108 inches. The following paragraphs describe the procedures required to assemble the hydraulic jack into the 36-inch configuration or alter it to any of the remaining heights. (See figure 2-1.) Using hydraulic jack erection diagram (figure 2-1) and information in paragraphs 2-2 through 2-6 erect hydraulic jack to the desired height.

2-2. Closed Height 36-inch.

To assemble the hydraulic jack into the 36inch configuration, three leg assemblies are attached to the cylinder and ram assembly and a foot assembly is secured to the bottom of each leg. The pump assembly is lug-mounted on the lower end of one leg and six no. 1 tripod braces are used.

2-3. Closed Height 54-inch.

To assemble or change the 36-inch hydraulic jack into the 54-inch configuration, one leg extension is added between each leg and foot assembly of the 36-inch configuration and six additional no. 2 braces are added.

2-4. Closed Height 72-inch.

To assemble or change the 36-inch hydraulic jack into the 72-inch configuration, two leg extensions are added between each leg and foot assembly of the 36-inch configuration and six no. 2 and six no. 3 braces are added.

2-5. Closed Height 90-inch.

To assemble or change the 36-inch hydraulic jack into the 90-inch configuration, three leg extensions are added between each leg and foot assembly of the 36-inch configuration and six no. 2, no. 3, and no. 4 braces are added.

2-6. Closed Height 108-inch.

To assemble or change the 36-inch hydraulic jack into the 108-inch configuration, four leg extensions are added between each leg and foot assembly of the 36-inch configuration. Six no. 2, no. 3, no. 4, and no. 5 braces and six brace links are also added.

2-7. Operation.

Operation of the hydraulic jack shall be in accordance with the following procedures. (See figure 2-1.)

WARNING

Clear area beneath aircraft of equipment and personnel before lowering aircraft. Stop raising operation immediately if a defect is noted that could cause danger to personnel or damage to the equipment by continuing operation.

a. Positioning. The ground surface under the hydraulic jack should be level. If ground surface is soft, a board or plank should be placed under each foot assembly. The hydraulic jack should be positioned so that a line drawn through any two of the foot assemblies will be parallel with the aircraft fuselage.

b. Raising. Raise the hydraulic jack as follows:

(1) Turn extension screw of cylinder and ram assembly out until jack pad socket contacts aircraft jack pad.

CAUTION

Do not extend extension screw of ram assembly out more than 18 inches.

(2) Position pointer of rise indicator rod on zero line of rise indicator decal.

(3) Loosen retainer screw on ram lock nut assembly to permit ram lock nut assembly to lower by its own weight as ram rises.

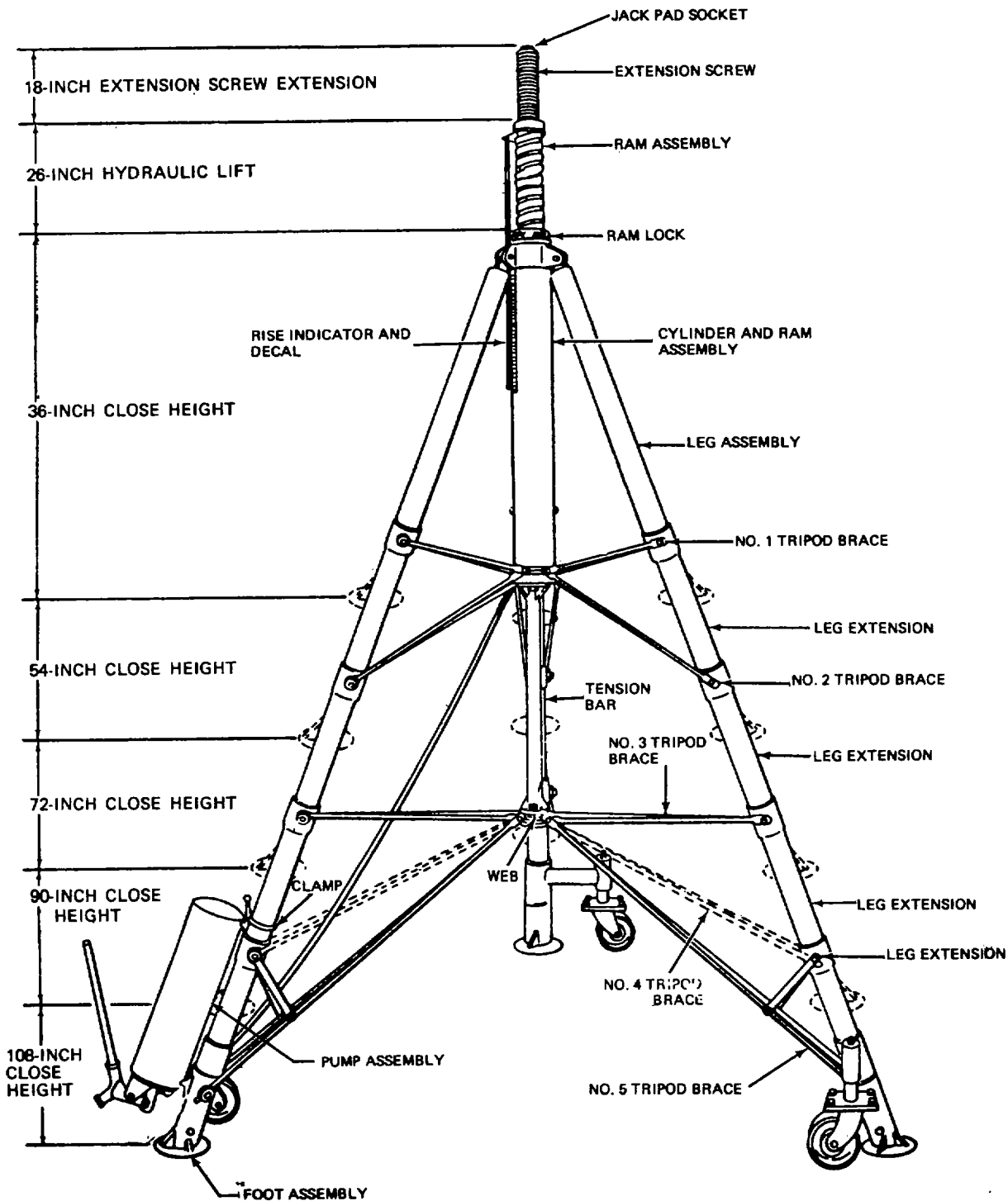
(4) Open vent assembly and close release assembly located on pump assembly.

(5) Disconnect chain to free pump handle and operate pump handle as required to raise aircraft.

(6) Tighten ram lock nut assembly against cylinder and tighten retainer screw.

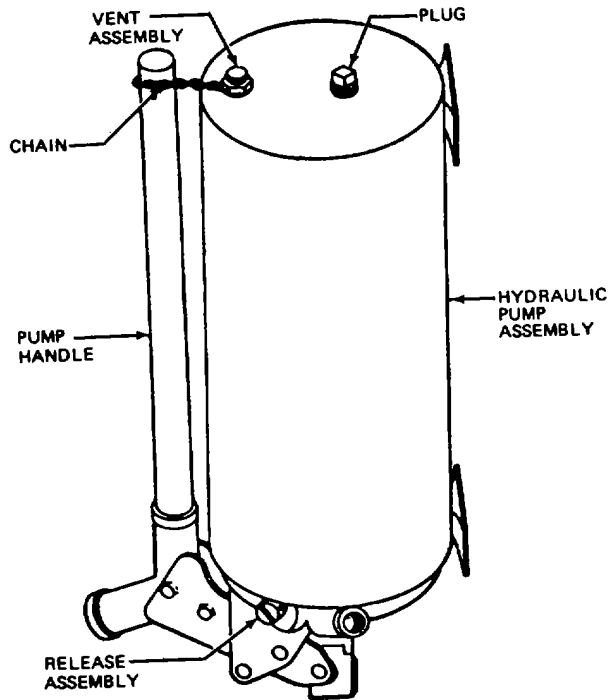
(7) Place pump handle in the stowed position and secure it with the chain.

c. Lowering. Lower the hydraulic jack as follows:



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Figure 2-I. Hydraulic Jack Operation and Erection Diagram (Sheet 1 of 2).



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Figure 2-1. Hydraulic Jack Operation and Erection Diagram (Sheet 2 of 2).

WARNING

Clear area beneath aircraft of all equipment and personnel before lowering aircraft.

(1) Loosen retainer screw on ram lock nut assembly and turn ram lock nut assembly to the top of extension screw of ram assembly. Tighten retainer screw.

(2) Open air vent assembly and slowly open release assembly located on pump assembly until desired lowering rate is obtained.

CAUTION

Lowering rate of the hydraulic jack is controlled by the release assembly. Do not open the release assembly too quickly.

(3) When ram assembly is completely lowered, close vent and release assemblies.

(4) Turn extension screw in until it is lowered inside the ram.

2-8. Operational Inspections.

Refer to table 2-1 for inspection criteria pertinent to the hydraulic jack operator.

2-9. Servicing.

Refer to chapter 3, paragraph 3-6 for servicing information.

Table 2-1. Operator's Daily Preventive Maintenance

BEFORE OPERATION PROCEDURES

- Inspect hydraulic jack for condition of paint, corrosion, and bent braces.
- Inspect all bolted connections for damage and security.
- Inspect extension screw and ram for dirt and corrosion and ram lock nut assemble, free rotation. Clean and lubricate as necessary.
- Inspect hose for deterioration, kinks, and leaks.
- Inspect pump piston for dirt, corrosion, and leaks.
- Check hydraulic fluid level in reservoir.
- Check ram operation.

DURING OPERATION PROCEDURES

Check for evidence of leaks at pump assembly, hose, and cylinder and ram assembly.

AFTER OPERATION PROCEDURES

- Check hose for leaks. Tighten if necessary.
- Check hydraulic fluid level in reservoir.
- Clean hydraulic jack.
- Record all deficiencies on DA Form 2404 and corrective action taken.

Section II. OPERATION UNDER UNUSUAL CONDITIONS

(Not applicable.)

CHAPTER 3

ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

Section I. PREPARATION FOR INSTALLATION, STORAGE, AND SHIPMENT

3-1. General.

This section provides detailed instructions for unpacking, erection, inspection, bleeding, and servicing procedures to be performed before the hydraulic jack is put into service. This section also provides storage, demolition, and shipment procedures.

3-2. Unpacking.

Unpack the hydraulic jack in accordance with the following procedures.

a. Remove hydraulic jack from wood crate.

b. Remove tape, barrier material, and desiccant bags from cylinder and ram assembly and pump assembly.

c. Check contents of shipping crate against list of parts provided.

d. Remove preservative coating compound from treated surfaces with dry cleaning solvent item 1, table 1-2).

3-3. Erection.

To assemble or change height configuration of the hydraulic jack, refer to paragraph 2-1 and figure 2-1.

3-4. Inspection.

Inspect the hydraulic jack in accordance with the following procedures.

a. Inspect hydraulic jack for condition of paint, corrosion, and bent braces and tension bar.

b. Inspect nameplate and decals for legibility and security.

3-5. Bleeding.

Bleed the hydraulic jack in accordance with the following procedures.

a. Using sufficient manpower, lower hydraulic jack on its side with hose from pump assembly up.

b. Disconnect hose at cylinder and ram assembly.

c. Add hydraulic fluid (item 4, table 2-1) through inlet port of cylinder and ram assembly until the cylinder is full and all entrapped air has escaped.

d. Elevate hose and slowly operate pump handle until hydraulic fluid completely fills hose.

e. Connect hose at cylinder and ram assembly.

f. Using sufficient manpower, place hydraulic jack upright.

g. Operate pump handle.

h. If ram is slow to rise or is spongy, use a suitable container to catch escaping hydraulic fluid and loosen hose at cylinder and ram assembly. Operate pump handle to bleed air from hydraulic system. Tighten hose.

i. Repeat step h as required to bleed hydraulic system.

3-6. Servicing.

Service the hydraulic jack as follows:

a. Clean hydraulic jack with dry cleaning solvent (item 1, table 1-2) by spray or brush application. Dry with filtered, compressed air or use a clean cloth.

b. Apply a thin film of lubricating oil (item 2, table 1-2) on ram assembly and roller of pump assembly.

c. Lubricate casters with lubricating oil (item 2, table 1-2).

d. Spot paint hydraulic jack with enamel (item 3, table 1-2) as required.

e. Flush and service pump assembly as follows:

(1) Remove filler plug and fill with hydraulic fluid (item 4, table 1-2).

(2) Disconnect hose from pump assembly and drain hydraulic fluid into a suitable container.

(3) Reconnect hose to pump assembly.

(4) Fill reservoir with hydraulic fluid (item 4, table 1-2) to a level of 1 inch below filler plug. Install filler plug.

3-7. Limited Storage Procedures.

Place the hydraulic jack in limited storage in accordance with the following procedures:

a. *Inspection.* When preparing the hydraulic jack for limited storage, inspect all parts for serviceable condition. Correct any deficiencies prior to placing equipment in storage.

b. *Preservation.* The hydraulic jack shall be

placed in limited storage, assembled in the 108-inch closed height configuration, and given limited preservation in accordance with paragraph 3-8 b.

c. *Storage.* Store the hydraulic jack as follows:

(1) Attach a tag to hydraulic jack containing description and preservation procedure.

(2) Protect hydraulic jack from rain and dust, using a temporary seal or covering.

(3) Store hydraulic jack in a sheltered area.

d. *In Storage Inspection.* Inspect the hydraulic jack in storage in accordance with the following procedures.

(1) Inspect hydraulic jack for pilferage, water damage, and condition of covering. Report pilferage to proper authority.

(2) Inspect hydraulic jack for condition of paint, adequate preservative, and evidence of corrosion.

e. *Maintenance During Storage.* Maintenance procedures while the hydraulic jack is in storage shall be as follows:

(1) Remove corrosion and spot-paint with enamel (item 3, table 1-2) as required.

