

**TECHNICAL MANUAL
ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND
SPECIAL TOOLS LIST**

**PUMP, CENTRIFUGAL: GASOLINE DRIVEN, BASE MOUNTED;
2-IN; 166-GPM, 25-FT HEAD
(BARNES MODEL 10-MG)
FSN 4320-820-0700**

CHANGE
NO. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 3 JUNE 1992

ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

**PUMP, CENTRIFUGAL: GASOLINE DRIVEN, BASE MOUNTED;
2-IN; 166-GPM, 25-FT HEAD
(BARNES MODEL 10-MG)
FSN 4320-820-0700**

Approved for public release; Distribution is unlimited

Current as of 16 November 1989

TM 5-4320-220-20P, 10 October 1969, is changed as follows:

Page 6, Fig 3, Item 9. NSN should be changed from 2910-740-3354 to 4730-00-740-3354. Change source code from MO to XB. Delete manufacture from items; Nipple, Pipe (4730-249-9721) and Tube, Copper (4710-277-7581).

All changes, additions, or deletions of Federal Stock Numbers or Manufacturer's Code and part numbers within this change should be appropriately reflected in the index.

By Order of the Secretary of the Army:

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:

MILTON H. HAMILTON
*Administrative Assistant to the
Secretary of the Army
01615*

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25E, (qty rqr block no. 1361).

TECHNICAL MANUAL
No. 5-4320-220-20P



HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 10 October 1969

ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

**PUMP, CENTRIFUGAL: GASOLINE DRIVEN, BASE MOUNTED;
2-IN; 166-GPM, 25-FT HEAD
(BARNES MODEL 10-MG)
FSN 4320-820-0700**

Current as of 13 December 1968

SECTION	Paragraph	Page
I.	INTRODUCTION	
	Scope	1
	General	2
	Explanation of columns	3
	Special information.....	4
	How to locate repair parts	5
	Abbreviations.....	6
	Federal supply codes for manufacturers	7
	Recommendations for maintenance manual improvements.....	8
II.	PRESCRIBED LOAD ALLOWANCE.....	vii
III.	SPECIAL TOOLS, TEST AND SUPPORT EQUIPMENT FOR ORGANIZATIONAL MAINTENANCE -NOT APPLICABLE	
IV.	REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE	
Group 01.	Engine	
	0100 Engine assembly	
	0101 Crankcase, block, cylinder head .	
	0103 Flywheel assembly .	
	0105 Valves, camshafts, and timing system	
	0106 Engine lubrication system .	
	0107 Engine starting systems (other than electrical)	
	0108 Manifolds .	

*This manual together with TM 5-4320-220-35P, 10 October 1969, supersedes TM 5-4320-220-25P, 10 June 1965.

	Page
03. Fuel System	
0301 Carburetor, fuel injector	4
0304 Air cleaner	5
0306 Tanks, lines, fittings, headers	6
0308 Engine speed governor and controls	7
0309 Fuel filters	9
0312 Accelerator, throttle or choke controls	9
04. Exhaust System	
0401 Muffler and pipes	9
05. Cooling System	
0502 Cowling, deflectors, air ducts, shrouds, etc.	10
06. Electrical System (Engine and Vehicular, Etc.)	
0605 Ignition components	10
22. Body Chassis or Hull, and Accessory Items	
2210 Data plates and instruction holders	15
55. Pumps	
5500 Pump assembly	15
5505 Suction and/or discharge assembly	16
5508 Lubricators	16
76. Fire Fighting Equipment Components	
7638 Portable fire fighting equipment	17
95. General Use Standardized Parts	
9501 Hardware supplies and bulk materials, common	17
SECTION V. Federal Stock Number and Reference Number Index.....	

SECTION I

INTRODUCTION

1. Scope

This manual lists repair parts required for the performance of organizational maintenance of the pump.

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 ill or supplied from DSA/GSA or Army
---	--

Code	Explanation
M	supply system, and authorized for use at indicated maintenance categories.
A	Applied to repair parts which are not procured or stocked but are to be manufactured at indicated maintenance categories.
X	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.
X1	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.
X2	Applied to repair parts which are not procured or stocked, the requirement for which will be supplied by use of the next higher assembly or components.
G	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
	Applied to major assemblies that are procured with PEMA (Procurement Equipment Missile 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 DSU and GSU or returned to depot supply level.

Note.

Source code is not shown on common hardware items known to be readily available in Army supply channels and through local procurement.

