

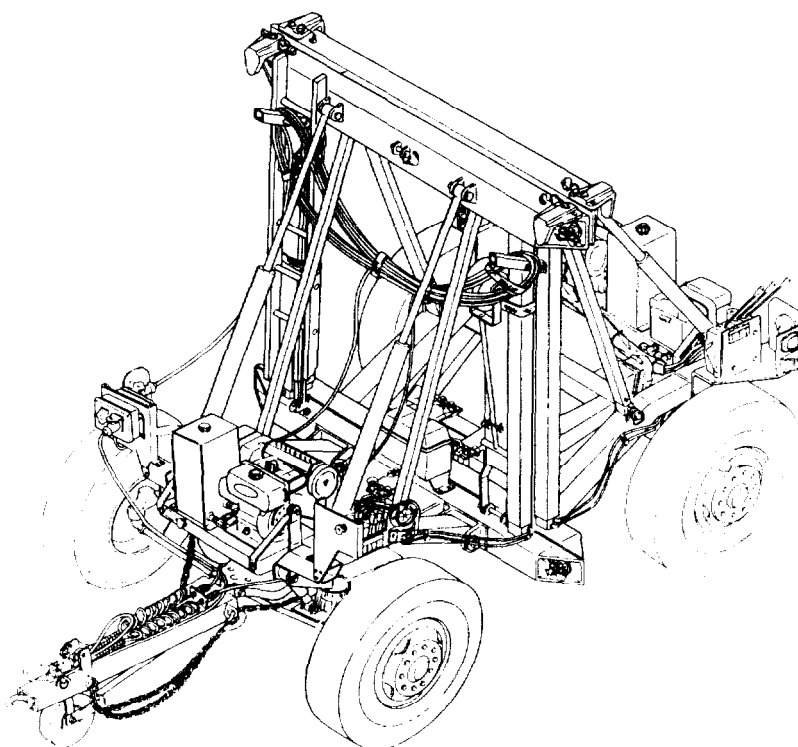
TM 9-2330-390-14&P

TECHNICAL MANUAL

**OPERATOR'S, UNIT, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)**

FOR

**DOLLY SET: LIFT, TRANSPORTABLE SHELTER,
7-1/2 TON, M1022A1
(NSN 2330-01-378-9997) (EIC: CML)**



Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

APRIL 1996

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DEPARTMENT OF THE ARMY
Washington, D.C., 1 April 1996

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Current as of 22 March 1996

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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual, direct to: Commander, U.S. Army Tank-Automotive and Armaments Command, ATTN: AMSTA-IM-OPIT, Warren, MI 48397-5000. A reply will be furnished to you.

You may also provide DA Form 2028-2 information to TACOM via datafax or e-mail.

- TACOM's fax number is: DSN 786-6323
- TACOM's e-mail address is: tacom-tech-pubs@cc.army.mil

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HOW TO USE THIS MANUAL

This manual is designed to help operate and maintain the M1022A1 Dolly Set. It describes the Operator/Crew, Unit, Direct Support, and General Support Maintenance prescribed by the Maintenance Allocation Chart (MAC) (Appendix B) and the Source, Maintenance, and Recoverability (SMR) Codes (Appendix C).

FEATURES OF THIS MANUAL:

- A table of contents is provided at the beginning of this manual. An index of all paragraphs contained within a section is found at the beginning of each section.
- Health hazard icons are identified with applicable WARNINGS to assist in easy recognition of a potential hazard. The following list identifies icons used within this manual and an explanation of the associated hazard.



Material emits radioactive energy and can injure human tissue or organs.



Material is poisonous or is a danger to your life.



Material may explode if subjected to high temperatures, sources of ignition, or high pressure.



Material can ignite and burn you.



Material emits vapors which present a danger to your life or health.



Material will cause burns or irritation of human skin or tissue.



Material will cause injury to your eyes.

HOW TO USE THIS MANUAL (Con't)

FEATURES OF THIS MANUAL (Con't):

- WARNINGS, CAUTIONS, and NOTES, subject headings, and other important information are highlighted in **BOLD** print as a visual aid.

WARNING

A **WARNING** indicates a hazard which can result in death or serious injury.

