

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT

MAINTENANCE MANUAL

CRANE, TRUCK MOUNTED, 3/4 CU. YDS., 20 TON,
W/CLAMSHELL, DRAGLINE AND BACKHOE ATTACHMENTS,
G.E.D., (HARNISHFEGER MODEL M320T2)

FSN 3810-151-4431

This copy is a reprint which includes current pages from Changes 1 and 2

HEADQUARTERS, DEPARTMENT OF THE ARMY

MAY 1971

TECHNICAL MANUAL

No. 5-3810-294-34

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 13 May 1971**DIRECT AND GENERAL SUPPORT MAINTENANCE MANUAL****CRANE, TRUCK MOUNTED, 3/4 CU. YDS., 20 TON W/CLAMSHELL,****DRAGLINE AND BACKHOE ATTACHMENTS, G.E.D****(HARNISHFEGGER MODEL M320T2)****FSN 3810-151-4431**

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PART ONE

CRANE (REVOLVING FRAME)

CHAPTER 1 INTRODUCTION

Section I. GENERAL

1-1. Scope

a. This manual contains instructions for the use of Direct Support and General Support personnel maintaining the model M320T2 truck crane. It gives instructions for maintenance, as specified in the Maintenance Allocation Chart (MAC), which is beyond the scope of Operator/Crew or Organizational Maintenance personnel.

b. This manual is divided into two parts. Part One covers repair instructions for the crane (revolving frame) portion of the truck crane. Part Two covers repair of the carrier portion of the truck crane. Maintenance personnel should read the instructions contained in this manual before repairing the equipment.

c. Refer to appendix A for a list of publications applicable to this manual.

d. Numbers in parentheses on illustrations indicate

quantity. Numbers preceding nomenclature callouts on illustrations indicate the preferred maintenance sequence.

1-2. Forms and Records

a. Maintenance records and reports which are used by maintenance personnel at all levels are listed in and prescribed by TM 38-750.

b. Report of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028, (Recommended Changes to Publications) and forwarded direct to Commanding General, U. S. Army Mobility Equipment Command, ATTN: AMSME-MPP, 4300 Goodfellow Blvd., St. Louis, Mo. 63120. --

Section II. DESCRIPTION AND DATA

1-3. Description

a. A general description of the model M320T2 truck crane and information pertaining to the identification plates are contained in TM 5-3810-294-10 and TM 5-3810-294-20. Equipment operating instructions are also contained in TM 5-3810-294-10.

b. A detailed description of specific components and assemblies is contained, as applicable, in the maintenance sections of this manual.

14. Tabulated Data

a. *General.* This section supplements the tabulated data contained in TM 5-3810-294-10 and TM 5-3810-294-20. (Refer to these technical manuals as required.)

b. *Tabulated data.*

(1) *Truck crane.*

ManufacturerHarnischfeger Corporation
Model.....M320T2

(2) *Carrier engine.*

ManufacturerInternational Harvester Company

Model.....UV-549
Number of cylinders8

Horsepower ,201 net hp at 2800 rpm
..... full load

Displacement 549 cubic inches

Ignition timing Top dead center

Governed speed (high idle)..... 2800+10 rpm

Low idle speed 450+50 rpm

Maximum oil pressure

(above 1500 rpm) 50 to 55 pounds per square inch

Minimum oil pressure

(idling) 15 to 20 pounds per square inch

Intake and exhaust valve

tappet clearance Engine equipped with hydraulic valve lifters. Tappet clearance adjustments not required.

Electrical system 24 volts, negative ground

Spark plug gap 0.028 to 0.033 inch

Distributor point gap 0.017 inch

(3) *Crane engine.*

Manufacturer International Harvester Company