(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 casing 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.

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 Pack.* This column indicates the actual quantity contained in the unit pack.

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

g. *Fifteen-Day Organizational Maintenance Allowance, Column (4) of Section II and Column (7) 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 (8).* This column is divided as follows:

(1) Figure number column (8a). Indicates the figure number of the illustration in which the item is shown.

(2) Item number, column (8b). Indicates the callout number used to reference the item in the illustration.

4. Special Information

a. Repair parts mortality has been based on 1,000 hours of operation per year.

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 pump and its components:

TM 5-4320 220-15

Operator, organizational,
field and depot
maintenance manual

LO 5-4320-220--15

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 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 Federal 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

ea.	each
ft	feet, foot
grp	group
in.	inch (es)
mtg	mounting (s)
No	number(s)
sh	sheet (s)
thd	thread (ed)
w/	with

7. Federal Supply Codes for Manufacturers

Code Manufacturer

00000	Ordnance Corps
00165	Chilton Metal Products
05748	Barnes Mfg Co
19728	Prestolite Co The
66289	Wisconsin Motor Corp
78940	Novo Industrial Corp United Air Cleaner Div
79960	Bendix Corp The Fuel Devices Div
81336	Chief of Engineers
81352	Air Force--Nav Aeronautical Specifications Promulgated by Aeronautical Standards Group
82796	Fairbanks Morse Inc Fairbanks Morse Power Systems Div
96906	Military Standards Promulgated by Stand- ardization Div Directorate of Logistic Services DSA

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 DA 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) useable on code	(4) 15 day org maint. alw					
			Qty into in unit pack	(A) 1-5	(B) 6-20	(C) 21-50	(D) 51-100	
GROUP 01-- ENGINE								
0100-- ENGINE ASSEMBLY								
2805-353-5908	GASKET SET		2	3	6	13		
2805-604-8225	POWER UNIT 0107-- ENGINE STARTING SYSTEMS (OTHER THAN ELECTRICAL)				2			
2990-618-6556	STARTER ROPE		2	3	6	13		
GROUP 03- FUEL SYSTEM								
0301 - CARBURETOR								
2910-654-3498	CARBURETOR		2	2	4			
2910-807-7153	GASKET SET 0304- AIR CLEANER		2	2	4			
5330-245-5460	WASHER, NONMETALLIC		2	2	4			
5330-253-2469	WASHER, NONMETALLIC 0306--TANKS, LINES, FITTINGS, HEADERS		2	2	4			
2910-846-0943	CAP, FUEL TANK 0308--ENGINE SPEED GOVERNOR AND CONTROLS			2	2			
2990-224-8188	SPRING, HELICAL, EXTENSION 0309- FUEL FILTERS				2			
2910-099-5639	STRAINER ASSEMBLY				2	2		
2910-358-5327	STRAINER ELEMENT		2	2	4			
GROUP 04-EXHAUST SYSTEM								
0401- MUFFLER AND PIPES								
2990-677-2375	MUFFLER		2	2	4			
GROUP 06--ELECTRICAL SYSTEM								
(ENGINE AND VEHICULAR, ETC.)								
0605 -IGNITION COMPONENTS								
2920-654-3499	MAGNETO, IGNITION			2	2			
2920-675-0548	CABLE ASSEMBLY				2			
2920-708-3516	KIT, REPAIR		2	3	6	13		
2920-922-2174	SPARK PLUG		2	7	13	25		