CAUTION

A **CAUTION** is a reminder of safety practices or directs attention to usage practices that will prevent damage to equipment.

NOTE

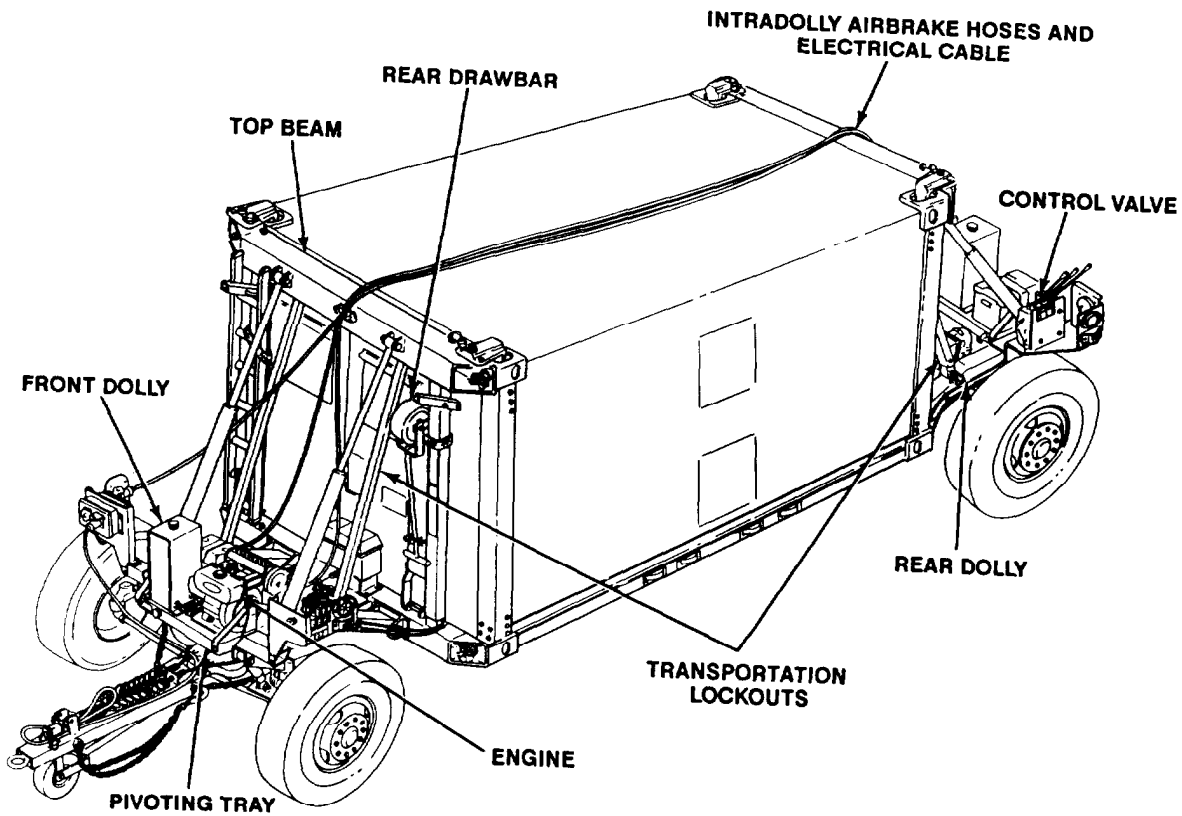
A **NOTE** is a statement containing information that will make the procedure easier to perform.

- Statements and words of particular importance are printed in capital letters to create emphasis.
- Instructions are located together with illustrations that show the specific task on which the technician is working.
- Equipment locator illustrations are provided as required throughout the operator and maintenance procedures. These illustrations are for use in locating components and assemblies of the dolly set. It should be noted that the locator illustrations do not always reflect the equipment conditions listed in the "Initial Setup" at the beginning of each task.
- Dashed leader lines used in illustrations indicate that called out items are not visible (i.e., they are located *within* the structure). Dashed leader lines in the Lubrication Chart indicate that lubrication is required on BOTH sides of the equipment.
- This equipment contains metric components and requires metric tools; therefore, technical instructions include metric in addition to standard units. A metric conversion chart is provided on the inside back cover.
- A Repair Parts and Special Tools Lists (RPSTL) is provided at Appendix C.
- A standard torque chart and an engine torque chart are provided at Appendix H.
- An alphabetical index is provided at the end of the manual to assist in locating information not readily found in the table of contents.

