

TECHNICAL MANUAL

UNIT MAINTENANCE

FOR

**CONTAINER CRANE, 40-TON,
ROUGH TERRAIN, MODEL RT875CC
NSN 3810-01-205-5716**

This manual shall be used in place of the Unit maintenance portion of the GROVE Manufacturing Company Commercial Maintenance Manual No. 7-187-000004-2 dated 1 Feb 89 and the PAT Equipment Corp. Troubleshooting Manual DS350M dated January 1989v that were originally overpacked with the crane.

Approved for public release; distribution is limited

H E A D Q U A R T E R S , D E P A R T M E N T O F T H E A R M Y

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UNIT MAINTENANCE MANUAL
FOR
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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: US Army Tank-Automotive Command, Attn: AMSTA-MB, Warren, MI 48090-5000. A reply will be furnished to you.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

SCOPE

Type of Manual: Organizational Maintenance

Model Number and Equipment Name:

RT875CC - Container Crane, Rough Terrain
Wheel Mounted, Hydraulic, Diesel Powered

Purpose of Equipment: Provides for 360 degree boom travel and 80, 000 lbs (40 Tons) lifting capacity in rough terrain conditions.

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.

Accidents involving injury to personnel or damage to materiel will be reported on DA Form 285 (Accident Report) in accordance with AR385-40.

Explosives and ammunition malfunctions will be reported in accordance with AR75-1.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Demolition of materiel to prevent enemy use will be in accordance with the requirement of TM 750-244-3 (Procedures for Destruction of Equipment to Prevent Enemy Use for U.S. Army).

PREPARATION FOR STORAGE OR SHIPMENT

Before the Container Crane is stored for a long period of time, shipped to a distant location, or returned to service after a period of time, certain guidelines/procedures must be followed. Refer to Chapter 18, Preparation for Storage and Shipment.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your RT875CC Container Crane 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. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at U.S. Army Tank Automotive Command, Attn: AMSTA-QRT, Warren, MI 48090. We'll send you a reply.

WARRANTY INFORMATION

The RT875CC Rough Terrain Container Crane is warranted by Grove Manufacturing Company for 18 months. Warranty starts on the date found on DA Form 2410 or DA Form 2408-16 in the logbook. Report all defects in materiel or workmanship to your supervisor who will take appropriate action. Refer to Warranty Technical Bulletin TB 5-3810-306-14.

Section II. EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

RT875CC Rough Terrain Container Crane

- Axle steering accomplished by utilizing hydraulic steer cylinders
- Welded steel frame
- Engine mounted at rear of crane
- Superstructure
- Sliding beam outriggers are integral with carrier frame
- Remote mounted six speed transmission
- Four-wheel drive

Capability and Features

- Automatic axle oscillation when superstructure travels more than 5 degrees from-travel position
- All crane functions controlled from cab
- Superstructure capable of 360 degree rotation in either direction
- Lifting is provided by main and auxiliary hoists
- Equipped with two section, trapezoidal boom
- Integral fifth wheel, to which rear axle is mounted, provides axle oscillation

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

- Counterweight. Bolted onto turntable to be part of turntable assembly. Weighs 12, 500 pounds.
- Hookblock. Provides lifting capability while boom is retracted. Capable of lifting 40 tons and utilizes one-piece pivot block with a safety latch.
- Overball Ball. Mounted on the auxiliary boom-nose. Ball can be stored during travel. Capable of lifting 5 tons.
- Hydraulic Tank. 165 gallon capacity. Supplies hydraulic oil to hydraulic valve banks. Located on right side of carrier frame. Uses a magnetized drain plug to collect metal particles in tank and a sight gauge to indicate oil level.
- Rear Outrigger. Mounted on rear stabilizer box. Extends when selector valve in outrigger control panel is operated. Stabilizes rear portion of crane during lifting operations.
- Diesel Engine. Cummins 6CTA8.3 turbo-charged diesel engine. Speed is controlled by a foot operated air throttle valve. Access to engine is gained through two side doors in hood assembly.

