

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE REPAIR PARTS
AND SPECIAL TOOLS LISTS
CRANE-SHOVEL, BASIC UNIT, TRUCK MOUNTED: 20 TON, $\frac{3}{4}$ CU. YD;
GASOLINE ENGINE, 6 X 6 (AMERICAN HOIST AND DERRICK MODELS)
MODEL 2360 (NON-WINTERIZED) FSN 3810-989-0505
MODEL W-2360 (WINTERIZED) FSN 3810-989-0506

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HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1970

ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS

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Current as of 22 June 1970**

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**SECTION I.
INTRODUCTION**

1. Scope

This manual lists repair parts required for the performance of organizational maintenance of the crane-shovel.

2. General

a. The Repair Parts List is arranged as follows:

(1) Individual parts and major assemblies are listed alphabetically by item name within the numbered functional groups.

(2) Assembly components and subassemblies are indented and listed alphabetically by item name under major assemblies.

b. This Repair Parts and Special Tools List is divided into the following sections:

(1) *Prescribed Load Allowance (PLA) - Section II.* A consolidated listing of repair parts quantitatively allocated for initial stockage at the organizational level. This is a mandatory stockage allowance.

(2) *Special Tools, Test and Support Equipment -Section III.* A list of special tools, test and support equipment authorized for the performance of maintenance at the organizational level. (Not Applicable)

(3) *Repair Parts - Section IV.* A list of repair parts authorized for the performance of maintenance at the organizational level.

(4) *Federal Stock Number and Reference Number Index - Section V.* A list of Federal stock numbers followed by reference numbers in ascending alpha-numeric sequence, cross-referenced to index number.

3. Explanation of Columns

The following provides an explanation of columns in the tabular lists in sections II, III, and IV:

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 Applied to repair parts which are stocked in or supplied from GSA/DSA or Army supply system, and authorized for use at indicated maintenance categories.

M Applied to repair parts which are not procured or stocked but are to be manufactured at indicated maintenance categories.

A Applied to assemblies which are not procured or stocked as such, but are made up of two or more units, each of which carry individual stock numbers and descriptions and are procured and stocked and can be assembled by units at indicated maintenance categories.

Code Explanation

X Applied to parts and assemblies which are not procured or stocked, the mortality of which is normally below that of the applicable end item, and the failure of which should result in retirement of the end item from the supply system.

X1 Applied to repair parts which are not procured or stocked, the requirement for which will be filled by use of the next higher assembly or component.

X2 Applied to repair parts which are not stocked. The indicated maintenance category requiring such repair parts will attempt to obtain them through cannibalization; if not obtainable through cannibalization, such repair parts will be requisitioned with supporting justification through normal supply channels.

G Applied to major assemblies that are procured with PEMA (Procurement Equipment Missiles Army) funds for initial issue only, to be used as exchange assemblies at DSU and GSU maintenance level. These assemblies will not be stocked above DS or GS level or returned to depot supply level.

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

Code Explanation

O Organizational maintenance

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

Code Explanation

R Applied to repair parts and assemblies which are economically repairable at DSU and GSU activities and normally are furnished by supply on an exchange basis.

T Applied to high dollar value recoverable repair parts which are subject to special handling and are issued on an exchange basis. Such repair parts normally are repaired or overhauled at depot maintenance activities.

U Applied to repair parts specifically selected for salvage by reclamation units because of precious metal content, critical materials, high dollar value reusable casings or castings.

(4) This column also lists, below the SMR code, an index number for each item in ascending numerical sequence, which is used to locate items in the publication when the Federal stock number and/or reference number is known.

b. *Federal Stock Number.* This column indicates the Federal stock number for the item.

c. *Description.* This column indicates the Federal item name and any additional description of the item required. A part number or other reference number is followed by the applicable five-digit Federal supply code for manufacturers in parentheses. Material required for manufacture or fabrication is identified. Repair parts quantities included in kits, sets and assemblies, not applicable to the end item, are shown in parenthesis following the repair part name.

d. *Unit of Issue.* This column indicates the unit used as a basis for issue, e.g., ea, pr, ft, yd, etc.

e. *Quantity Incorporated in Unit.* This column indicates the quantity of the item used in the functional group.

f. *Fifteen-Day Organizational Maintenance Allowance, Column (3) of Section II and Column (6) of Section III and IV.*

(1) The allowance columns are divided into four subcolumns. Indicated in each subcolumn is the quantity of items authorized for the number of equipments supported. 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 appropriate density column applicable to the number of items supported to obtain the total quantity of repair parts authorized.