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT UNIT OF ISSUE	(5) QTY OF MEAS	(6) INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
00001		SECTION IV - REPAIR PARTS FOR ORGANIZATIONAL MAINTENANCE									
00002		GROUP 01 - ENGINE									
0		0100 - ENGINE ASSEMBLY									
00003	5305-269-3219	BOLT, MACHINE: engine mtg	EA	4		*	*	*	*	1	22
P 0	2805-353-5908	GASKET SET: engine overhaul	EA	1		2	3	6	13		
00004		Q22 (66289)									
X1	2910-447-9260	GASKET: air cleaner clamp	EA	1	SEE	GRP	0304				
00005		QD647 (66289)									
X1	2805-546-3730	GASKET: bearing plate, flywheel end	EA	1	SEE	GRP	0101				
00006		QD674 (66289)									
X1	5330-147-3307	GASKET: carburetor flange	EA	1	SEE	GRP	0301				
00007		QC58 (66289)									
X1	2805-536-8805	GASKET: cylinder head	EA	1	SEE	GRP	0101				
00008		QD484 (66289)									
X1	2805-353-5904	GASKET: engine base	EA	1	SEE	GRP	0106				
00009		QD675 (66289)									
X1	5330-285-5061	GASKET: governor bracket	EA	1	SEE	GRP	0308				
00010		QD571 (66289)									
X1	2805-251-3219	GASKET: intake manifold	EA	1	SEE	GRP	0108				
00011		QB77 (66289)									
X1	2920-047-4530	GASKET: magneto flange	EA	1	SEE	GRP	0605				
00012		QD570A (66289)									
X1	2805-366-9739	GASKET: main bearing plate, take-off end (as required)	EA								
00013		QD487B (66289)									
X1	5330-292-1504	GASKET: main bearing plate, take-off end (as required)	EA								
00014		QD487A (66289)									
X1	2805-695-8784	GASKET: tappet chamber cover	EA	1	SEE	GRP	0105				
00015		QD612A (66289)									

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
0 00016 P O R	5310-732-0558 2805-604-8225	NUT, PLAIN, HEXAGON: engine mtg POWER UNIT, GASOLINE: Wisconsin Model MKENLD, Specification No. 189204 189294 (66289)	EA EA	4 1	*	*	*	*	*	1	20
0 00017 0 00018 00019	53-10-479-6859	WASHER, LOCK: engine mtg 0101 - CRANKCASE, BLOCK, CYLINDER HEAD	EA	4	*	*	*	*	*	1	21
0 00020 0 00021 X2 0 00022 X1 00023	5310-207-9156 5306-225-8504 2805-360-833, SA68 (66289)	BOLT, MACHINE: cylinder head mtg BOLT, MACHINE: tappet chamber cover COVER, PLATE: tappet chamber	EA EA EA	3 1 1	*	*	*	*	*	1	8
X1 00024	2805-546-3730	GASKET: bearing plate, flywheel end Q0674 (66289)	EA	1							
X1 00025	2805-536-8805	(Component of GASKET SET, Stock No. 2805-353-5908, See Group 0100) GASKET: cylinder head QDU484 (66289)	EA	1						1	5
IX1 00026	2805-366-9739	(Component of GASKET SET, Stock No. 2805-353-5908, See Group 0100) GASKET: main bearing plate, take-off end (as required) QD487B (66289)	EA								
X1 00027	5330-292-1504	(Component of GASKET SET, Stock No. 2805-353-5908, See Group 0100) GASKET: main bearing plate, take-off end (as required) QD487A (66289)	EA								
OP 00028 0 00029 0 00030 0 00031	0 5310-584-8731 4730-366-6256 5305-269-3213 5307-275-3755	2805-705-7796 HEAD, CYLINDER, WITH SPARK PLUG INSERT AB101-5S1 (66289) NUT, PLAIN, HEXAGON: cylinder head stud PLUG, PIPE: timing inspection hole SCREW, CAP, HEXAGON HEAD: cylinder head mtg STUD, PLAIN: cylinder head mtg	EA EA EA EA EA	1 1 1 2 1	*	*	*	*	*	1	9
					*	*	*	*	*	1	10
					*	*	*	*	*	1	19
					*	*	*	*	*	1	7
					*	*	*	*	*	1	4

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
0 00032	5310-702-1797	WASHER, FLAT: cylinder head mtg	EA		6	*	*	*	*	1	11
0 00033	5310-205-9981	WASHER, FLAT: tappet chamber cover screw	EA		1	SEE	GRP	0105			
00034		0103 - FLYWHEEL ASSEMBLY									
X2 0 00035	2805-366-6136	FLYWHEEL, CRANKSHAFT NC143 (66289)	EA		1					1	27
00036		0105 - VALVES, CAMSHAFTS, AND TIMING SYSTEM									
0 00037	5306-225-8504	BOLT, MACHINE: tappet chamber cover	EA		1	*	*	*	*	1	18
X2 0 00038	2805-360-8334	COVER, PLATE: tappet chamber SA68 (66289)	EA		1					1	16
X1 00039	2805-695-8784	GASKET: tappet chamber cover QD612A (66289)	EA		1					1	15
		(Component of GASKET SET, Stock No 2805-353-5908, See Group 0100) (Can be manufactured from PAPER, GASKET, Stock No. 5330-233-5845)									
0 00040	5310-205-9981	WASHER, FLAT: tappet chamber cover screw	EA		1	*	*	*	*	1	17
00041		0106 - ENGINE LUBRICATION SYSTEM									
0 00042	4730-254-6228	ELBOW, PIPE TO TUBE breather line	EA		2	*	*	*	*	2	13
0 00043	4730-045-9769	PLUG, PIPE, MAGNETIC oil drain	EA		1	*	*	*	*	1	34
X2 0 00044	PLUG, PIPE:	oil filler, case iron, square head, 1/2-14 thd size, w/gage rod XK4, (66289)	EA		1					1	33
X2 0 00045	2940-464-3772	TUBE ASSEMBLY METAL: crankcase breather RM494 (662895)	EA		1					2	14
00046		0107 - ENGINE STARTING SYSTEMS (OTHER THAN ELECTRICAL)									
X2 0 00047	2990-6259303	PULLEY, ENGINE STARTING U222 (66289)	EA		1					1	1