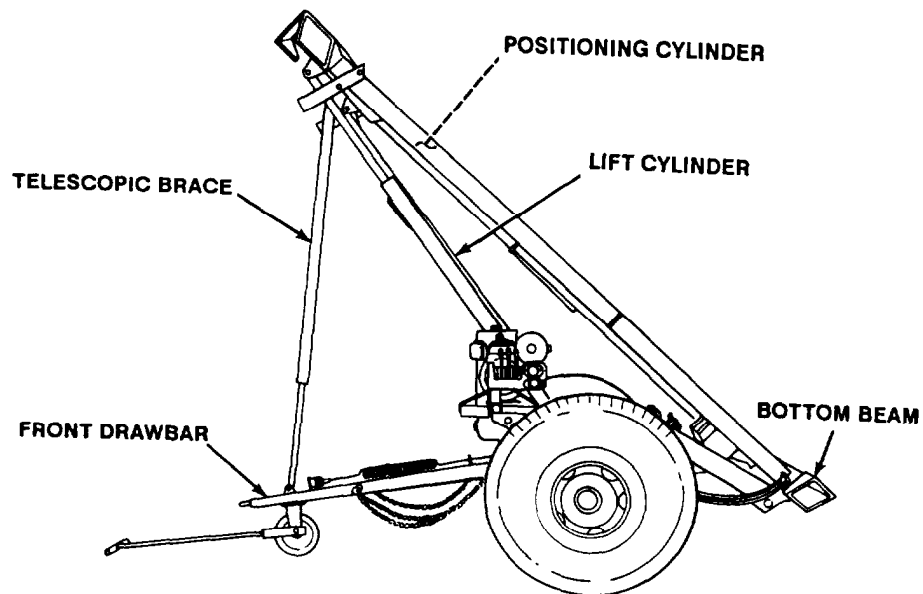
HOW TO USE THIS MANUAL (Con't)

FOLLOW THESE GUIDELINES WHEN YOU USE THIS MANUAL:

- Read through this manual and become familiar with its contents before attempting to operate or maintain the dolly set.
- Read the warning summary provided at the beginning of this manual before performing any operator or maintenance tasks.
- In the actual operation and maintenance tasks, follow all WARNINGS, CAUTIONS, and NOTES. These are given immediately preceding the procedural steps to which they apply. If these instructions are not followed or care is not taken, injury to personnel or equipment damage may result.
- Within a chapter, section, or paragraph, headings are used to help group the material and assist you in quickly finding tasks. Read all preliminary information found at the beginning of each task. After completing a task, ALWAYS perform the follow-on maintenance at the end of the task.



TRANSPORT MODE



MANEUVERING POSITION

CHAPTER 1

INTRODUCTION

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1-1. SCOPE.

a. Type of Manual. Operator's, Unit, Direct Support, and General Support Maintenance Manual (Including Repair Pans and Special Tools Lists).

b. Equipment Name and Model Number. Dolly Set: Lift, Transportable Shelter, 7½ Ton, M1022A1.

c. Purpose of Equipment.

(1) The dolly set is designed to provide full ground mobility for International Standard Organization (ISO) containers and shelters up to 15,000 lb (6810 kg) gross maximum weight.

(2) The M1022A1 Dolly Set is designed to lift at ends of containers. With the installation of a side lift kit, the M1022A1 provides both side lift and end lift capabilities.

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

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, *The Army Maintenance Management System (TAMMS)*.

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

For destruction of Army materiel to prevent enemy use, refer to TM 750-244-6.

1-4. PREPARATION FOR STORAGE OR SHIPMENT.

For information on preparing the dolly set for storage or shipment, refer to Chapter 4, Section XVIII.

1-5. OFFICIAL NOMENCLATURE, NAMES, AND DESIGNATIONS.