(3) 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 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.

(4) Subsequent changes to allowances will be limited as follows: No change in the range of items is authorized. If additional items are considered necessary, recommendation should be forwarded to U.S. Army Mobility Equipment Command for exception or revision to the allowance list. Revisions to the range of items authorized will be made by this Command based upon engineering experience, demand data, or TAERS information.

h. *Illustration, Column (7).* This column is divided as follows:

(1) *Figure number, column (7) (a).* Indicates the figure number of the illustration in which the item is shown.

(2) *Item number, column (7) (b)* Indicates the callout number used to reference the item in the illustration.

4. Special Information

a. Repair parts mortality has been based on 3,000 hours operation per year for Crane (sec. IV, part I) and 1200 hours operation per year for Carrier (sec. IV, part II) and 3000 hours operation per year for winterization (sec. IV, part III).

b. Parts which require manufacture or assembly at a category higher than that authorized for installation will indicate in the source column the higher category.

c. The following publications pertain to the crane-shovel and its components:

TM 5-3810-227-15 Operator, organizational, DS, GS, and depot maintenance manual.

LO 5-3810-227-15-1-2-3-4 Lubrication order

5. How to Locate Repair Parts

a. When Federal stock number or reference number is unknown:

(1) *First.* Using the table of contents, determine the functional group within which the repair part belongs.

(2) *Second.* Find the illustration covering the functional group to which the repair part belongs.

(3) *Third.* Identify the repair part on the illustration, and note the illustration figure and item number of the repair part.

(4) *Fourth.* Using the Repair Parts Listing, find the functional group to which the repair part belongs and locate the illustration figure and item number noted on the illustration.

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 Fed-Stock Number or Reference Number. This index is in ascending alpha-numeric sequence cross-referenced to an index number.

(2) *Second.* Using the Repair Part Listing, find the index number referenced in the Index of Federal Stock Numbers and Reference Numbers.

6. Abbreviations

clcoil
cucubic
degdegree(s)
diadiameter
eaeach
ftfeet (foot)
galgallon (s)
grpgroup
idinside diameter

in.....inch (es)
 lg.....long (length)
 lh.....left hand
 mtg.....mounting (s)
 No.....number
 NPT.....American Standard
 Taper Pipe Thread
 od.....outside diameter (s)
 o/a.....over-all
 rh.....right hand
 rl.....reel (roll)
 spec.....specification
 ss.....steel strip
 thd.....thread (ed)
 thk.....thick (ness)
 v.....volt(s)
 w.....wide(width)
 yd.....yard(s)

<i>Code</i>	<i>Manufacturer</i>
24522.....	Hymphrey Products Division of General Gas Light Co.
24617.....	General Motors Corp.
27182.....	Hansen, A. L. Mfg. Co.
28158.....	Hendrickson Mfg. Co.
30327.....	Imperial Division Imperial-Eastman Group I-T-E Imperial Corporation
37942.....	Mallory, P. R. and Co., Inc.
88151.....	Marathon Electric Mfg. Corp.
89215.....	McCord Corp.
39766.....	Merrill Mfg. Corp.
40152.....	Clark Equipment Co., Construction Machinery Division
41510.....	Morin Mfg. Co.
43334.....	New Departure-Hyatt Bearings Division General Motors Corp.
43766.....	Nice Ball Bearing Co.
46522.....	Hupp, Inc., Cleveland Division
46717.....	Pettibone Mulliken Corp.
48873.....	Prestolite Battery Co., Inc.
57733.....	Stewart-Warner Corp.
58479.....	Quick-Way Division The Superior Equipment Co.
59690.....	Thew & Lorian Co.
61208.....	Twin Disc, Inc.
63477.....	Wagnen Electric Corp., Wagner Division
70040.....	AC Spark Plug Div of General Motors Corp.
70700.....	Alemite Corp.
70281.....	Allen Division Stolper Industries, Inc.
70330.....	King Bee Mfg. Co.
70412.....	Anderson Co., The
70436.....	Arens Controls, Inc.
70485.....	Atlantic India Rubber Works, Inc.
70960.....	North American Rockwell Corp., Universal Joint Plant
71215.....	Rockwell Mfg. Co., Dayton Division
71843.....	Porter, H.K. Co., Inc., Fabricated Metals Products Division Cleveland Forge Works
71951.....	Doray Lamp Co., Inc.
71984.....	Dow Corning Corp.
72113.....	Esco, Corp.
72210.....	Columbus Auto Parts Co.
72560.....	Delco Products Div of General Motors Corp.
72850.....	Bendix Corp., The Motor Components Division
72962.....	Elastic Stop Nut Division of Amerace Esna Corp.
73331.....	Guide Lamp Division of General Motors Corp.
73369.....	Hill, C. L. Mfg. Co., Inc.
73370.....	Fram Corp.
73460.....	Eaton Yale and Towne, Inc., Fuller Transmission Division
73842.....	Goodyear Tire and Rubber Co.