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
P 0 00048	2990-618-6556	STARTER ROPE ENGINE U268 (66289) (Can be manufactured from CORD, COTTON, Stock No. 4020-241-8439)	EA		1	2	3	6	13	1	29
X2 0 00049	WASHER, LOCK: K:	starting pulley PE73 (66289)	EA		1					1	2
00050		0108 - MANIFOLDS									
X1 00051	2805-251-3219	GASKET: intake manifold QB77 (66289)	EA		1					2	3
X2 0 00052	2805-374-3129	(Component of GASKET SET, Stock No. 2805-353-5908, See Group 0100) MANIFOLD, INTAKE: gasoline engine LC269A (66289)	EA		1					2	4
0 00053	4730-018-9566	PLUG, PIPE: intake manifold	EA		1	*	*	*	*	2	9
0 00054	5305-225-3839	SCREW, CAP, HEXAGON HEAD: intake manifold	EA		2	*	*	*	*	2	8
0 00055	5310-582-5965	WASHER, LOCK: intake manifold	EA		2	*	*	*	*	2	7
00056		GROUP 03 - FUEL SYSTEM									
00057		0301 - CARBURETOR, FUEL INJECTOR									
0 00058	5306-207-6474	BOLT, MACHINE: carburetor mtg	EA		2	*	*	*	*	2	5
P 0 00059	2910-654-3498 12199A	CARBURETOR, FLOAT: engine (79960) (Includes components of GASKET SET, Stock No. 2810-807-7153)	EA		1	*	2	2	4	2	11
X1 00060	5330-147-3307 QC58	GASKET: carburetor flange (66289) (Component of GASKET SET, Stock No. 2805-353-5908, See Group 0100)	EA		1					2	10
P 00061	0 C181-329	2910-807-7153 GASKET SET: carburetor (79960)	EA		1	*	2	2	4		
X1 00062	2910-980-1705 C142-68	GASKET: bowl to body (79960)	EA		1					2	12
X1 00063	5330-508-3010 T56-20	WASHER, NONMETALLIC, FUEL VALVE SEAT (79960)	EA		1						

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
X1 00064	5330-358-5683	WASHER, NONMETALLIC: main jet T56-24 (79960)	EA		1						
X1 00065	5330-291-9873	WASHER, NONMETALLIC: discharge jet T56-48 (79960)	EA		1						
X1 00066	5330-176-4123	WASHER, NONMETALLIC: main jet adjustment T56-23 (79960)	EA		1						
0 00067	5310-407-9566	WASHER, LOCK: carburetor mtg 0304 - AIR CLEANER	EA		2	*	*	*	*	2	6
00068	2940-141-9296	AIR CLEANER, INTAKE T12B1 (78940)	EA		1						
X2 0 00069	2940-830-0150	CAP 179B1 (78940)	EA		1					2	2
X1 00070		CUP, OIL 176B1 (78940)	EA		1					2	24
00071	5330-245-5460	WASHER, NONMETALLIC: base A7419 (78940)	EA		1	*	2	2	4	2	23
P 0 00072	5330-253-2469	WASHER, NONMETALLIC: filter 615A1 (78940)	EA		1	*	2	2	4	2	25
0 00073	5306-207-9152	BOLT, MACHINE: bracket mtg	EA		1	*	*	*	*	2	20
00074	2940-047-4495	BRACKET ASSEMBLY, AIR CLEANER (66289)	EA		1						
X2 0 00075	B1291S1	BRACKET, AIR CLEANER B1291-6 (66289)	EA		1					2	17
X1 00076		GASKET: air cleaner clamp QD547 (66289)	EA		1						
X1 00077	2910-447-9260	(Component of GASKET SET, Stock No. 2805-353-5908, See Group 0100) (Can be manufactured from PAPER, Stock No. 5330-270-8469)								2	15