(2) Apply preservative coating compound (item 8, table 1-2) on extension screw and ram assembly as required.

(3) Replace defective desiccant bags and covering as required.

3-8. Shipment.

The hydraulic jack is shipped in a disassembled condition in one wooden crate. When properly crated, the hydraulic jack may be shipped by air, land, or sea transportation. The following procedures shall be followed when preparing the hydraulic jack for shipment.

a. *Inspection.* When preparing the hydraulic jack for shipment, inspect all parts for serviceable condition. Correct any deficiencies prior to packaging and crating for shipment.

b. *Preservation.* The hydraulic jack being prepared for shipment will be given limited preservation as follows:

(1) Clean hydraulic jack with dry cleaning solvent (item 1, table 1-2).

(2) Drain hydraulic fluid from pump assembly and cylinder and ram assembly.

(3) Apply a film of preservative coating compound (item 8, table 1-2) on extension screw and ram assembly.

c. *Crating.*

(1) Secure four desiccant bags (item 9, 3-2 table 1-2) to cylinder and ram assembly, wrap with barrier material (item 10, table 1-2), and seal with tape (item 11, table 1-2).

(2) Secure four desiccant bags (item 9, table 1-2) to pump assembly, wrap with barrier material (item 10, table 1-2), and seal with tape (item 11, table 1-2).

(3) Place all parts of hydraulic jack in 18x 34x 43-inch wood crate (item 12, table 1-2).

(4) Secure all parts of hydraulic jack inside wood crate to prevent shifting during movement. Seal wood crate.

3-9. Demolition.

When capture or abandonment of the hydraulic jack to an enemy is imminent, the responsible unit commander shall make the decision either to destroy the equipment or to render it inoperative. Based on this decision, orders are issued which cover the desired extent of destruction. Whatever method of destruction is employed, it is essential to destroy the same vital parts of all the hydraulic jacks and corresponding repair parts. When the decision has been made to destroy the hydraulic jack, proceed as follows:

a. *Demolition by Mechanical Means.* Use sledge hammers, crowbars, picks, axes, or any other heavy tools which may be available to destroy the following:

- (1) Pump assembly
- (2) Cylinder
- (3) Extension screw of ram assembly
- (4) Ram assembly

NOTE

The above steps are minimum requirements for this method of demolition.

b. *Demolition by Misuse.* Drain hydraulic fluid from reservoir and pour dirt, salt, or other contaminants inside reservoir. Fill with water or other liquid. Operate pump to circulate contaminants throughout hydraulic system of hydraulic jack.

c. *Demolition by Explosive Means.* Place as many of the following charges as the situation permits and detonate.

(1) Two 1 / 2-pound charges at bottom of cylinder and ram assembly.

(2) Two 1 / 2-pound charges between pump assembly and leg (or leg extension).

d. *Demolition by Weapons Fire.* Fire on hydraulic jack with heaviest suitable weapon available.

e. *Demolition by Scattering and Concealment*

Remove all easily accessible parts and scatter them through dense foliage, bury in dirt or sand, or throw in a lake, stream, or other body of water.

f. Demolition by Burning. Pack rags, clothing, or other flammable material saturated with, hydraulic fluid or other flammable liquids around pump assembly and ignite.

g. Demolition by Submersion. Totally submerge hydraulic jack in a body of water to provide concealment and water damage.

NOTE

A body of salt water will do greater damage to metal parts than submersion in fresh water.

Section II. INSTALLATION

(Not applicable)

Section III. INSPECTION AND SERVICING

3-10. Inspection Requirements.

Refer to table 2-1 and paragraphs 3-4 and 37a for inspection criteria applicable to the hydraulic jack upon placing it in service or storage. Additional inspection criteria pertinent to disassembly of components will be found in the applicable disassembly instructions.

3-11. Servicing.

Refer to paragraph 3-6 for servicing criteria.

Section IV. PREVENTIVE MAINTENANCE .

3-12. Preventive Maintenance.

Preventive maintenance at the organizational level shall be accomplished in accordance with table 3-1.

3-13. Cleaning.

Refer to paragraph 3-6a for cleaning instructions applicable to the hydraulic jack.

3-14. Lubrication.

Refer to paragraphs 3-6 b and 3-6 c for lubrication instruction applicable to the hydraulic jack.

Table 3-1. Organizational Preventive Maintenance

MONTHLY

Perform operator's daily preventive maintenance services.
Inspect casters and caster arm assemblies for dirt and corrosion and check for proper operation.
Lubricate hydraulic jack.

SEMIANNUAL

Perform monthly organizational preventive maintenance services.
Flush and refill reservoir.
Paint hydraulic jack.

Section V. OPERATIONAL CHECKOUT

3-15. General.

This section provides information useful in diagnosing and correcting unsatisfactory operation or failure of the hydraulic jack. Each trouble symptom stated is followed by a list of probable causes. The possible remedy recommended is described opposite the probable cause. Any operational trouble beyond the scope of organizational maintenance must be reported to the next higher maintenance level as applicable. Before looking for a trouble, check the

operating procedure to insure trouble is not due to incorrect operation.

3-16. Performance Checks.

(Not applicable.)

3-17. Troubleshooting Data.

Refer to table 3-2 for organizational troubleshooting data applicable to the hydraulic jack.

Table 3-2. Organizational Troubleshooting Data

Malfunction	Probable Cause	
Jack will not rise capacity load	Faulty safety relief valve	Replace safety relief valve.
	High pressure leak at hose or plug	Tighten or replace hose or plug.
	Leaking discharge valve	Replace valve body.
	Leaking release assembly	Tighten release assembly.
	Defective ram packing	Replace ram packing.
Jack will not support load.	Defective pump body packing	Replace pump body packing.
	Leaking safety relief valve	Replace safety relief valve.
	Leaking hose fitting	Tighten or replace fitting.
	Leaking discharge valve	Replace pump body.
	Leaking release assembly	Tighten release assembly.
Jack will not lower load	Ram lock nut assembly not against cylinder	Loosen retainer screw on ram lock nut assembly, turn against cylinder, and tighten retainer screw.
	Defective ram packing	Replace ram packing.
Jack will not lower load	Broken release assembly	Replace release assembly.
	Bent ram	Replace cylinder and ram assembly.
Ram will not raise	Ram lock nut not against cylinder	Loosen retainer screw on ram lock nut assembly, turn against cylinder, and tighten retainer screw.
	Lack of hydraulic fluid	Service hydraulic system.
	Clogged screen	Clean screen
Ram will not rise to full height	Sticking intake or valve ball	discharge Operate pump handle rapidly to free sticking ball.
	Open release assembly	Close release assembly.
	Bent ram	Replace ram.
Ram will not rise to full height	Lack of hydraulic fluid	Service system.
	Clogged screen	Clean screen.
	Closed air vent assembly	Open air vent assembly.

Malfunction	Probable Cause	
	Sticking intake valve ball	Operate pump handle rapidly to free sticking ball.
Ram rises and falls during each stroke Ram will not close fully	Leaking discharge valve Bent ram Air in cylinder Restriction in hose Ram lock nut assembly against cylinder	Replace pump body. Replace cylinder and ram assembly. Bleed hydraulic system. Disconnect hose at cylinder and operate pump handle to flush out hose. Turn ram lock assembly to top of ram and tighten retainer screw on ram lock nut assembly.
Pump stroke partially ineffective	Clogged screen Closed vent assembly Sticking intake valve ball Air trapped in pump chamber	Clean screen. Open vent assembly. Operate pump handle rapidly to free sticking ball. Open release assembly and operate pump handle rapidly to bleed air from pump chamber.
Pump handle effort too high	Wrong position for socket pin assembly Restriction in hose	Reposition socket pin assembly. Disconnect hose at cylinder and operate pump handle to flush hose.
Pump handle effort too low	Wrong position for socket pin assembly Sticking intake valve ball	Reposition socket pin assembly. Operate pump handle rapidly to free sticking ball.
Pump handle snaps back toward pump assembly	Clogged screen Closed air vent assembly Sticking intake valve ball	Clean screen. Open air vent assembly. Operate pump handle rapidly to free sticking ball.
Pump handle creeps toward pump assembly	Leaking discharge valve Air in pump chamber	Replace pump body. Open release assembly and operate pump handle rapidly to bleed air from pump chamber.

Section VI. REPAIR AND REPLACEMENT OF AUTHORIZED PARTS

3-18. Introduction.

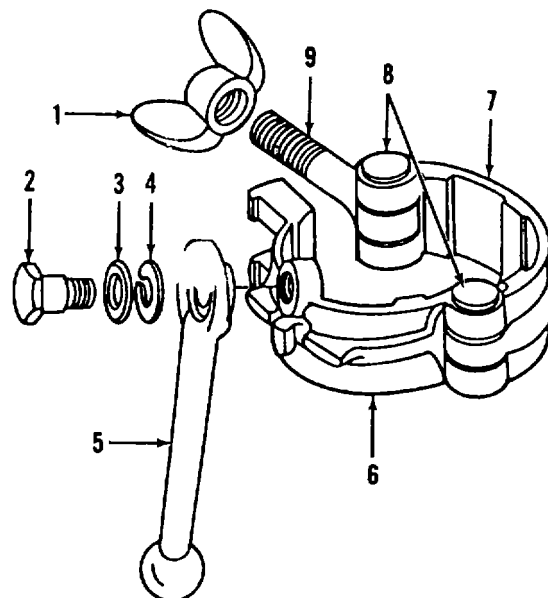
This section contains organizational instructions required to remove, disassemble, clean, inspect, repair, test, adjust, align, service, and replace the clamp assembly, pump assembly, cylinder and ram assembly, foot assemblies, and tripod assembly authorized by appendix B, maintenance Allocation Chart.

3-19. Removal.

Remove the clamp assembly, pump assembly, cylinder and ram assembly, foot assemblies and tripod assembly as follows:

3-20. Clamp Assembly.

- a. Disconnect hose at pump assembly and drain hydraulic fluid into a suitable container.
- b. Release cam handle (5, figure 3-11 from lug at upper end of reservoir of pump assembly.
- c. Remove pump assembly from hydraulic jack.
- d. Remove wing nut (1) from eyebolt (9).
- e. Separate front half clamp (6) and rear half clamp (7). Remove clamp assembly.



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Figure 3-1. Clamp Assembly-Exploded View.

3-21. Pump Assembly.

- a. Remove pump assembly from hydraulic jack in accordance with paragraph 3-20, steps a through b.
- b. Disconnect chain (8, figure 3-2) and remove pump handle (1) from pump handle socket (5).

FIGURE & INDEX NO.	PART NO.	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
3-1-		1 2 3 4 5 6 7		
	50B25223	CLAMP ASSEMBLY, Jack	1	
-1	42A13046-3	. NUT, Wing (80049)	1	
-2	42A13049	. BOLT, Cam (80049)	1	
-3	AN960-816	. WASHER, Flat	1	
-4	MS35338-48	. WASHER, Lock.....	1	
-5	42B13048	. HANDLE, Cam	1	
-6	50C25240	. CLAMP, Front half (80049).....	1	
-7	50B25242	. CLAMP, Rear half (80049)	1	
-8	AN435-10-20P	.. RIVET (88049)	1	
-9		.. BOLT, Eye (80049).....	1	

c. Remove gasket (11) and reservoir (12) from pump body (38) by removing screws (13 and 14) and lockwashers (15). Discard gasket.

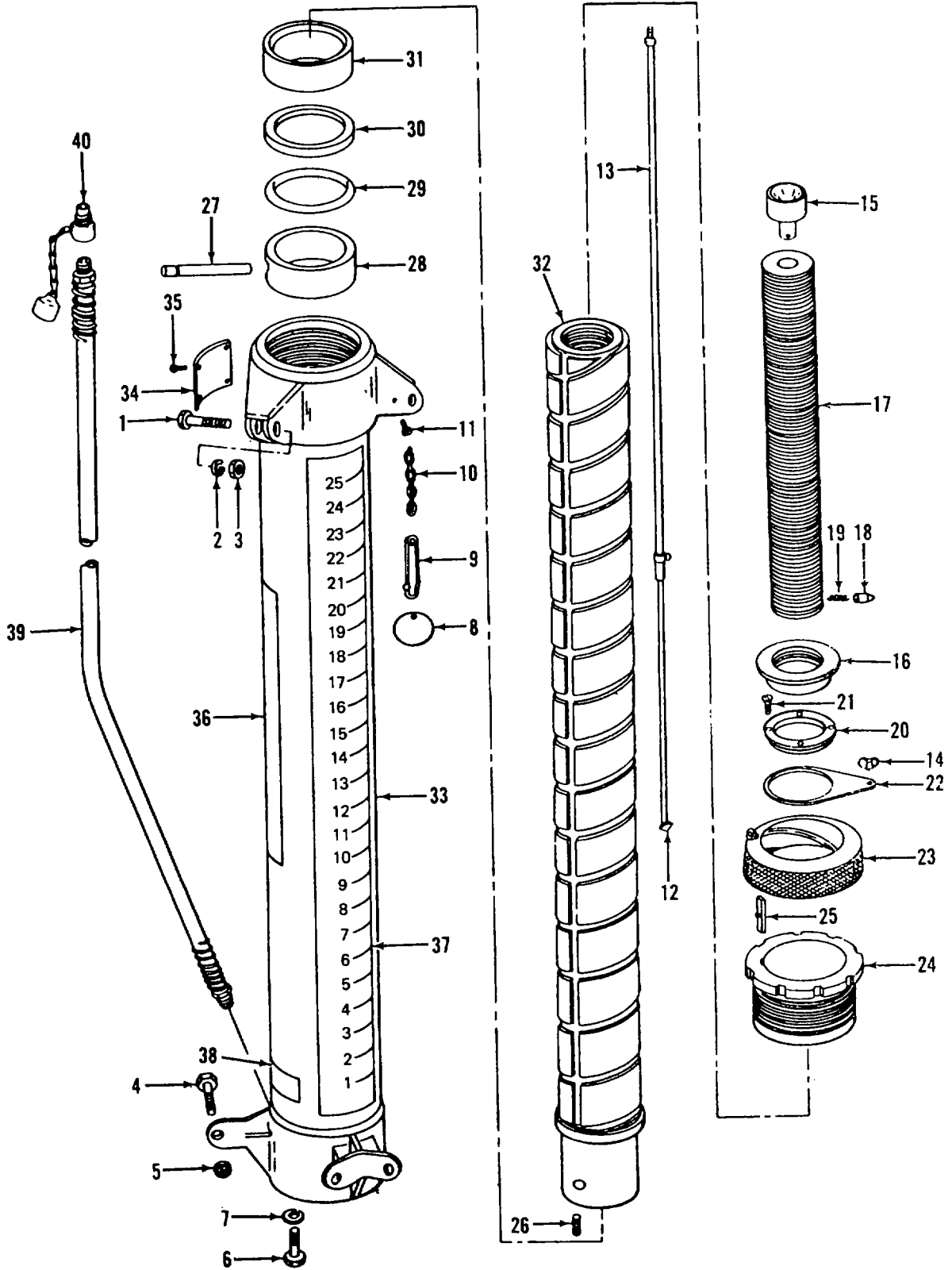
a. Disconnect hose (39, figure 3-3) at cylinder assembly and drain hydraulic fluid into a suitable container. Remove male connector assembly (40) from hose.