7. Federal Supply Codes for Manufacturers

<i>Code</i>	<i>Manufacturer</i>
00000.....	Ordnance Corps.
00309.....	Morris Eureka Electric Wholesale Supply
00736.....	Air-Maze Division of North American Rockwell Corp., Air-Maze Plant
00779.....	Amp., Inc.
01276.....	Aeroquip Corp., Industrial Division
01428.....	Superior Ball Joint Corp.
02280.....	American Hoist and Derrick Co.
03743.....	Appleton Electric Co.
04225.....	Crump, A. L. and Co.
04255.....	Weatherhead Co., The
04618.....	American Pamcor, Inc.
04681.....	Carworth, Inc.
05608.....	General Electric Distributing Corp.
06853.....	Bendix-Westinghouse Automotive Air Brake Co.
07949.....	Rhoads Sheet Metal Works
08070.....	Parker-Hannifin Corp., Automotive Service Products Division
08484.....	Breeze Corporations, Inc.
09704.....	Seats, Inc.
10941.....	Carver Pump Co.
12603.....	Clark Equipment Co.
13345.....	Fabricast, Inc.
13445.....	Cole & Hersee Co.
13548.....	Truck & Lite Co., Inc.
14351.....	Continental Motors Corp.
15867.....	Kansas City Industries, Inc.
16764.....	Delco & Remy Division of General Motors Corp.
18265.....	Donaldson Co., Inc.
19207.....	Army Tank-Automotive Center
19728.....	Prestolite Co., The Division of Eltra Corp.
19954.....	Eaton Mfg. Co., Marshall Division
24161.....	Gates Rubber Co.
24446.....	General Electric Co.

<i>Code</i>	<i>Manufacturer</i>
74400.....	Hobbs, John, W.
74410.....	Holland Hitch Co.
74462.....	Hoof, C. M. Co.
75124.....	Jambor Tool and Stamping Co.
75255.....	Kem Mfg. Co., Inc.
75535.....	Crosby & Laughlin Div of American Hoist and Derrick Co.
76700.....	Nelson Muffler Corp.
77260.....	Pierce Governor Co., Inc.
77326.....	Pollak Joseph Corp.
77640.....	Ross Gear Division TRW, Inc., Lafayette Plant
77915.....	Sheller-Globe Corp., Steering Wheel Division
78189.....	Illinois Tool Works, Inc., Shakeproof Division
78229.....	Steel City Division Midland-Ross Corp.
78357.....	Snap-Tite, Inc.
78500.....	North American Rockwell Corp., Transmission and Axle Div.
78533.....	Star Marine Engine Works Division of Graymarine Corp.
78570.....	Titeflex Div of Atlas Corp.
79227.....	Watts Regulator Co.
79470.....	Weatherhead Co., The
79960.....	Bendix Corp., The Fuel Devices Division
80406.....	Bethlehem Steel Corp.
80523.....	American Chain and Cable Co., Inc. Automotive and Aircraft Division
80749.....	United Specialties Co.
81240.....	Minneapolis-Moline, Inc.
81263.....	Douglas Division Scott and Fetzer Co, The
81300.....	Dayco Corp.
81321.....	Purolator, Inc.
81332.....	Wayne Foundry and Stamping Co.
81336.....	Chief of Engineers
81349.....	Military Specifications Promulgated by Standardization Div Directorate of Logistic Services DSA
81646.....	Ideal Corporation
82268.....	Sparton Electronics Division of Sparton Corp.
82484.....	Sprague Devices, Inc.
84790.....	Dura Corp. Zanesville Division
85181.....	Deublin Co.