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
0 00078	5305-808-9977	SCREW, MACHINE: air cleaner bracket	EA		1	*	*	*	*	2	16
0 00079	5310-013-4551	NUT, PLAIN, HEXAGON: air cleaner bracket mtg	EA		1	*	*	*	*	2	21
0 00080	5310-366-6163	NUT, PLAIN, WING: air cleaner mtg stud	EA		1	*	*	*	*	2	1
O 00081	5305-068-0500	SCREW, CAP, HEXAGON HEAD: clip mtg	EA		1	*	*	*	*	2	18
0 00082	5307-275-3759	STUD, PLAIN: air cleaner mtg	EA		1	*	*	*	*	2	22
X2 0 00083	2940-315-1916	SUPPORT AIR CLEANER BRACKET PG343A (66289)	EA		1	*	*	*	*	2	19
0 00084	5310-582-5965	WASHER, LOCK: clip mtg	EA		2	*	*	*	*	2	7
0 00085		0306 - TANKS, LINES, FITTINGS, HEADERS								3	19
X2 0 00086	2805-353-5859	BRACKET, FUEL TANK BK85 (66289)	EA		1					3	19
0 00087	4730-231-5632	ELBOW, PIPE TO TUBE: fuel line	EA		2	*	*	*	*	3	8
0 00088	5305-269-3211	SCREW, CAP, HEXAGON HEAD: fuel tank bracket	EA		2	*	*	*	*	3	17
M 0 00089	2910-740-3354	STAND PIPE FUEL TANK RM1280A (46289)	EA		1					3	9
		MANUFACTURE FROM: NIPPLE, PIPE									
0 00090	4730-249-9721		EA		1	*	*	*	*		
P 0 00091	4710-277-7581	TUBE, COPPER (3/4 in. required)	FT		SEE	GRP	9501				
X2 0 00092		TANK ASSEMBLY, FUEL WE306GS1 (66289)	EA		1					3	
X2 0 00093	5340-974-9537	RING, RETAINING: fuel tank strainer PK127A (66289)	EA		1					3	22
X2 0 00094	4730-812-4303	STRAINER, FUEL TANK RD127A (66289)	EA		1					3	20
X2 0 00095		STRAP ASSIBILITY, FUEL TANK PG504S (66289)	EA		2						

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION		
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.	
0 00096 X2 0 00097 X2 0 00098 0 00099 X2 0 00100 P 00101 M 00102 P 0 00103 X2 0 00104 M 00105 P 0 00106 P 0 00107 0 00108 00109 X2 0 00110 X1 00111	5310-013-4551 2910-371-4613 5310-582-5965 2910-830-5496 0 0 0 4010-186-9388 5310-814-5973 0 4730-011-6452 4710-277-5525 0 5310-194-0021 2990-874-3232 2910-992-8627	NUT, PLAIN, HEXAGON: fuel tank strap SCREW, MACHINE: fuel tank strap XA88 (66289) STRAP, FUEL TANK PG504 (66289) WASHER, LOCK: fuel tank strap TANK ASSDEMLY: fuel WE306A (66289) 2910-846-0943 CAP, FUEL TANK RC118 (66289) CHAIN, FIEL TANK CAP MANUFACTIRE FR(M: CRHAIN, WELDLESS (6 in. required) WASHER, FLAT, STRAINER PH482 (66289) 2910-366-6289 TUBE ASSEMBLY METAL: strainer to carburetor RM980 (66289) MANUFACTURE FROM: NUT, TUBE COUPLING TUBE, COPPER (24 in. required) WASHER, LOCK: fuel tank bracket 0308 - ENGINE SPEED GOVERNOR AND CONTROLS CONTROL ASSEMBLY, GOVERNOR TT74D (66289) BRACE, CONTROL BRACKET PG563 (66289)	EA EA EA EA EA EA EA EA EA EA EA EA EA EA EA EA	2 2 2 1 1 1 1 2 SEE 1 1 2 SEE 2 1	*	*	*	*	*	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 4	3 7 5 4 6 1 2 21 16 *	3 3 3 3 3 3 3 3 3 3 3 3 3 3 4 5