3-22. Cylinder and Ram Assembly.

FIGURE & INDEX NO.	PART NO.	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
3-2-	51D7138	PUMP ASSEMBLY, Hand.....	1	
-1	48B7861	. HANDLE, Pump, Hydraulic.....	1	
-2	43A12196	. PIN ASSEMBLY, Socket (80049)	1	
-3		. CHAIN, Pin.....	1	
-4	AN535-8-6	. SCREW, Drive	1	
-5	48C7860	. SOCKET, Pump, Jack.....	1	
-6	42A13017	. PIN, Piston (80049)	1	
-7	42A13016	. ROLLER, Tripod, Jack.....	1	
-8	43A12197	. CHAIN ASSEMBLY, Pump handle (80049)		
-9	50B7763	. VENT, Jack, Reservoir	1	
-10	MS20913-3S	. PLUG, Pipe, Reservoir		
-11	42A13025	. GASKET, Reservoir to body.....	1	
-12	50C25220-2	. RESERVOIR, Pump assembly (80049)	1	
-13		. SCREW		
-14		. SCREW		
-15	48A7858	. WASHER, Lock (80049).....		
-16	52B6863	. PISTON, Pump	1	
-17		. CHAIN, Piston	1	
-18		. SCREW, Drive	1	
-19	48A7866	. RING, Retainer (80049).....		
-20	48A7880	. FELT, Mechanical, Preformed.....	1	
-21	52B6864	. NUT, Packing.....	1	
-22	48B7863-2	RETAINER, Packing.....	1	
-23	MS28775-218	. PACKING, Preformed	1	
-24	43A12192-3	. VALVE, Safety relief.....	1	
-25	43A12191-3	. VALVE, Safety relief.....	1	
-26	AN932U3	. PLUG, Discharge valve (88044)	1	
-27	42A13004	. SPRING, Helical compression, discharge valve	1	
-28	MS150460	. BALL, Discharge valve	1	
-29	42A13003	. SPRING, Helical compression, intake valve	1	
-30	MS19059-49	. BALL, Intake valve	1	
-31	AN932U2	. PLUG, Pipe	1	
-32	D2421	. SCREEN, Pump (57771).....		
-33	42A12998	. RELEASE ASSEMBLY.....		
-34	MS19059-49	. BALL, Release assembly.....	1	
-35	42A13022	. NUT, Packing	1	
-36	42A13021	. PACKING, Preformed, Release assembly stem.....	1	
-37	43A13905	CONNECTOR ASSEMBLY (80049).....	1	
-38	52D6861	BODY, Pump, Tripod jack.....	1	
-39	43A12145	DECAL, Instruction (80049)	1	
-40	42A13047	DECAL, Capacity (80049).....		

b. Remove cylinder and ram assembly tripod assembly by removing bolts (1, 4, and 6),

from lockwashers (2 and 7), and nuts (3 and 5).



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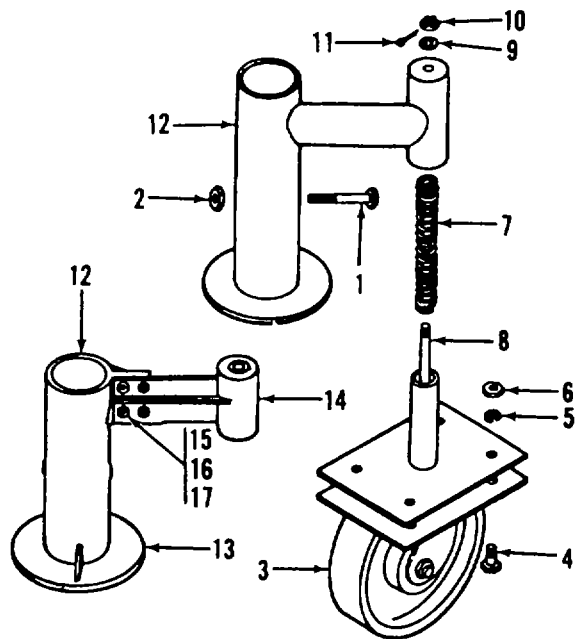
Figure 3-3. Cylinder and Ram Assembly-Exploded View

3-23. Foot Assembly.

a. Using sufficient manpower, lower hydraulic jack on its side.

FIGURE & INDEX NO.	PART NO.	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
3-3-		CYLINDER AND RAM ASSEMBLY	1	
-1	800399	. BOLT, Machine	3	
-2	MS35338-48	. WASHER, Lock.....	3	
-3	MS21044N8	. NUT, Self-locking	3	
		(RPLS P/N AN365-820)		
-4	60-8-16	. BOLT (80049).....	1	
-5		. NUT	1	
-6	AN8-6A	. BOLT, Machine	3	
-7	MS35338-48	. WASHER, Lock.....	3	
		---*---		
-8	42A7530	. SOCKET, Jack pad, Adapter	1	
-9		. PIN.....	1	
-10		. CHAIN.....	1	
-11	AN520-10-6	. SCREW (88044).....	1	
-12	48A7878-4	. ROD, Indicator, Jack	1	
-13	49B6450-4	. TUBE ASSEMBLY, Rise indicator	1	
-14	MS35426-13	. NUT, Wing	1	
-15	42A7529	. SOCKET, Jack pad	1	
-16	51B7332	. NUT, Knurled	1	
-17	50C25201	. SCREW, Extension (80049)	1	
-18	42A12988	. PLUNGER, Jack extension.....	1	
-19	42A12989	. SPRING, Helical compression	1	
-20	50B25259	. RETAINER (80049)	1	
-21	AN510-4-6	. SCREW (88044).....	4	
-22	50B25239	. COLLAR.....	1	
-23	43A12190-4	. NUT, Jack ram lock	1	
-24	50B25168	. BEARING, Ram	1	
-25	43A12189-2	. KEY ASSEMBLY (80049).....	1	
-26	AN565AIOH6	. SETSCREW (88044).....	1	
-27	50A25187	. PIN, Ram (80049)	1	
-28	50B25152	. BEARING, Sleeve	1	
-29	MS28775-338	. PACKING, Preformed	1	
-30	50B25175-2	. RETAINER, Packing.....	1	
-31	50B25222	. BEARING, Sleeve	1	
-32	50C25205	. RAM, Jack, Hydraulic	1	
-33	50D25184	. CYLINDER (80049)	1	
-34	50A25126	. NAMEPLATE (80049).....	1	
-35	AN535-2-2	. SCREW (88044).....	4	
-36	50C25127	. DECAL, Assembly (80049).....	1	
-37	50B25162	. DECAL, Rise indicator (80049).....	1	
-38	42A13047-3	. DECAL, Capacity (80049).....	1	
-39	49B6568	. HOSE ASSEMBLY, Rubber (80049)}	1	
-40		. CONNECTOR ASSEMBLY	1	

b. Remove each foot assembly from leg extension of tripod assembly by removing bolts (1, figure 3-4) and nuts (2).



3-24. Tripod Assembly.

- a. Remove pump assembly in accordance with paragraph 3-20 steps a through c.
- b. Remove cylinder and ram assembly in accordance with paragraph 3-22.
- c. Remove foot assemblies in accordance with paragraph 3-23.

3-25. Disassembly.

Disassemble the clamp assembly, pump assembly, cylinder and ram assembly, foot assemblies and tripod assembly as follows:

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Figure 3-4. Foot Assembly-Exploded View.

FIGURE & INDEX NO.	PART NO.	DESCRIPTION							QTY PER ASSY	USABLE ON CODE
		1	2	3	4	5	6	7		
3-4-	53D6830	FOOT ASSEMBLY							3	
-1	60-8-42	BOLT (80049).....							1	
-2		NUT							1	
-3	MS24380-6SU	CASTER, Swivel (RPLS P/N 52C6417-1)							1	
-4	60-8-10	BOLT (80049).....							4	
-5		WASHER, Lock.....							4	
-6	325-8	NUT (80049).....							4	
-7		SPRING							1	
-8	53C6832	MOUNT, Caster.....							1	
-9	AN960-616	WASHER							1	
-10	AN320-6	NUT							1	
-11	AN380-3-3	PIN, Cotter							1	
-12	53C7069	ARM ASSEMBLY, Caster (80049).....							2	
-13	53D7070	FOOT (80049).....							1	
-14	53C7071	HOUSING (80049)							1	
-15	AN8-12A	BOLT (88044).....							4	
-16		WASHER, Lock 4.....							4	
-17		NUT 4.....							4	

3-26. Clamp Assembly.

a. Remove cam bolt (2, figure 3-1) washer (3), and lockwasher (4) from front half clamp (6). Remove clamp cam handle (5).

b. Separate front half clamp (6) and rear half clamp (7) by drilling out rivet (8).

c. Separate eyebolt (9) from rear half clamp (7) by drilling out rivet (8).

3-27. Pump Assembly.

Disassembly of the hydraulic pump assembly at organizational level is limited to separation of the hydraulic pump and reservoir (12, figure 3-2) and removal of the following parts.

a. *Vent Assembly.* Remove the air vent assembly (9, figure 3-2) as follows:

(1) Remove chain assembly (8) from vent assembly (9).

(2) Remove vent assembly (9) from reservoir (12).

b. *Safety Relief Valve.* Remove the safety relief valve (24, figure 3-2) from pump body (38).

CAUTION

The safety relief valve is preset at assembly. Do not attempt to move adjusting nut.

c. *Safety Relief Valve.* Remove the safety relief valve (25, figure 3-2) from pump body (38).

CAUTION

The safety relief valve no. 2 is preset at assembly. Do not attempt to move adjusting nut.

d. *Intake and Discharge Valves.* Remove the intake and discharge valves as follows:

(1) Remove plug (26, figure 3-2) from pump body (38).

(2) Carefully extract discharge valve spring (27) from pump passage. Tap pump body (38) lightly to free ball (28).

(3) Carefully extract intake valve spring (29) from pump passage. Tap pump body (38) lightly to free ball (30).

e. *Release Assembly and Associated Components.* Remove and disassemble release assembly as follows:

(1) Open release assembly (33, figure 32) until free from threads in pump body (38).

(2) Remove packing nut (35) from pump body (38) and remove release assembly (33), packing nut (35), and preformed packing (36).

(3) Remove ball (34) from pump return passage by tapping pump body (38) lightly.

3-28. Cylinder and Ram Assembly.

Disassembly of the cylinder and ram assembly is restricted to direct support level maintenance. Do not disassemble the cylinder and ram assembly at organizational level.

3-29. Foot Assemblies.

a. Remove swivel casters (3, figure 3-4) from caster mounts (8) by removing bolts (4), lockwashers (5), and nuts (6).

b. Remove spring (7) and caster mount (8) from caster arm assembly (121) by removing cotter pin (11), nut (10), and washer (9).

NOTE

The caster arm assembly, part number 53116831, is interchangeable with the caster arm assembly, part number 53C7069.

c. If caster arm assembly (12), part number 53C7069, is used, separate foot (13) from housing (14) by removing bolt (115), lockwashers (16), and nuts (17).

3-30. Tripod Assembly.

a. Disassemble leg extensions (1, figure 3-5) by removing bolts and nuts (2 and 3). Separate legs (4) from upper leg extensions.

b. Disassemble no. 1 and no. 2 braces (5 and 6) and tension bar (7) by removing bolts (8) and lockwashers (9).

c. Disassemble web (10) and no. 3 and no. 4 braces (11 and 12) by removing bolts (13) and nuts (14).