Official nomenclature is generally used throughout the manual; however, some nomenclature has been abbreviated or shortened to make the procedures easier to follow. Table 1-1 provides a cross-reference between the official nomenclature and the abbreviated nomenclature.

Table 1-1. Nomenclature Cross-reference List.

Official Nomenclature	Abbreviated Nomenclature
Auxiliary Engine	Engine
Jack Stand	Trestle
Lockout Brace	Transportation Lockout
Oil Level Gage	Dipstick
O-ring	Preformed Packing
Preformed Packing	O-ring
Push-pull Valve	Airbrake Valve
Steering Arm Assembly	Steering Link
Twist Lock Assembly	Twist Lock

1-6. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs).

If your dolly set needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF Form 368 (Product Quality Deficiency Report). Mail it to us at: Commander, U.S. Army Tank-Automotive Command, ATTN: AMSTA-QT, Warren, MI 48397-5000. We'll send you a reply.

1-7. WARRANTY INFORMATION.

The M1022A1 Dolly Set is under warranty by the Engineered Systems Company in accordance with TB 9-2330-390-12.

1-8. SAFETY, CARE, AND HANDLING.

a. **First Aid.** Refer to FM 21-11, First Aid for Soldiers, for first aid treatments of injured personnel. IMMEDIATELY seek medical attention for any injury. The following first aid procedures should be used to prevent further injury until medical attention is available.

(1) **Exhaust Gases or Toxic Fumes.** Expose person to fresh air and keep warm. DO NOT permit person to move. If necessary, administer Cardiovascular Pulmonary Resuscitation (CPR) and immediately seek medical attention.

(2) Chemical Burns.

(a) Eyes. Flush eyes with cold water for no less than 15 minutes. Immediately seek medical attention.

(b) Skin. Flush area with large amounts of cold water until all acid is removed. Seek medical attention as required.

1-8. SAFETY, CARE, AND HANDLING (Con't).

- (c) Internal. Drink large amounts of water or milk followed by milk of magnesia, beaten egg, or vegetable oil. Immediately seek medical attention.
- (d) Clothing or Equipment. Immediately wash area with large amounts of cold water. Neutralize acid with baking soda or household ammonia.

(3) **Foreign Object in Eye.** DO NOT attempt to remove foreign object from eye as object may cause cuts and abrasions. Close eye, cover with gauze and tape, and immediately seek medical attention.

b. Personnel and Dolly Set Precautions.

- (1) Read and become familiar with all WARNINGS in the warning summary at the front of this manual.
- (2) WARNING decals on the dolly set provide safety instructions and identify specific hazards which, if not followed, may result in serious injury or death to personnel.
- (3) Throughout this manual, WARNINGS and CAUTIONS are given immediately preceding the procedural steps to which they apply. Read these WARNINGS and CAUTIONS and follow them exactly.
- (4) When operating or maintaining the dolly set, keep hands, feet, and clothing clear of all moving parts. Remove watches, rings, and other jewelry which could catch on moving parts and cause injury.
- (5) When performing maintenance, protect yourself against injury. Wear protective gear such as safety goggles or lenses, safety shoes, rubber apron, gloves, etc.
- (6) Notify others in the area if you are handling flammable materials. Know location of fire extinguishers and emergency procedures in case of accident or fire.
- (7) Never operate the engine in a closed area unless there is good ventilation. Be alert for signs of carbon monoxide poisoning. If symptoms are noticed, immediately evacuate and ventilate the area.
- (8) Never leave dolly set unattended while engine is running.
- (9) Before performing maintenance, ensure that the dolly set is secured against movement. Park dolly set on level ground with rear dolly parking brakes applied. If parking brakes are not functioning, chock wheels.
- (10) When lifting heavy parts, have someone help you. Ensure that lifting or jacking equipment is working properly, is of sufficient capacity for the assigned task, and is secure against slipping.

1-9. CORROSION PREVENTION AND CONTROL (CPC).

- a. Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any corrosion problems with the dolly set be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.
- b. While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem.
- c. If a corrosion problem is identified, report it using SF Form 368 (Product Quality Deficiency Report). Use of key words such as "corrosion", "rust", "deterioration", or "cracking" will ensure that the information is identified as a CPC problem. Submit the form to the address specified in DA Pam 738-750.