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
X1 00112	2990-536-2962	CONTROL, GOVERNOR VE584A (66289)	EA	1							
X1 00113		BLOCK, SWIVEL: adjusting screw TC301-3 (66289)	EA	1						4	2
X1 00114		BRACKET, CONTROL VC35 (66289)	EA	1						4	8
X1 00115		LEVER, CONTROL: VB179A (66289)	EA	1						4	3
0 00116		PIN, COTTER: support pin spring	EA	1	*	*	*	*	*	4	11
0 00117		PIN, STRAIGHT, HEADLESS: lever support	EA	1	*	*	*	*	*	4	10
X1 00118		SPRING, HELICAL, COMPRESSION: lever support pin PM117 (66289)	EA	1	*	*	*	*	*	4	12
0 00119		WASHER, FLAT: support pin spring	EA	1	*	*	*	*	*	4	13
0 00120		WASHER, FLAT: swivel block	EA	1	*	*	*	*	*	4	4
M 0 00121		GASKET: bracket to crankcase QD695 (66289) MANUFACTURE FROM:	EA	1						4	9
P 0 00122	5330-841-2729	PAPER, GASKET (2 in. by 2 in. required)	SH	SEE	GRP	9501					
0 C0123	5310-637-1058	NUT, PLAIN, HEXAGON: adjusting screw	EA	2	*	*	*	*	*	4	1
X1 00124	5305-958-5245	SCREW, ADJUSTING: governor spring FI121A (66289)	EA	1						4	16
0 00125		SCREW, MACHINE: bracket mtg	EA	1	*	*	*	*	*	4	6
0 00126		WASHER, LOCK: bracket mtg	EA	1	*	*	*	*	*	4	7
X2 0 00127		LEVER, GOVERNOR CONTROL TC432B (66289)	EA	1						4	14
0 00128	5310-576-1783	NUT, PLAIN, HEXAGON: governor control lever mtg	EA	1	*	*	*	*	*	4	18

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
P 0 00129	2990-224-8188	SPRING, HELICAL, EXTENSION: governor PM74 (66289)	EA		1	*	*	*	2	4	17
00130		0309 - FUEL FILTERS									
P 0 00131	2910-099-5639	STRAINER ASSEMBLY, FUEL 830 (00165)	EA		1	*	*	2	2	3	23
X1 00132		BAIL ASSEMBLY, STRAINER 100A (00165)	EA		1					3	15
X2 00133		BOWL, SEDIMENT: strainer, glass M100-2 (00165)	EA		1					3	14
X1 00134		COVER, STRAINER 100-1 (00165)	EA		1					3	11
P 0 00135	2910-358-5327	STRAINER ELEMENT, SEDIET 10-11 (00165)	EA		1	*	2	2	4	3	12
X1 00136		VALVE ASSEMBLY, NEEDLE 100-6-7-8-9 (00165)	EA		1					3	10
X2 0 00137		WASHER, NONMETALLIC strainer bowl 100-10N (00165)	EA		1					3	13
00138		0312 - ACCELERATOR, THROTTLE OR CHOKE CONTROLS									
X2 C 00139		PIN, COTTER: throttle lever rod X132 (66289)	EA		1					4	19
X2 0 00140	2990-603-4790	ROD, THROTTLE LEVER VE304C (66289)	EA		1					4	15
00141		GROUP 04 - EXHAUST SYSTEM									
00142		0401 - MUFFLER AND PIPES									
P 0 00143	2990-677-2375	MUFFLER, EXHAUST WD66B (66289)	EA		1	*	2	2	4	1	14
X2 0 00144		NIPPLE, PIPE: muffler to engine LJ158 (66289)	EA		1					1	13