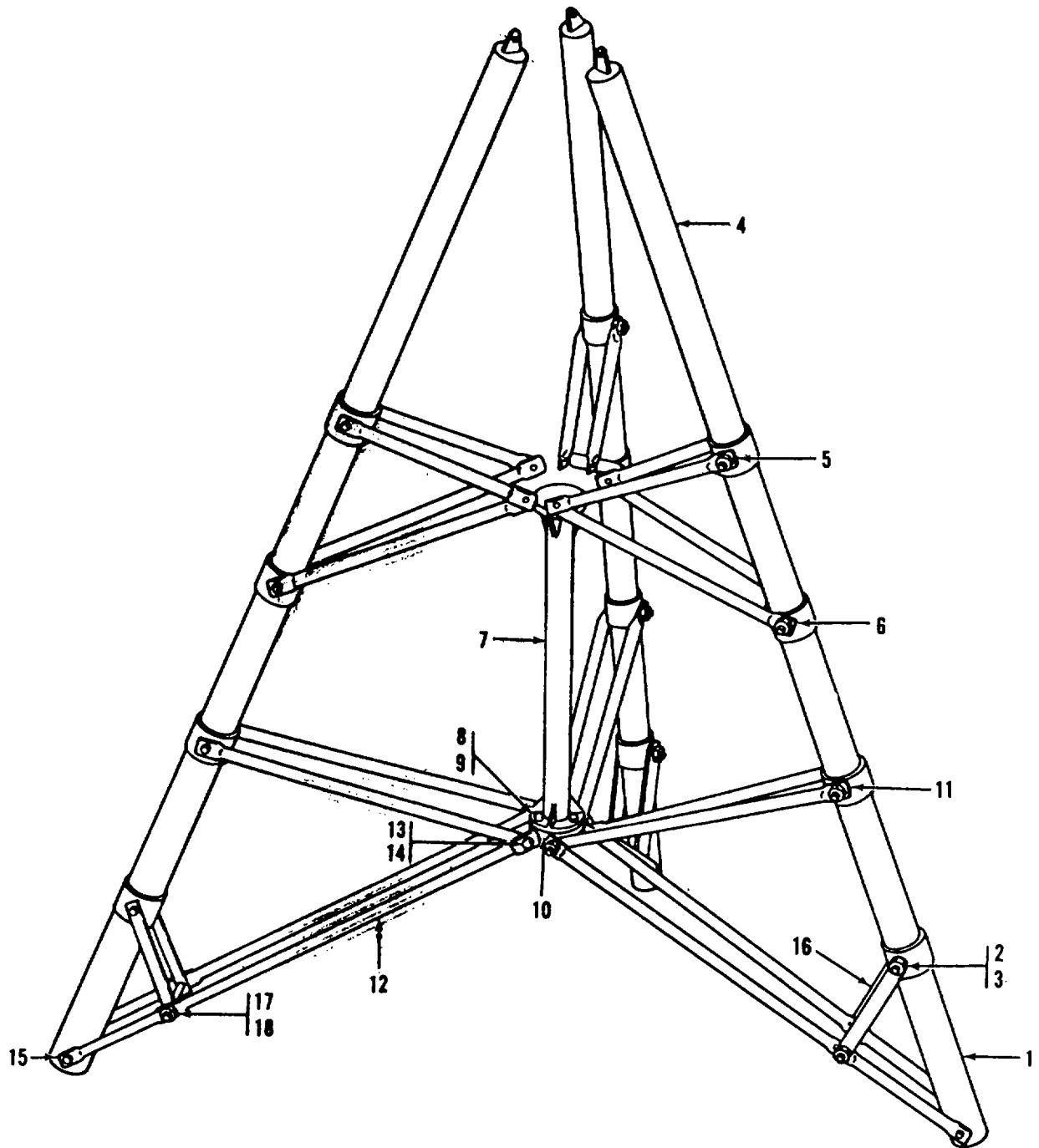
d. Disassemble no. 5 braces (15) and connecting links (16) by removing brace studs (17) and nuts (18).

3-31. Cleaning.

Cleaning instructions for the clamp assembly, pump assembly, cylinder and ram assembly, foot assemblies, and tripod assembly after disassembly are as follows:

3-32. Clamp Assembly.

Clean all parts of clamp assembly (figure 31) with dry cleaning solvent (item 1, table 1-2).



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Figure 3-5. Tripod Assembly

FIGURE & INDEX NO.	PART NO.	DESCRIPTION	QTY PER ASSY	USABLE ON CODE
3-5-		TRIPOD ASSEMBLY	1	
-1	50B25235	. LEG, Jack extension.....	12	
-2		. BOLT	12	
-3	MS21044N8	. NUT, Self-locking hexagon..... (RPLS P/N AN365-820 leg)	12	
-4	50B25197	. LEG (80049).....	3	
-5	50B25213	. BRACE, Jack, Tripod, No. 1	6	
-6	50B25211	. BRACE, Jack, Tripod, No. 2	6	
-7	50B25218	. BAR, Tension, Tripod jack.....	1	
-8	AN8-6A	. BOLT, Machine	3	
-9	MS35338-48	. WASH, Lock.....	3	
-10	50C25244	. WEB, Brace, Tripod Jack	1	
-11	50B25216	. BRACE, Jack, Tripod, No. 3	6	
-12	50B25214	. BRACE, Jack, Tripod, No. 4	6	
-13		. BOLT	12	
-14		. NUT	12	
-15	50B25145	. BRACE, Jack, Tripod, No. 5	6	
-16	50A25203	. CONNECTING LINK, Rigged	6	
-17	50A25248	. STUD, Jack, Tripod.....	3	
-18	MS21044N8	NUT, Self-Locking, Hexagon	6	
		(RPLS P/N AN365-820)		

3-33. Pump Assembly.

Clean pump assembly (figure 3-2) with dry cleaning solvent (item 1, table 1-2) by immersion or brush application. Dry thoroughly with filtered, compressed air. Remove screen (32) from intake port of pump body (38). Clean with filtered, compressed air, and insert in intake port.

a. *Air Vent Assembly.* Clean air vent assembly (9, figure 3-2) by immersion in dry cleaning solvent (item 1, table 1-2). Dry thoroughly with filtered, compressed air.

b. *Safety Relief Valve.* Clean safety relief valve (24, figure 3-2) by immersion in dry cleaning solvent (item 1, table 1). Dry with filtered, compressed air.

c. *Safety Relief Valve.* Clean safety relief valve (25, figure 3-2) by immersion in dry cleaning solvent (item 1, table 1-2). Dry thoroughly with filtered, compressed air.

d. *Intake and Discharge Valves.* Clean intake and discharge valves (27 through 30, figure 3-2) by immersion in dry cleaning solvent (item 1, table 1-2).

e. *Release Assembly and Associated Components.* Clean release assembly and associated components (33 through 36, figure 3-2) by immersion in dry cleaning solvent (item 1, table 1-2). Dry thoroughly with filtered, compressed air.

3-34. Cylinder and Ram Assembly.

Clean cylinder and ram assembly (figure 33) with dry cleaning solvent (item 1, table 1-2) by spray or brush application. Clean hose assembly (39) by flushing with dry cleaning solvent (item 1, table 1-2). Dry thoroughly with filtered, compressed air.

3-35. Foot Assemblies.

Clean foot assembly (figure 3-4) by immersion in dry cleaning solvent (item 1, table 1-2).

3-36. Tripod Assembly.

Clean tripod assembly (figure 3-5) with dry-cleaning solvent (item 1, table 1-2) by spray or brush application.

3-37. Inspection.

Inspect the clamp assembly, pump assembly, cylinder and ram assembly, foot assemblies, and tripod assembly as follows:

3-38. Clamp Assembly.

a. Inspect wing nut (1, figure 3-1) for bent, cracked, or broken wings and distorted threads.

b. Inspect cam bolt (2) for shoulder wear and distorted threads.

c. Inspect front half clamp (6) and rear half clamp (7) for cracks, warpage, and excessive wear at pivot points.

d. Inspect eyebolt (9) for excessive wear at eye and distorted threads.

3-39. Pump Assembly.

a. Inspect reservoir (12, figure 3-2) and pump body (38) for condition of paint, corrosion, cracks, and warped mounting base and mounting flange.

NOTE

Paint pump assembly in accordance with painting instructions outlined in TM 551500-204-25 / 1.

b. Check pump handle socket (5) for excessive play or lost motion and free operation.

c. Inspect safety relief valve (24), safety relief valve (25), and release assembly (33) for condition and security.

d. Inspect screen (32) for distortion.

e. Inspect instruction and capacity decals (39 and 40) for legibility and security.

f. Inspect parts removed during disassembly as follows:

(1) *Air vent assembly.* Inspect vent assembly (9, figure 3-2) for positive opening and closing, clogging, and deterioration of felt plug inside vent assembly, and for distorted threads.

(2) *Safety relief valve.* Inspect safety relief valve (24, figure 3-2) for corrosion, cracks, and distorted threads.

(3) *Safety relief valve.* Inspect safety relief valve (25, figure 3-2) for corrosion, cracks, and distorted threads.

(4) *Intake and discharge valves.* Inspect intake and discharge valve springs (27 and 29, figure 3-2) for corrosion and wear, balls (28 and 29) for out-of-roundness or excessive wear, and general condition of assembly.

(5) *Release assembly and associated components.* Inspect release assembly for excessive wear, broken, cracked, distorted, or stripped, head and threads; out-of-roundness or wear of ball (34); distorted threads of nut (35); and deterioration of packing (36).

3-40. Cylinder and Ram Assembly.

a. Inspect jack pad adapter socket (8, figure 3-3) for cracks and excessive wear.

b. Inspect rise indicator rod (12) and rise indicator tube assembly (13) for security and warpage.

c. Inspect jack pad socket (15) for chips, cracks, and excessive wear.

d. Inspect extension screw (17) for corrosion and distorted threads. Inspect for bent extension screw.

e. Inspect ram nut (23) for free rotation on ram (32).

f. Inspect ram (32) for corrosion and distorted grooves. Inspect for bent ram.

g. Inspect cylinder (33) for cracks, deep dents, and condition of painted surface. Inspect for broken or cracked lugs.

NOTE

Paint cylinder and ram assembly in accordance with painting instructions outlined in TM 55-1500-204-25 / 1.

h. Inspect nameplate (34), assembly decal (36), rise indicator decal (37), and capacity decal (38) for legibility and security.

i. Inspect hose (39) for cracks, deterioration, kinks, and wear due to chaffing.

j. Inspect hose fittings for cracks and distorted threads.

3-41. Foot Assemblies.

a. Inspect swivel casters (3, figure 3-4) for free rotation and chipped, cracked, gouged, or excessively worn wheels. Inspect mounting flanges for cracks, warpage, and elongated holes.

b. Inspect springs (7) for corrosion and excessive wear.

c. Inspect caster mounts (8) for excessive wear and evidence of binding on spring housings. Inspect attachment stems for bends and distorted threads. Inspect mounting flanges for cracks, warpage, and elongated holes.

d. Inspect caster arm assemblies (12) for cracks, bends, and broken or cracked welds. Inspect foot of caster arm assemblies for cracks and excessive wear. Inspect housings for excessive wear and evidence of binding on caster mounts.

3-42. Tripod Assembly.

a. Inspect tripod assembly (figure 3-5) for condition of paint.

NOTE

Paint tripod assembly in accordance with painting instructions outlined in TM 551500-204-25 / 1.

b. Inspect leg extensions (1) and legs (4) for bends, corrosion, and evidence of material failure.

c. Inspect no. 1, no. 2, no. 3, no. 4, and no. 5 braces (5, 6, 11, 12, and 15) and connecting links (16) for bends, corrosion, cracks, and rigidity.

d. Inspect tension bar (7) for bends and corrosion.

3-43. Repair.

Repair the clamp assembly, cylinder and ram assembly hose, and foot assembly as follows:

3-44. Clamp Assembly.

Repair clamp assembly (figure 3-1) by replacing defective parts.

3-45. Hose.

Repair of hose (39, figure 3-3) may be accomplished by manufacturing a new hose and replacement of defective hose fittings in accordance with repair instructions outlined in TM 55-1500-204-25/1.

NOTE

Repair of the hose may be accomplished only if requested by organizational maintenance and when specifically authorized by the direct support technical service officer.

3-46. Foot Assembly.

Repair foot assembly (figure 3-4) by welding broken or cracked welds.

3-47. Adjustment.

Adjust the hydraulic pump as follows

a. Install pump body (38, figure 3-1) upright in a suitable holding fixture.

b. Connect an external source of hydraulic fluid (item 4, table 1-21) to intake port of pump body (38).

c. Using a tee fitting, install a suitable pressure gage (5000 psi) in discharge port of pump body (38). Connect return hose between tee fitting and external source of hydraulic fluid.

d. Insert pump handle (1) into pump handle socket (5), close release assembly (33), and operate pump handle to check for proper pump handle effort. Adjust pump handle socket pivot point as required to obtain proper pump handle effort.

e. Operate pump handle (1) and check for a 2235 psi reading on pressure gage. Adjust plug (26) at intake and discharge valve port as required to obtain a discharge pressure of 2235 psi. f. Disconnect return hose at tee fitting and cap tee fitting opening.

g. Remove safety relief valve (24) from pump body (38) and install a plug in pump body opening.

h. Operate pump handle and check pressure indication of pressure gage. Safety relief valve (25) should open between 2975 and 3350 psi. Use a suitable container to catch escaping hydraulic fluid.

CAUTION

The safety relief valve is preset at assembly. Do not attempt to move adjusting nut.

i. Open release assembly (33) to relieve 3-16 hydraulic pressure. Use a suitable container to catch escaping hydraulic fluid.

j. Remove plug installed in step (7) above and install safety relief valve (24) in pump body (38).

k. Close release assembly (33) and operate pump handle. Check pressure indication of pressure gage. Safety relief valve (24) should open between 2550 and 2925 psi. Use a suitable container to catch escaping hydraulic fluid.

CAUTION

The safety relief valve is preset at assembly. Do not attempt to move adjusting nut.

l. Open release assembly (33) to relieve hydraulic pressure. Use a suitable container to catch escaping hydraulic fluid.

m. Remove cap from tee fitting and drain hydraulic fluid from pump into a suitable container.

n. Remove pressure gage and fitting from discharge port of pump body (38).

o. Disconnect external source of hydraulic fluid at intake port of pump body (38).

p. Remove pump from holding fixture.

3-48. Reassembly.