85919.....	Electrical Products Corp.
87249.....	Sittler Bros. Horseradish Co.
88136.....	Trombetta Solenoid Corp.
88907.....	Kiekhaeffer Mercury Division of Brunswick Corp.
89110.....	Amp., Inco.
89473.....	General Electric Distributing Corp.
89698.....	Avis Industrial Corp., Rees Mackworth Division
89749.....	Clark Equipment Co, Industrial Truck Div.
89881.....	Clark Equipment Co., Transmission Div of Automotive Div.
90218	Hadley Mfg. Co., Inc. <i>Code</i> <i>Manufacturer</i>
91595.....	Dura Electric Lamp Co., Inc.
92687.....	National Electric Specialty Co.
94222.....	Southco, Inc.
95019.....	Dana Corp., Spicer Division
96823.....	Macchi Corp.
96906.....	Military Standards Promulgated by Standardization Div Directorate of Logistic Services DSA
97286.....	North American Rockwell Corp., Commercial Products Group
97403.....	Army Engineer Research and Development Laboratories
97562.....	American Cable Division of American Chain and Cable Co., Inc.
98126.....	Freedman Seating Co.
98343.....	Berg Mfg. and Sales Co.
98624.....	Michigan Fleet Equipment Co.
98738.....	Stewart & Warner Electronics Division of Stewart & Warner Corp.

8. Recommendations for Maintenance Manual Improvements

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 Boulevard, St. Louis, Mo. 63120.

SECTION II. PRESCRIBED LOAD ALLOWANCE

(1) FEDERAL STOCK NUMBER	(2) DESCRIPTION	(3) 15-DAY ORGANIZATIONAL MAINTENANCE ALLOWANCE			
		(a)	(b)	(c)	(d)
		USABLE ON CODE 1-5	6-20	21-50	51-100
	PART 1. CRANE-SHOVEL GROUP 01 - ENGINE GROUP 0100 - ENGINE ASSEMBLY				
2805-85-8657	GASKET SET	2	2	4	
2805-966-3822	PARTS KIT	2	2	2	
	GROUP 0106 - ENGINE LUBRICATION SYSTEM				
2805-586-5205	HOSE, OIL FILTER		2	2	
2815-605-5038	LINE ASSEMBLY			2	
2940-114-9026	FILTER ELEMENT, FLUID, PRESSURE 7	31	62	125	
2990-961-9521	CAP ASSEMBLY			2	
5330-599-1285	WASHER, NONBETALLIC 7	31	62	125	
	GROUP 03 - FUEL SYSTEM GROUP 0301 - CARBURETOR				
2910-966-3824	CARBURETOR ASSEMBLY		2	2	
	GROUP 0302 - FUEL PUMPS				
2910-288-0403	BOWL, SEDIMENT, FUEL	2	2	3	
2910-537-0228	PUMP, FUEL	2	2	4	
5330-291-9825	WASHER, NONMETALLIC 2	3	6	13	
	GROUP 0306 - TANKS, LINES, FITTINGS				
2910-442-5844	CAP			2	
2910-961-9520	HOSE ASSEMBLY GASKET 515 (98624)			2	
	GROUP 0308 - ENGINE SPEED GOVERNOR				
2990-961-5576	GOVERNOR ASSEMBLY		2	2	
	GROUP - COOLING SYSTEM GROUP 0503 - THEOSAT AND HOUSING GASKET				
4720-444-9444	HOSE, RUBBER			2	
6620-5533-3126	THERMOSTAT		2	2	
	GROUP 0504 - WATER PUMP				
2930-652-5147	PUMP, CENTRIFUGAL			2	
	GROUP 0505 - FAN ASSEMBLY				
3030-821-8277	BELT, V	2	2	4	
	GROUP 06 - ELECTRICAL SYSTEM GROUP 0601 - GENERATOR				
2920-533-3008	GENRATOR, ENGINE ACCESSORY		2	2	
2920-533-3011	PARTS KIT, ELECTRICAL CONTACT BRUSH HOLDER		2	3	
3030-528-5079	BELT, V	2	2	4	6
	GROUP 0602 - GENERATOR REGULATOR				
2920-533-3009	REGULATOR, ENGINE GENERATOR		2	2	