Reassembly instructions for the clamp assembly, pump assembly, cylinder and ram assembly, foot assembly and tripod assembly are as follows:

3-49. Clamp Assembly.

a. Position eyebolt (9, figure 3-1) in rear half clamp (7) and install new rivet (8).

b. Assemble front half clamp (6) on rear half clamp (7) and install new rivet (8).

c. Position cam handle (5) on front half clamp (6) and install lockwasher (4), washer (3), and cam bolt (2).

3-50. Pump Assembly.

Reassembly of the hydraulic pump assembly at organizational level consists of assembly and replacement of the vent assembly (9, figure 3-2); safety relief valves (24 and 25); intake and discharge valves (items 26 through 31); release assembly and associated components (items 33 through 36); and installing the hydraulic pump on the reservoir (12). To reassemble the hydraulic pump assembly, proceed as follows:

a. *Vent Assembly.* Assemble and install vent assembly as follows:

(1) Apply white lead (item 5, table 1-2) on threads of vent assembly (9, figure 3-2).

(2) Install vent assembly (9) in reservoir (12).

(3) Install chain assembly (8) on vent assembly (9).

b. Safety Relief Valve. Install the safety relief valve (24, figure 3-2) as follows:

(1) Apply white lead (item 5, table 1-2) to threads of safety relief valve (24).

(2) Install safety relief valve (24) in pump body (38).

c. Safety Relief Valve. Install the safety relief valve (25, figure 3-2) as follows:

(1) Apply white lead (item 5, table 1-2) on threads of safety relief valve (25).

(2) Install safety relief valve (25) in pump body (38).

d. Intake and Discharge Valves. Reassemble and install the intake and discharge valves (items 26 through 31) as follows:

(1) Insert ball (30, figure 3-2) into pump passage. Position a suitable brass rod, with cupped end, over ball and tap lightly to seat ball.

(2) Carefully install valve spring (29) in pump passage. Insure intake valve spring is straight and centered in pump passage.

(3) Insert ball (28) into pump passage. Position a suitable brass rod, with cupped end, over ball and tap lightly to seat ball.

(4) Install discharge valve spring (27). with small end pressing against center of ball (28). Insure discharge valve spring is straight and centered in pump passage.

(5) Install plug (26) in pump body (38).

(6) Adjust discharge valve in accordance with paragraph 3-47, steps (1) through (5).

e. Release Assembly and Associated Components. Assemble and install the release assembly and associated components (items 33 through 36) as follows:

(1) Insert ball (34) in pump return passage. Position a suitable brass rod, with cupped end, over ball and tap lightly to seat ball.

(2) Lubricate release assembly (33), packing nut (35), and preformed packing (36) with lubricating oil (item 2, table 1-2).

(3) Assemble packing nut (35) and preformed packing (36) on release assembly (33) and insert into pump body (38).

(4) Start threads of release assembly (33) into threads in pump body (38).

(5) Install packing nut (35) in pump body (38).

(6) Close release assembly (33).

f. Hydraulic Pump. Install the hydraulic pump to the reservoir (12, figure 3-2) as follows:

(1) Position gasket (11) on mounting base of reservoir (12).

(2) Place mounting flange of pump body (38) on mounting base of reservoir (12), align mounting holes, and install lockwashers (15) and screws (13 and 14).

(3) Install pump handle (1) in pump handle socket (5) and connect chain assembly (8).

3-51. Cylinder and Ram Assembly.

Reassembly of the cylinder and ram assembly (figure 3-3) is not authorized at organizational level. Maintenance required at organizational level consists of installation of the cylinder and ram assembly on the tripod assembly. Refer to paragraph 3-56 for installation procedures.

3-52. Foot Assemblies.

NOTE

The caster arm assembly, part number 53H6831, is interchangeable with the caster arm assembly, part number 53C7069.

a. If caster arm assembly (12, figure 3-4), part number 53C7069, is used, position housing (14) on foot (13) and install bolts (15), lockwashers (16), and nuts (17).

b. Lubricate spring (7) and spring housing of caster mount (8) with lubricating oil (item 2, table 1-2).

c. Assemble spring (7) and caster mount (8) in housing of caster arm assembly (12) and install washer (9), nut (10), and cotter pin (11).

d. Lubricate axle of caster (3) with lubricating oil (item 2, table 1-2). Position caster on caster mount (8) and install bolts (4), lockwashers (5), and nuts (6).

3-53. Tripod Assembly.

a. Install foot assemblies in accordance with paragraph 3-55.

b. Install cylinder and ram assembly in accordance with paragraph 3-56.

c. Install pump assembly in accordance with paragraph 3-57.

3-54. Installation.

Install the foot assemblies, cylinder and ram assembly, pump assembly, and clamp assembly as follows:

3-55. Foot Assemblies.

- a. Position foot assemblies (figure 3-41 on legs (or leg extensions) of tripod assembly and install bolts (11 and nuts (2).
- b. Using sufficient manpower, place hydraulic jack upright.

3-56. Cylinder and Ram Assembly.

To install cylinder and ram assembly, position cylinder and ram assembly on tripod assembly and install bolts (1, 4, and 6, figure 3-3), lockwashers (2 and 7, and nuts (3 and 5).

3-57. Pump Assembly.

Install pump assembly (figure 3-2) on hydraulic jack in accordance with paragraph 3-58, steps c through f.

3-58. Clamp Assembly.

- a. Position clamp assembly (figure 3-1) on leg (or leg extension) of hydraulic jack and close front half clamp (6) and rear half clamp (7).
- b. Install wing nut (1) on eyebolt (9).
- c. Position pump assembly on hydraulic jack and lock clamp cam (5) into lug at upper end of reservoir.
- d. Apply white lead (item 5, table 1-2) on threads of hose fittings.
- e. Install male connector assembly (40, figure 3-3) on hose (39) and connect to cylinder and ram assembly.
- f. Connect opposite end of hose to pump assembly.

- g. Bleed hydraulic jack in accordance with paragraph 3-5.

3-59. Hydraulic Jack Functional Testing.

The hydraulic jack shall be functionally tested after each reassembly to insure safe operation.

- a. Turn ram lock nut assembly to top of ram and tighten retainer screw.
- b. Open vent assembly on reservoir and close release assembly on pump.
- c. Disconnect chain assembly on reservoir to free pump handle.
- d. Apply test load (20,000 pounds) at ball socket of extension screw.
- e. Operate pump handle until ram is fully extended and pump bypass is reached.
- f. Hold pressure against test load for a minimum of 15 minutes. Check for evidence of leakage at top of cylinder. There shall be no apparent settling of ram.
- g. Slowly open release assembly to lower ram into cylinder. When ram is fully closed, remove test load.
- h. Move pump handle to stowed position and connect chain assembly.
- i. Close air vent assembly and release assembly.

FIGURE AND INDEX NO.	PART NO.	FMC	FIGURE AND INDEX NO.	PART NO.	FMC
3-4-10	AN320-6	88044	3-2-35	42A13022	80049
3-3-14	AN350-1032	88014	3-2-11	42A13025	80049
3-3-3			3-1-1	42A13046-3	80049
3-3-5			3-2-40	42A13047	80049
3-5-3			3-3-38	42A13047-3	80049
3-5-14			3-1-2	42A13049	80049
3-4-11	AN380-3-3	88044	3-1-9	42A13052	80049
3-1-8	AN435-10-20P	88044	3-3-15	42A7529	80049
3-3-21	AN510-4-6	88044	3-3-8	42A7530	80049
3-3-11	AN520-10-6	88044	3-1-5	42B13048	80049
3-3-35	AN535-2-2	88044	3-2-39	43A12145	80049
3-2-4	AN535-8-6	88044	3-3-25	43A12189-2	80049
3-2-18			3-3-23	43A12190-4	97151
3-3-26	AN565A10H6	88044	3-2-25	43A12191-3	80049
3-4-15	AN8-12A	88044	3-2-24	43A12192-3	80049
3-3-1	AN8-17A	88044	3-2-2	43A12196	80049
3-3-6	AN8-6A	88044	3-2-8	43A12197	80049
3-5-8			3-2-37	43A13905	80049
3-2-10	AN913-3S	88044	3-2-15	48A7858	80049
3-2-31	AN932U2	88044	3-2-19	48A7866	80049
3-2-26	AN932U3	88044	3-3-12	48A7878-4	80049
3-3-7			3-2-20	48A7880	80049
3-5-9			3-2-1	48B7861	80049
3-4-9	AN960-616	88044	3-2-22	48B7863-2	80049
3-1-3	AN960-816	88044	3-2-5	48C7860	80049
3-2-32	D2421	57771	3-3-13	49B6450-4	80049
3-2-30	MS150457	96906	3-3-39	49B6568	80049
3-2-28	MS150460	96906	3-3-34	50A25156	80049
3-2-30	MS19059-49	80049	3-3-27	50A25187	80049
3-2-34		96906	3-5-16	50A25203	80049
3-2-10	MS20913-3S	96906	3-5-17	50A25248	80049
3-3-3	MS21044N8	96906	3-5-15	50B25145	80049
3-5-3		96906	3-3-28	50B25152	80049
3-5-18		96906	3-3-37	50B25162	80049
3-4-3	MS24380-6SU	96906	3-3-24	50B25168	80049
3-2-23	MS28775-218	96906	3-3-30	50B25175-2	80049
3-3-29	MS28775-338	80049	3-5-4	50B25197	80049
3-1-4	MS35338-48	96906	3-5-6	50B25211	80049
3-3-2		96906	3-5-5	50B25213	80049
3-3-7		96906	3-5-12	50B25214	
3-5-9		96906	3-5-11	50B25216	
3-3-14	MS35426-13	96906	3-5-7	50B25218	80049
3-2-34			3-3-31	50B25222	80049
3-4-6	325-8	80049	3-1-	50B25223	80049
3-4-17			3-5-1	50B25235	80049
3-3-18	42A12988	80049	3-3-22	50B25239	80049
3-3-19	42A12989	80049	3-1-7	50B25242	80049
3-2-33	42A12998	80049	3-3-20	50B25259	80049
3-2-29	42A13003	80049	3-2-9	50B7763	80049
3-2-27	42A13004	80049	3-3-36	50C25157	80049
3-2-7	42A130i6	80049	3-3-17	50C25201	80049
3-2-6	42A13017	80049	3-3-32	50C25205	80049
3-2-36	42A13021	80049	3-2-12	50C25220-2	80049

FIGURE AND INDEX NO.	PART NO.	FMC
3-1-6	50C25240	80049
3-5-10	50C25244	80049
3-3-33	50S25184	80049
3-3-16	51B7332	80049
3-2-	51D7138	
3-2-16	52B6863	80049
3-2-21	52B6864	80049
3-2-38	52D6861	80048
3-4-8	53C6832	80049
3-4-12	53C7069	80049

FIGURE AND INDEX NO.	PART NO.	FMC
3-4-14	' 53C7071	80049
3-4-	53D6830	80049
3-4-13	53D7070	80049
3-4-12	53H6831	80049
3-4-4	60-8-10	80049
3-3-4	60-8-16	8-0049
3-5-13		
3-4-1	60-8-42	80049
3-3-1	800399	18876

CHAPTER 4

DIRECT AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS

**Section I. PREPARATION FOR
MAINTENANCE, STORAGE, AND SHIPMENT**

(Not applicable)

Section II. CHECKOUT AND ANALYSIS

4-1. Introduction.

This section provides detailed instructions for pressure testing the high pressure hose assembly (39, figure 3-3) and troubleshooting the hydraulic jack at direct support maintenance level.

4-2. Hose Pressure Testing.

Pressure test hose assembly in accordance with the following procedures:

- a. Clean hose in accordance with paragraph 3-34.
- b. Remove metal identification tag from hose.
- c. Connect hose to hydrostatic test unit filled with hydraulic fluid (item 4, table 1-2).
- d. Apply a proof pressure of 5000 psi to hose. Pressure test for not less than 30 seconds and not more than 5 minutes. Check hose and hose fittings for evidence of leakage.

e. Bleed off proof pressure and remove hose from hydrostatic test unit.

f. Reject hose if leakage is noted.

g. Clean serviceable hose in accordance with paragraph 3-34 and cap hose fittings if hose is not to be installed immediately.

h. Install metal identification tag (item 7, table 1-2). Mark metal identification tag by impression stamping, engraving, or etching to show part number, operating pressure, and date of pressure test.

4-3. Troubleshooting Data.

Refer to table 4-1 for direct support troubleshooting data applicable to the hydraulic jack.

Table 4-1. Direct Support Troubleshooting Data

MALFUNCTION	PROBABLE CAUSE	POSSIBLE REMEDY
Hydraulic jack fails to raise capacity load.	Defective ram preformed packing. Defective pump body preformed packing.	Replace ram preformed packing. Replace pump body preformed packing.
Hydraulic jack fails to support load.	Defective ram prepacking.	Replace ram preformed packing.
Ram will not raise or lower load.	Bent ram.	Replace ram.

Section III. REPAIR PROCEDURES.

4-4. Introduction.

This section provides detailed disassembly, inspection, repair, and reassembly instructions authorized by appendix B, maintenance allocation chart for direct support level maintenance. For removal, cleaning, and replacement, refer to chapter 4, section VI.

4-5. Disassembly.

Disassemble the pump assembly, and cylinder and ram assembly as follows:

4-6. Pump Assembly.

- a. Remove socket pin assembly (2, figure 3-2) from pump handle socket (5) by removing chain (3) and screws (4).

b. Remove pump handle socket (5), piston pin (6), and piston pin roller (7) from pump piston (16).

c. Remove vent assembly (9) from reservoir (12) in accordance with paragraph 3-27 a.

d. Remove plug (10) from reservoir (12).

e. Remove pump piston (16) from pump cylinder by removing screws (18) and chain (17).

f. Remove retaining ring (19), felt (201, packing nut (21), packing retainer (22), and preformed packing (23) from pump body (38). Discard preformed packing.

g. Remove safety relief valve (24) in accordance with paragraph 3-27 b.

h. Remove safety relief valve (25) in accordance with paragraph 3-27 c.

i. Remove intake and discharge valves (items 27 through 30) in accordance with paragraph 3-27 d.

j. Remove plugs (31) and screen (32) from pump body (38).

k. Remove release assembly and associated components (33 through 36) in accordance with paragraph 3-27 e.

l. Remove connector assembly (37) from pump body (38).

NOTE

Remove instruction and capacity decals (39 and 40) only if damaged.

4-7. Cylinder and Ram Assembly.

a. Remove socket (8, figure 3-3), pin (9), screw (11), and chain (10) from cylinder (33).

b. Remove jack indicator rod (12) and rise indicator tube assembly (13) by removing nut (14) from collar (22).

c. Remove jack pad socket assembly (15) from extension screw (17).

d. Loosen ram bearing (24) and remove ram assembly (32) from cylinder (33).

NOTE

The ram assembly (32) may be removed from the cylinder by gradually applying filtered, compressed air through the inlet port of the cylinder.

e. Remove nut (16) from extension screw (17).

f. Remove extension screw (17), plunger (18), and spring (19) from ram (32).

g. Remove retainer (20) from ram (32) by removing screws (21). Remove collar (22).

h. Remove ram lock nut (23) from ram (32).

i. Remove ram bearing (24) and key assembly (25) from ram (32).

j. Remove setscrew (26) and ram pin (27) from ram (32).

k. Remove bearing sleeve (28), preformed packing (29), packing retainer (30), and bearing sleeve (31) from ram (32). Discard preformed packing and packing retainer.

NOTE

Remove nameplate (34), assembly decal (36), rise indicator decal (37), and capacity decal (38) only if damaged.

4-8. Inspection and Repair.

Inspect the pump assembly and cylinder and ram assembly as follows:

4-9. Pump Assembly.

a. Inspect all parts of pump assembly for corrosion, cracks, and excessive wear.

b. Replace defective parts and remove corrosion by polishing with crocus cloth (item 6, table 1-2).

c. Check clearance of pump piston in packing nut. Replace pump piston and packing nut if clearance exceeds 0.011 inch.

d. Inspect pump body to insure pump passages are not obstructed. Clean pump passages to remove any obstructions by flushing with dry cleaning solvent (item 1, table 1-2).

e. Repair cracks in reservoir by welding.

f. Paint pump assembly in accordance with painting instructions outlined in TM 55-1500-204-25 / 1.

4-10. Cylinder and Ram Assembly.

a. Inspect all parts of cylinder and ram assembly for corrosion, cracks, and excessive wear. Replace defective parts and remove corrosion by polishing with crocus cloth (item 6, table 1-2).

b. Inspect for bent or twisted indicator rod (12, figure 3-3) and dented or bent rise indicator tube assembly (13). Indicator rod (12) may be straightened using a rawhide mallet and wooden block. Replace dented or bent rise indicator tube assembly.

c. Inspect for bent extension screw (17) and burred or distorted threads. Replace defective extension screw.

d. Inspect ram bearing (24), bearing sleeve (28), and bearing sleeve (31), for burrs, galling, and scratches in bearing surface. Repair by polishing with crocus cloth (item 6, table 1-2).

e. Inspect for bent ram (32) and burrs, chips, nicks, and scratches in grooved areas. Repair by honing with a suitable abrasive stone and polishing with crocus cloth (item 6, table 1-2). Replace bent ram.

f. Inspect exterior surface of cylinder (33) for gouges, nicks, and deep scratches. Repair by honing with a suitable abrasive stone.

g. Paint exterior surface of cylinder (33) in accordance with painting instructions outlined in TM 55-1500-204-25/ 1.

h. Assemble ram bearing (24) on ram (32) and check clearance between ram and bearing surface. Replace ram bearing if clearance exceeds 0.015 inch.

NOTE

Check clearance through full travel of ram in ram bearing.

i. Assemble bearing sleeve (31) and bearing sleeve (28) on ram (32), insert ram inside cylinder (33), and check clearance between cylinder and bearing surface. Replace bearing sleeve (31) and bearing sleeve (28) if clearance exceeds 0.020 inch.

NOTE

Check clearance through full travel of ram in cylinder.

4-11. REASSEMBLY.

Reassemble the pump assembly and cylinder and ram assembly as follows 4-12. Pump Assembly.

a. Install connector assembly (37, figure 32) in pump body (38).

b. Install release assembly and associated components (33 through 36) in accordance with paragraph 3-50 e.

c. Install screen 32 and plug (31) in pump body (38).

d. Install intake and discharge valves (27 through 30) in accordance with paragraph 3-50d.

e. Install safety relief valve (25) in accordance with paragraph 3-50 c

f. Install safety relief valve (24) in accordance with paragraph 3-50 b.

g. Lubricate preformed packing (23) packing nut (21), and pump piston (16) with hydraulic fluid (item 4, table 1-2). Assemble retaining ring (19), felt (20), packing nut (21), packing retainer (22), and preformed packing (23) on pump piston (16) and insert in pump cylinder.

h. Install pecking nut (21) felt (20), and retainer ring (19) in pump body (38).

i. With pump piston (16) pushed in fully, install chain (17) and screw (18).

j. Install plug (10) in reservoir (12).

k. Install vent assembly (9) in reservoir (12).

l. Lubricate piston pin roller (7) and piston pin (6) with lubricating oil (item 2, table 1-2), assemble in pump handle socket (5), and stake piston pin (6).

m. Secure socket pin assembly (21 to pump body (38) by installing chain (3) and screws (4).

n. Lubricate socket pin assembly (2) with lubricating oil (item 2, table 1-2). Position pump handle socket (5) in pump piston (16) base and pump body (38). Secure with socket pin assembly.

o. Adjust pump in accordance with paragraph 3-47.

4-13. Cylinder and Ram Assembly.

a. Assemble bearing sleeve (31, figure 3-3), packing retainer (30), preformed packing (29), and bearing sleeve (28) on ram (32). Lubricate preformed packing with hydraulic fluid (item 4, table 2-1) prior to reassembling.

b. Install ram pin (27) through bearing sleeve (28) and ram (32). Secure ram pin with setscrew (26).

c. Install key assembly (25) on ram bearing (124) and assemble ram bearing on ram (32).

d. Start ram lock assembly (23) on ram (32); insure ram lock nut assembly is installed with retainer screw up.

e. Assemble collar (22) and retainer (20) and secure with screws (21).

f. Insert spring (19) and plunger (18) in hole at lower end of extension screw (17). With spring and plunger depressed, thread extension screw inside ram (32).

g. Install extension screw nut (16) on extension screw (17).

h. Lubricate bearing sleeve (28) and bearing sleeve (31) with hydraulic fluid (item 4, table 1-2) and insert ram assembly in cylinder (33). Carefully push ram assembly down until bottomed in cylinder.

i. Install ram bearing (24) in cylinder.

j. Install socket assembly (15) in extension screw (17).

k. Position indicator rod (12) and rise indicator tube assembly (13) on collar (22) and secure with wing nut (14).

l. Assemble jack pad adapter socket (8), pin (9), and chain (10) and secure to cylinder (33) with screw (11).

APPENDIX A

REFERENCES

AR 750-5
TM 9-2851
TM 38-750
TM 55-1500-204-25/1
TM 5-220

Maintenance Responsibilities and Shop Operation.
Painting Instructions for Field Use.
The Army Maintenance Management System.
General Aircraft Maintenance Manual.
Demolition Materials and Methods.

A-1/A-2 blank

APPENDIX B

MAINTENANCE ALLOCATION CHART

B-1. Purpose.

The purpose of the maintenance allocation chart is to provide all activities with maintenance functions to be performed at each level of maintenance.

B-2. Definitions.

a. *Column 1, Group Number.* Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.

b. *Column 2, Functional Group.* Column 2 lists the noun names of components, assemblies, subassemblies, and modules on which maintenance is authorized.

c. *Column 3, Maintenance Functions.* Maintenance functions will be limited to and defined as follows:

(1) *Inspect.* To determine serviceability of an item by comparing its physical, mechanical, and electrical characteristics with established standards.

(2) *Test.* To verify serviceability and to detect electrical or mechanical failure by use of test equipment.

(3) *Service.* To clean, to preserve, to charge, and to add fuel, lubricants, cooling agents, and air. If it is desired that elements, such as painting and lubricating, be defined separately, they may be so listed.

(4) *Adjust.* To rectify to the extent necessary to bring into proper operating range.

(5) *Align.* To adjust specified variable elements of an item to bring to optimum performance.

(6) *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 being compared with the certified standard.

(7) *Install.* To set up for use in an operational environment such as an emplacement, site, or vehicle.

(8) *Replace.* To replace unserviceable items with serviceable assemblies, subassemblies, or parts.

(9) *Repair.* To restore an item to serviceable condition. This includes, but is not limited to, inspection, cleaning, preserving, adjusting, replacing, welding, riveting, and strengthening.

(10) *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.

(11) *Rebuild.* To restore an item to a standard as nearly as possible to original or new condition in appearance, performance, and life expectancy. This is accomplished through 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.

(12) *Symbols.* The symbol O, F, H, or D placed in the appropriate column indicates the level responsible for performing that particular maintenance function. The symbol "%%" which applies to organizational maintenance indicates the level responsible for performing that particular maintenance function may be performed provided it is specifically authorized by the direct support maintenance officer. Use of the symbol will apply only to replacement of major assemblies and time-consuming operations which are within the capabilities of organization, but over which control by the commodity commands is considered essential. In no case will the direct support maintenance officer require the accomplishment of a "%%" maintenance function by an organization or unit, and in no case will a "%%" function authorize stockage of parts at organizational level.

d. *Column 4, Tools and Equipment.* This column will be used to specify, by code, those tools and test equipment required to perform the designated function.

e. *Column 5, Remarks.* Self-explanatory.

B-3. General.

a. A maintenance function assigned to a maintenance level, which for any reason is beyond its capability, becomes the responsibility of the next higher maintenance level.

b. The authority to perform a maintenance function does not constitute authority to requisition or otherwise secure necessary repair parts specified in current supply directives.

B-4. Deviations.

a. Normally, there will be no deviations from the assigned maintenance level. In cases of operational necessity, a maintenance function assigned to a maintenance level may, on a one-time basis and at the request of the lower maintenance level, be authorized to the lower maintenance level by the maintenance officer of the level to which the function is assigned.

b. The furnishing of special tools, equipment, and the like, required by the lower maintenance level to perform this function, will be the responsibility of the level to which the function is assigned.

B-5. Additional Information.

a. Changes in the maintenance allocation chart will be based on continuing evaluation and analysis by responsible technical personnel and on Maintenance Request Forms DA 2407 received from field activities.

b. All maintenance prescribed herein will be performed in accordance with applicable publications.

c. In any instance of conflict with current tool and equipment lists or current supply manuals, this maintenance allocation chart will be the final authority. Each such instance should be promptly reported by Maintenance Request, Form DA 2407.

APPENDIX C

REPAIR PARTS AND SPECIAL TOOLS LIST
(Current as of 1 March 1971)

Section I. INTRODUCTION

C-1. Scope.

This appendix lists repair parts and maintenance supplies required for the performance of organizational and direct support maintenance of the type B-6, 10-ton, jack, hydraulic, tripod.

C-2. General.

This basic issue items, repair parts, and special tools listing is divided into the following sections:

- a. *Basic Issue Items-Section II.* Not applicable.
- b. *Maintenance and Operating Supplies-Section III.* Not applicable.
- c. *Prescribed Load Allowance (PLA) Section IV.* Not applicable.
- d. *Repair Parts Section V.* A list of repair parts authorized for the performance of maintenance at the organizational and direct support level in figure and item number sequence. Maintenance supplies (MS) are listed within the section in ascending Federal stock number sequence.
- e. *Special Tools, Test and Support Equipment Section VI.* Not applicable.
- f. *Federal Stock Number and Reference Number Index Section VII.* A list of Federal stock numbers in ascending numerical sequence, followed by a list of reference numbers appearing in all the listings, in ascending alpha-numerical sequence. cross-referenced to the illustration figure and item number.

C-3. Explanation of Columns.

The following provides an explanation of columns in the tabular lists in section V.

- a. *Source, Maintenance and Recoverability (Codes (SMR)).*

(1) Source code indicates the selection status and source for the listed item. Source codes are:

Code	Explanation
P	Repair parts, special tools and test equipment supplied from the GSA/DSA, or Army supply system, and authorized for use at indicated maintenance categories.

Code	Explanation
P2	Repair parts, special tools and test equipment which are procured and stocked for insurance purposes because the combat or military essentiality of the end item dictates that a minimum quantity be available in the supply system.
P9	Assigned to items which are NSA design controlled: unique repair parts, special tools, test, measuring and diagnostic equipment, which are stocked and supplied by the Army COMSEC Logistic System and which are not subject to the provisions of AR 380-41.
P10	Assigned to items which are NSA design controlled : special tools, test, measuring and diagnostic equipment for COMSEC support, which are accountable under the provisions of AR 380-41, and which are stocked and supplied by the Army COMSEC Logistic System.
M	Repair parts, special tools and test equipment which are not procured or stocked, as such, in the supply system but are to be manufactured at indicated maintenance levels.
A	Assemblies which are not procured or stocked as such, but are made up of two or more units. Such component units carry individual stock numbers and descriptions, are procured and stocked separately and can be assembled to form the required assembly at indicated maintenance categories.
X	Parts and assemblies that are not procured or stocked because the failure rate is normally below that of the applicable end item of component. The failure of such part or assembly should result in retirement of the end item from the supply system.
X1	Repair parts which are not procured or stocked. The requirement for such items will be filled by the next higher assembly or component.

Code	Explanation
X2	Repair parts, special tools, and test equipment which are not stocked and have no foreseen mortality. The indicated maintenance category requiring such repair parts will attempt to obtain the parts through cannibalization or salvage. The item may be requisitioned with exception data, from the end item manager, for immediate use.
XG	Major assemblies that are procured with PEMA funds for initial issue only as exchange assemblies at DSU and GSU level. These assemblies will not be stocked above the DS and GS level or returned to depot supply level.

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded X1 and aircraft support items as restricted by AR -700-42.

(2) Maintenance code indicates the lowest category of maintenance authorized to install the listed item. The maintenance level codes are:

Code	Explanation
C	Crew or operator maintenance
O	Organizational maintenance
F	Direct support maintenance

(3) Recoverability code indicates whether unserviceable items should be returned for recovery or salvage. Items not coded are nonrecoverable. Recoverability codes are:

Code	Explanation
R	Applied to repair parts (assemblies and components), special tools and test equipment which are considered economically repairable at direct and general support maintenance levels. When the item is no longer economically repairable, it is normally disposed of at the GS level. When supply considerations dictate, some of these repair parts may be listed for automatic return to supply for depot level repair as set forth in AR 710-50. When so listed, they will be replaced by supply on an exchange basis.
S	Repair parts, special tools, test equipment and assemblies which are

Code	Explanation
	economically repairable at DSU and GSU activities and which normally are furnished by supply on an exchange basis. When items are determined by a GSU to be uneconomically repairable, they will be evacuated to a depot for evaluation and analysis before final disposition.
T	Higher dollar value recoverable repair parts, special tools, and test equipment which are subject to special handling and ..re issued on an exchange basis. Such items will be repaired or overhauled at depot maintenance activities only. No repair may' be accomplished at lower levels.
U	Repair parts, special tools and test equipment specifically selected for salvage by reclamation units because of precious metal content, critical materials, high dollar value or reusable casings or castings.

b. Federal Stock Number. Indicates the Federal stock number assigned to the item and will be used for requisitioning purposes. Items source coded A, M, X1, or X2 are not assigned a Federal stock number.

c. Description. Indicates the Federal item name and any additional description of the item required.

(1) Reference number and manufacturer's code. Indicates a part number or other reference number for the listed item followed by the applicable five-digit Federal supply code for manufacturers, in parentheses.

(2) Usable on code. Not applicable.

d. Unit of Measure (U/M). A two-character alphabetical abbreviation indicating the amount or quantity of the item upon which the allowances are based (e.g., FT, EA, PR).

e. Quantity Incorporated in Unit. Indicates the quantity of the item used in the assembly. A "V" appearing in this column in lieu of a quantity indicates that a definite quantity cannot be indicated.

f. Fifteen-day Organizational Maintenance Allowance.

(1) The allowance column is divided into four subcolumns. Indicated in each subcolumn, opposite the first appearance of each item, is the total quantity of items authorized for the number of equipments supported. Subsequent appearances of the same item will have the letters "REF" in the allowance columns. Items authorized for use as required but not for initial stockage are identified with an asterisk * in the allowance column.

(2) The quantitative allowances for organizational level of maintenance represents one initial prescribed load for a 15-day period for the number of equipments supported. Units and organizations authorized additional prescribed loads will multiply the number of prescribed loads authorized by the quantity of repair parts reflected in the density column applicable to the number of items supported to obtain the total quantity of repair parts authorized.

(3) The basis of issue for authorized special tools, test and support equipment is the number of end items of equipment supported.

(4) Organizational units providing maintenance for more than 100 of these equipments shall determine the total quantity of parts required by converting the equipment quantity to a decimal factor by placing a decimal point before the next to the last digit of the number to indicate hundredths, and multiplying the decimal factor by the parts quantity authorized in the 51-100 allowance column. Example; authorized allowance for 51-100 equipments is 40; for 150 equipments, multiply 40 by 1.50, or 60 parts required.

(5) Subsequent changes to allowances will be limited as follows: No change in the range of items is authorized. If additional items are considered necessary, recommendations should be forwarded to Commanding General, U. S. Army Aviation Systems Command, P. O. Box 209, St. Louis, Missouri 63166, for exception or revision to the allowance list. Revisions to the range of items authorized will be made by USAAVSCOM based upon engineering experience, demand data, or TAMMS information.

g. Thirty-day DS Maintenance Allowance.

(1) The allowance column is divided into three subcolumns. Indicated in each subcolumn, opposite the first appearance of each item, is the total quantity of items authorized for the number of equipments supported. Subsequent appearances of the same item will have the letters "REF" in this column. Items authorized for use as required but not for initial stockage are identified with an asterisk * in the allowance column.

(2) The quantitative allowance for DS level of maintenance will represent initial stockage for a 30-day period for the number of equipments supported.

(3) Determination of the total quantity of parts required for maintenance of more than 100 TM 55-1730-208-13 of these equipments can be accomplished by converting the equipment quantity to a decimal factor by placing a decimal point before the next to last digit of

the number to indicate hundredths, and multiplying the decimal factor by the parts quantity authorized allowance for 51-100 allowance column. Example: authorized allowance for 51-100 equipments is 40; for 150 equipments, multiply 40 by 1.50, or 60 parts required.

(4) The basis of issue for authorized special tools, test and support equipment is the number of end items of equipment supported.

h. One-year Allowance per 100 Equipments / Contingency Planning Purposes. Indicates opposite the first appearance of each item, the total quantity required for distribution and contingency planning purposes. The range of items indicates total quantities of all authorized items required to provide for adequate support of 100 equipments for one year.

i. Illustration. Illustrations appear in the narrative portion of this manual. This column is divided as follows:

(1) Figure number. Indicates the figure number of the illustration in which the item is shown. Appearances of the letters "MS" in this column indicate maintenance supplies located in section V.

(2) Item number. Indicates the callout number to reference the item in the illustration.

C-4. How to Locate Repair Parts.

a. When Federal Stock Number or Reference Number is Unknown:

(1) *First.* Find the exploded view illustration of the assembly or subassembly to which the repair part belongs.

(2) *Second.* Identify the repair part on the illustration and note the illustration figure and item number of the repair part.

(3) *Third.* Using the repair parts listing, find the figure and item number listed in the illustration column.

b. When Federal Stock Number or Reference Number is Known:

(1) *First.* Using the index of Federal stock numbers and reference numbers, find the pertinent Federal stock number or reference number. This index is in ascending Federal stock number sequence, followed by a list of reference numbers in ascending alpha-numerical sequence, cross-referenced to the illustration figure and item number.

(2) *Second.* Using the repair parts listing, find the figure and item number listed in the illustration column referenced in the index of Federal stock numbers and reference numbers.

C-5. Federal Supply Codes for Manufacturers.

Code	Manufacturer
00624	Aeroquip Corp Aircraft Division Jackson Plant 300 S East Ave Jackson MI 49203
07878	Aeronautical Systems Div Wright- Patterson AFB OH 45433
18876	Army Missile Command Redstone Arsenal AL
80049	Department of the Air Force Washington DC

Code	Manufacturer
88044	Aeronautical Standards Group Dept of Navy and Air Force Silver Springs MD
96906	Military Standards Promulgated By Standardization Div Directorate of Logistic Services DSA
97151	Air Force Logistics Command Wright- Patterson Air Force Base Dayton OH
98750	San Antonio Air Material Area Kelly Air Force Base San Antonio TX

SMR CODE	FEDERAL STOCK NUMBER	DESCRIPTION REFERENCE NO. & MFR CODE	USABLE ON CODE	UNIT OF MEA	QTY INC IN UNIT	15-DAY ORG MAINT ALW				30-DAY DS MAINT ALW			1-YR ALW PER 100 EQP CNTY	ILLUSTRATION	
						1-5	6-20	21-50	51-100	1-20	21-50	51-100		FIG NO	ITEM NO
	1730-516-2019	50J25178 (80049)	JACK, HYDRAULIC, TRIPOD-TYPE B-6, 10 TON.....	EA										1-1	
SECTION V REPAIR PARTS GROUP 02 CLAMP ASSEMBLY															
P--O--	1730-035-6634	50B25223 (98750)	CLAMP ASSEMBLY, JACK.....	EA	1	*	*	*	*	*	*	*		3-1	
P--O--	5310-167-0823	AN960-816 (88044)	.WASHER, AT	EA	1	*	*	*	*	*	*	*		3-1	3
P--O--	5310-584-5272	MS35338-48 (96906)	.WASHER, LOCK	EA	1	*	*	*	*	*	*	*		3-1	4
X2-O--		42B13048 (98750)	.HANDLE, CAM	EA	1									3-1	5
GROUP 03 PUMP ASSEMBLY															
P--O--	1730-035-6651	51D7138 (98750)	PUMP, HYDRAULIC, HAND DRIVEN	EA	1	*	*	*	*	*	*	*		3-2	
P--O--	1730-492-4002	48B7861 (98750)	.HANDLE, PUMP, HYDRAULIC JACK	EA	1	*	*	*	*	*	*	*		3-2	1
P--O--	1730-670-9869	43A12196 (98750)	.PIN ASSEMBLY, SOCKET	EA	1	*	*	*	*	*	*	*		3-2	2
P--O--	5305-253-5622	MS21318-41 (96906)	.SCREW, DRIVE	EA	2	*	*	*	*	*	*	*		3-2	4
X2-O--		48C7860 (80049)	.SOCKET, JACK HANDLE	EA	1									3-2	5
X2-O--		42A13016 (80049)	.ROLLER, TRIPOD JACK PISTON	EA	1									3-2	7
P--O--	1730-212-4500	50B7763 (98750)	.VENT, JACK RESERVOIR	EA	1	*	*	*	*	*	*	*		3-2	9
P--O--	4730-221-2138	MS20913-3S (96906)	.PLUG, PIPE	EA	1	*	*	*	*	*	*	*		3-2	10
P--O--	1730-492-3343	4ZA13025 (98750)	.GASKET	EA	1	*	*	*	*	*	*	*		3-2	11
P--F--	1730-035-6673	52B6863 (98750)	.PISTON, PUMP, HYDRAULIC JACK	EA	1					*	*	*		3-2	16
P--O--	5305-253-5622	MS21318-41 (96906)	.SCREW, RIVE	EA	2	*	*	*	*	*	*	*		3-2	18
P--F--	1730-492-3979	48A7880 (98750)	.FELT, MECHANICAL, PREFORMED	EA	1					*	*	*		3-2	20
X2-F--		52B6864 (98750)	.NUT, PACKING	EA	1									3-2	21
P--F--	1730-514-4700	48B7863-2 (98750)	.RETAINER, PACKING	EA	1					*	*	*		3-2	22
P--F--	5330-584-0263	MS28775-218 (96906)	.PACKING, PREFORMED.....	EA	1					*	*	*		3-2	23
P--F--	1730-203-4861	43A12192-3 (98750)	.VALVE, SAFETY	EA	1					*	*	*		3-2	24
P--F--	1730-568-0691	42A13004 (80049)	.SPRING, HELICAL, COMPRESSION	EA	1					*	*	*		3-2	27
P--F--	3110-100-6163	MS19059-52 (96906)	.BALL, BEARING	EA	1					*	*	*		3-2	28
P--F--	1730-568-0690	42A13003 (80049)	.SPRING, HELICAL, COMPRESSION	EA	1					*	*	*		3-2	29
P--F--	3110-100-6151	MS19059-49 (96906)	.BALL, BEARING	EA	1					*	*	*		3-2	30
P--F--	4730-278-2973	AN932U2 (88044)	.PLUG, PIPE	EA	2					*	*	*		3-2	31
P--O--	1730-509-8182	42A12998 (98750)	RELEASE ASSEMBLY, TRIPOD JACK	EA	1	*	*	*	*	*	*	*		3-2	33
P--O--	3110-100-6151	MS19059-49 (96906)	.BALL BEARING	EA	1	*	*	*	*	*	*	*		3-2	34

SMR CODE	FEDERAL STOCK NUMBER	DESCRIPTION REFERENCE NO. & MFR CODE	USABLE ON CODE	UNIT OF MEA	QTY INC IN UNIT	15-DAY ORG MAINT ALW				30-DAY DS MAINT ALW			1-YR ALW PER 100 EQP CNTY	ILLUSTRATION	
						1-5	6-20	21-50	51-100	1-20	21-50	51-100		FIG NO	ITEM NO
GROUP 06 TRIPOD ASSEMBLY															
P--O--	1730-035-6635	50B25235 (98750)	LEG, JACK, EXTENSION	EA	12	*	*	*	*	*	*	*		3-5	1
P--O--	5310-877-5795	MS21044N8 (96906)	NUT, SELF-LOCKING, HEXAGON	EA	12	*	*	*	*	*	*	*		3-5	3
P--O--	1730-035-6630	50825213 (98750)	BRACE, JACK, TRIPOD	EA	6	*	*	*	*	*	*	*		3-5	5
P--O--	1730-035-6629	50B25211 (98750)	BRACE, JACK, TRIPOD.....	EA	6	*	*	*	*	*	*	*		3-5	6
P--O--	1730-035-6633	50B25218 (98750)	BAR, TENSION, TRIPOD	EA	1	*	*	*	*	*	*	*		3-5	7
P--O--	5306-206-2868	AN8-6A (88044)	BOLT, MACHINE	EA	3	*	*	*	*	*	*	*		3-5	8
P--O--	5310-584-5272	MS35338-48 (96906)	WASHER, LOCK	EA	3	*	*	*	*	*	*	*		3-5	9
P--O--	1730-035-6645	500C25244 (07878)	WEB, BRACE, TRIPOD JACK	EA	1	*	*	*	*	*	*	*		3-5	10
P--O--	1730-035-6632	50B25216 (98750)	BRACE, JACK, TRIPOD.....	EA	6	*	*	*	*	*	*	*		3-5	11
P--O--	1730-035-6631	50B25214 (97850)	BRACE, JACK, TRIPOD	EA	6	*	*	*	*	*	*	*		3-5	12
P--O--	1730-035-6623	50B25145 (98750)	BRACE, JACK, TRIPOD.....	EA	6	*	*	*	*	*	*	*		3-5	15
P--F--	1730-035-6620	50A25203 (98750)	CONNECTING LINK, RIGGED.....	EA	6					*	*	*		3-5	16
P--F--	1730-035-6622	50A25248 (98750)	STUD, JACK, TRIPOD.....	EA	3					*	*	*		3-5	17
P--F--	5310-877-5795	MS210441N8 (96906)	NUT, SELF-LOCKING, HEXAGON	EA	6					*	*	*		3-5	18
MAINTENANCE SUPPLIES															
P--O--	5350-221-0872		CLOTH, ABRASIVE-FERRIC OXIDE & QUARTZ, 9 IN. W..... 11 IN. LG, 24 PER CARTON, PFD P-C-458	EA	V	*	*	*	*	*	*	*		MS	
P--O--	6810-238-8119		NAPHTHA, ALIPHATIC-1 Gal CAN, FED TT-N-95.....	GL	V	*	*	*	*	*	*	*		MS	
P--O--	6850-264-6573		DESICCANT, ACTIVATED-200 BAGS, 5 GAL PAIL ... IL-D-3464	BG	V	*	*	*	*	*	*	*		MS	
P--O--	6850-264-9038		DRY CLEANING SOLVENT-LIQUID, 5 GAL DRUM, .. FED P-D-680	GL	V	*	*	*	*	*	*	*			
P--O--	7510-663-0196		TAPE, PRESSURE SENSITIVE ADHESIVE-2 IN. W, 60..... YD ROLL, FED PPP-T-60	YD	V	*	*	*	*	*	*	*		MS	
P--O--	8010-239-5736		WHITE LEAD, BASIC CARBONATE-PASTE, 1 LB CAN FED TT-W-251	LB	V	*	*	*	*	*	*	*			
P--O--	8010-297-2092		ENAMEL-GRAY, 1 PT CAN, MIL-E-7729.....	PT	V	*	*	*	*	*	*	*		MS	
P--O--	8030-275-8093		PLASTIC COATING COMPOUND, STRIPPABLE-..... SPRAYABLE, 5 GAL PAIL, MIL-C-16555	GL	V	*	*	*	*	*	*	*		MS	
P--O--	8135-753-4661		BARRIER MATERIAL, GREASE PROOPED-36 IN. W, 100 YD ROLL, MIL-B-1218	YD	V	*	*	*	*	*	*	*		MS	
P--O--	9150-223-4134		HYDRAULIC FLUID, PETROLEUM BASE-1 GAL CAN, MIL-H-5606	GL	V	*	*	*	*	*	*	*		MS	
P--O--	9150-263-3490		LUBRICATING OIL, GENERAL. PURPOSE-1 QT CAN MIL-L-7870	QT	V	*	*	*	*	*	*	*		MS	

SMR CODE	FEDERAL STOCK NUMBER	DESCRIPTION REFERENCE NO. & MFR CODE	USABLE ON CODE	UNIT OF MEA	QTY INC IN UNIT	15-DAY ORG MAINT ALW				30-DAY DS MAINT ALW			1-YR ALW PER 100 EQP CNTY	ILLUSTRATION	
						1-5	6-20	21-50	51-100	1-20	21-50	51-100		FIG NO	ITEM NO
P--O--	5310-492-3342	42A13022 (80049)	.NUT-PACKING, RELEASE STEM	EA	1	*	*	*	*	*	*	*		3-2	35
P--O--	5330-492-3341	42A13021 (80049)	.PACKING, PREFORMED	EA	1	*	*	*	*	*	*	*		3-2	36
X2-F--		52D6861 (98750)	.BODY, PUMP, TRIPOD JACK	EA	1									3-2	38
GROUP 04 CYLINDER AND RAM ASSEMBLY															
P--O--	5306-206-4539	800399 (18876)	BOLT, MACHINE	EA	3	*	*	*	*	*	*	*		3-3	1
P--O--	5310-584-5272	MS35338-48 (96906)	WASHER, LOCK.....	EA	3	*	*	*	*	*	*	*		3-3	2
P--O--	5310-877-5795	MS21044N8 (96906)	NUT, SELF-LOCKING, HEXAGON	EA	3	*	*	*	*	*	*	*		3-3	3
P--O--	5306-206-2868	AN8-6A (88044)	BOLT, MACHINE	EA	3	*	*	*	*	*	*	*		3-3	6
P--O--	5310-584-5272	MS35338-48 (96906)	WASHER, LO	EA	3	*	*	*	*	*	*	*		3-3	7
P--O--	1730-670-9850	42A7530 (98750)	SOCK(T, JACK PAD	EA	1	*	*	*	*	*	*	*		3-3	8
		50D25181 (80049)	RAM ASSEMBLY	EA	1									3-3	
P--O--	1730-035-6612	48A7878-4 (98750)	.ROD INDICATOR, JACK	EA	1	*	*	*	*	*	*	*		3-3	12
P--O--	1730-035-6614	49B6450-4 (98750)	.TUBE ASSEMBLY, RISE INDICATOR	EA	1	*	*	*	*	*	*	*		3-3	13
P--O--	5310-720-8549	MS35426-13 (96906)	.NUT, PLAIN, WING.....	EA	1	*	*	*	*	*	*	*		3-3	14
P--O--	1730-492-3373	42A7529 (98750)	.SOCKET, JACK PAD	EA	1	*	*	*	*	*	*	*		3-3	15
X2-O--		51B7332 (80049)	.NUT, PLAIN, KNURLED.....	EA	1									3-3	16
P--F--	1730-492-3328	42A12988 (98750)	.PLUNGER, JACK EXTENSION, SCREW RETAINING	EA	1					*	*	*		3-3	18
P--F--	1730-331-6400	42A12989 (98750)	.SPRING, HELICAL, COMPRESSION	EA	1					*	*	*		3-3	19
P--F--	1730-035-6636	50B25239 (98750)	.COLLAR, JACK, INDICATOR	EA	1					*	*	*		3-3	22
P--F--	1730-674-8595	43A12190-4 (97151)	.NUT, JACK RAM LOCK	EA	1					*	*	*		3-3	23
P--F--	1730-035-6625	50B25168 (98750)	.BEARING, RAM	EA	1					*	*	*		3-3	24
P--F--	1730-203-4215	50B25152 (98750)	.BEARING, SLEEVE	EA	1					*	*	*		3-3	28
P--F--	5330-599-1000	MS28775-338 (96906)	.PACKING, PREFORMED.....	EA	1					*	*	*		3-3	29
P--F--	1730-331-9697	50B25175-2 (98750)	.RETAINER, PACKING	EA	1					*	*	*		3-3	30
P--F--	1730-537-2075	50B25222 (98750)	.BEARING, SLEEVE	EA	1					*	*	*		3-3	31
P--F--	1730-035-6640	50C25205 (98750)	.RAM, JACK, HYDRAULIC	EA	1					*	*	*		3-3	32
P--O--	1730-618-8290	154906-6-6-120 (00624)	HOSE ASSEMBLY, RUBBER.....	EA	1	*	*	*	*	*	*	*		3-3	39
GROUP 05 FOOT ASSEMBLY															
P--O--	1730-861-3066	53D6830 (80049)	FOOT, HYDRAULIC JACK.....	EA	3	*	*	*	*	*	*	*		3-4	
P--O--	5340-804-2244	MS24380-6SU (96906)	.CASTER, SWIVEL.....	EA	3	*	*	*	*	*	*	*		3-4	3
P--F--	1730-670-9861	53C6832 (98750)	.MOUNT, JACK CASTER	EA	3					*	*	*		3-4	8
P--F--	5310-167-0821	AN960-616 (88044)	.WASHER, FLAT	EA	3					*	*	*		3-4	9
P--F--	5310-176-8110	AN320-6 (88044)	.NUT, SLOTTED, HEXAGON	EA	3					*	*	*		3-4	10
P--F--	5315-842-3044	MS24665-283 (96906)	.PIN, COTTER	EA	3					*	*	*		3-4	11

**SECTION VII
FEDERAL STOCK NUMBER AND REFERENCE NUMBER INDEX**

STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER	STOCK NUMBER	FIGURE NUMBER	ITEM NUMBER
1730-035-6612	3-3	12	1730-861-3066	3-4	
1730-035-6614	3-3	13	3110-100-6151	3-2	30
1730-035-6620	3-5	16	3110-100-6151	3-2	34
1730-035-6622	3-5	17	3110-100-6163	3-2	28
1730-035-6623	3-5	15	4730-221-2138	3-2	10
1730-035-6625	3-3	24	4730-278-2973	3-2	31
1730-035-6629	3-5	6	5305-253-5622	3-2	4
1730-035-6630	3-5	5	5305-253-5622	3-2	18
1730-035-6631	3-5	12	5306-206-2868	3-3	6
1730-035-6632	3-5	11	5306-206-2868	3-5	8
1730-035-6633	3-5	7	5306-206-4539	3-3	1
1730-035-6634	3-1		5310-167-0821	3-4	9
1730-035-6635	3-5	1	5310-167-0823	3-1	3
1730-035-6636	3-3	22	5310-176-8110	3-4	10
1730-035-6640	3-3	32	5310-492-3342	3-2	35
1730-035-6645	3-5	10	5310-584-5272	3-1	4
1730-035-6651	3-2		5310-584-5272	3-3	2
1730-035-6673	3-2	16	5310-584-5272	3-3	7
1730-203-4215	3-3	28	5310-584-5272	3-5	9
1730-203-4861	3-2	24	5310-720-8549	3-3	14
1730-212-4500	3-2	9	5310-877-5795	3-3	3
1730-331-6400	3-3	19	5310-877-5795	3-5	3
1730-331-9697	3-3	30	5310-877-5795	3-5	18
1730-492-3328	3-3	18	5315-842-3044	3-4	11
1730-492-3343	3-2	11	5330-492-3341	3-2	36
1730-492-3373	3-3	15	5330-584-0263	3-2	23
1730-492-3979	3-2	20	5330-599-1000	3-3	29
1730-492-4002	3-2	1	5340-804-2244	3-4	3
1730-509-8182	3-2	33	5350-221-0872	MS	
1730-514-4700	3-2	22	6810-238-8119	MS	
1730-516-2019	1-1		6850-264-6573	MS	
1730-537-2075	3-3	31	6850-264-9038	Ms	
1730-568-0690	3-2	29	7510-663-0196	MS	
1730-568-0691	3-2	27	8010-239-5736	MS	
1730-618-8290	3-3	39	8010-297-2092	MS	
1730-670-9850	3-3	8	8030-275-8093	MS	
1730-670-9861	3-4	8	8135-753-4661	MS	
1730-670-9869	3-2	2	9150-223-4134	MS	
1730-674-8595	3-3	23	9150-263-3490	MS	

REFERENCE NUMBER	MFG CODE	FIG NUMBER	ITEM NUMBER	REFERENCE NUMBER	MFG CODE	FIG NUMBER	ITEM NUMBER
AN320-6	88044	3-4	10	43A12190-4	97151	3-3	23
AN8-6A	88044	3-3	6	43A12192-3	98750	3-2	24
AN8-6A	88044	3-5	8	43A12196	98750	3-2	2
AN932U2	88044	3-2	31	48A7878-4	98750	3-3	12
AN960-616	88044	3-4	9	48A7880	98750	3-2	20
AN960-816	88044	3-1	3	48B7861	98750	3-2	1
MS19059-49	96906	3-2	30	48B7863-2	98750	3-2	22
MS19059-49	96906	3-2	34	48C7860	80049	3-2	5
MS19059-52	96906	3-2	28	49B6450-4	98750	3-3	13
MS20913-3S	96906	3-2	10	50A25203	98750	3-5	16
MS21044N8	96906	3-3	3	50A25248	98750	3-5	17
MS21044N8	96906	3-5	3	50B25145	98750	3-5	15
MS21044N8	96906	3-5	18	50B25152	98750	3-3	28
MS21318-41	96906	3-2	4	50B25168	98750	3-3	24
MS21318-41	96906	3-2	18	50B25175-2	98750	3-3	30
MS24380-6SU	96906	3-4	3	50B25211	98750	3-5	6
MS24665-283	96906	3-4	11	50B25213	98750	3-5	5
MS28775-218	96906	3-2	23	50B25214	98750	3-5	12
MS28775-338	96906	3-3	29	50B25216	98750	3-5	11
Ms35338-48	96906	3-1	4	50B25218	98750	3-5	7
MS35338-48	96906	3-3	2	50B25222	98750	3-3	31
MS35338-48	96906	3-3	7	50B25223	98750	3-1	
Ms35338-48	96906	3-5,	9	50B25235	98750	3-5	1
MS35426-13	96906	3-3	14	50B25239	98750	3-3	22
154906-6-6-120	00624	3-3	39	50B7763	98750	3-2	9
42A12988	98750	3-3	18	50C25205	98750	3-3	32
42A12989	98750	3-3	19	50C25244	07878	3-5	10
42A12998	98750	3-2	33	50D25181	80049	3-3	
42A13003	80049	3-2	29	50J25178	80049	1-1	
42A13004	80049	3-2	27	51B7332	80049	3-3	16
42A13016	80049	3-2	7	51D7138	98750	3-2	
42A13021	80049	3-2	36	52B6863	98750	3-2	16
42A13022	80049	3-2	35	52B6864	98750	3-2	21
42A13025	98750	3-2	11	52D6861	98750	3-2	38
42A7529	98750	3-3	15	53C6832	98750	3-4	8
42A7530	98750	3-3	8	53D6830	80049	3-4	
42B13048	98750	3-1	5	800399	18876	3-3	1

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