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
00145		GROUP 05 - COOLING SYSTEM									
00146		0502 - COWLING, DEFLECTORS, AIR DUCTS, SHROUDS, ETC.									
X2 0	2805-310-7667	COVER, AIR SHROUD: cylinder head	EA	1						1	12
00147		SE155 (66289)									
0	5310-596-6326	NUT, SHEET, SPRING: screen mtg	EA	4	*	*	*	*	*	1	24
00148											
X2 0	2805-310-7668	RETAINER, SCREEN, FLYWHEEL HOUSING	EA	1						1	3
00149		SE158 (66289)									
X2 0	2805-377-4977	SCREEN, AIR SHROUD	EA	1						1	28
00150		SE157 (66289)									
X2 0		SCREW, CAP, SOCKET HEAD: shroud to crankcase	EA	2						1	26
00151		XB78 (66289)									
0	5305-988-1723	SCREW, MACHINE: screen mtg	EA	4	*	*	*	*	*	1	30
00152											
0	5305-988-1721	SCREW, MACHINE: shroud attaching	EA	4	*	*	*	*	*	1	32
00153											
X2 0	2805-371-4616	SHROUD, FLYWHEEL	EA	1						1	23
00154		SE154 (66289)									
X2 0	5340-779-5991	SPACER, SLEEVE: cylinder head stud	EA	1						1	6
00155		HF432 (66289)									
0	5310-582-5965	WASHER, LOCK: shroud mtg	EA	4	*	*	*	*	*	1	31
00156											
0	5310-407-9566	WASHER, LOCK: shroud to crankcase	EA	2	*	*	*	*	*	1	25
00157											
00158		GROUP 06 - ELECTRICAL SYSTEM (ENGINE AND VEHICULAR, ETC.)									
00159		0605 - IGNITION COMPONENTS									
0	5306-272-3742	BOLT, MACHINE: magneto mtg	EA	1	*	*	*	*	*	6	10
00160											
P 0	2920-675-0548	CABLE ASSEMBLY SPECIAL PURPOSE, ELECTRICAL: ignition	EA	1	*	*	*	*	2	5	1
00161	YD176C	(66289w)									

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
X1 00162	2920-047-4530	GASKET: magneto flange QD570A (66289) (Component or GASKET SET, Stock No. 2805-353-5908, See Group 0100) (Can be manufactured from PAPER, Stock No. 5330-233-5845)	EA		1					6	9
P0 00163	2920-708-3516	KIT, REPAIR PARTS: magneto KIT82796-1 (81336)	EA		1	2	3	6	13		
X1 00164	3110-144-8998	BEARING, BALL ANNULAR: rotor drive end C5949 (82796w)	EA		1					5	18
X1 00165	2920-585-4059	BEARING, SLEEVE: rotor cam end A5950A (82796)	EA		1					5	12
X1 00166	5910-644-6204	CAPACITOR, FIXED PAPER DIELECTRIC: magneto SXY2433X (82796)	EA		1					5	22
I1 00167	2920-319-5055	CONTACT SET, DISTRIBUTOR: magneto A2437A (82796)	EA		1					5	29
X1 00168	5330-366-7148	GASKET: magneto end cap to frame K2498 (82796)	EA		1					5	30
X1 00169	2920-602-4263	RING, RETAINING: fulcrum contact mtg T1498 (82796)	EA		1					5	28
X1 00170	5340-699-9964	RING, RETAINING: rotor drive end C1498D (82796)	EA		1					6	8
X1 00171	5340-143-5280	RING, RETAINING: rotor shaft bearing B1498B (82796)	EA		1					5	17
X1 00172	5340-816-4239	RING, RETAINING: switch rod V1498 (82796)	EA		1					5	7
X1 00173	5305-281-6387	SCREW, ASSEMBLED WASHER: end cap mtg 10SIOD (82796)	EA		1						
X1 00174	5305-614-0245	SCREW, MACHINE end cap mtg AN500-10-10 (81352)	EA		1					5	6
X1 00175	5310-576-5752	WASHER, LOCK: end cap mtg	EA		1					5	5

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
X1 00176	2920-356-1221	SEAL, PLAIN: rotor drive end G3861 (82796)	EA		1					6	6
X1 00177	5340-576-5825	SHIM, THRUST BEARING: rotor drive end C2723 (82796)	EA		2					5	16
X1 00178	5310-205-7981	WASHER, FLAT: rotor drive end A2492C (82796)	EA		1					6	7
X1 00179	5310-285-1591	WASHER, FLAT, rotor drive end A2492A (82796)	EA		1					6	5
X1 00180	9390-292-0355	WICK, FELT: breaker arm L2788 (82796)	EA		1					5	37
P O R 00181	2920-654-3499	MAGNETO, IGNITION FMXDE1B7U (82796) (Includes components of REPAIR KIT, Stock No, 2920-708-3516)	EA		1	*	*	2	2		
X1 00182	2920-286-2712	BEARING, SLEEVE: impulse coupling A2572 (82796)	EA		1					6	22
X1 00183	2920-358-6442	BUSHING, PRIMAY GROUND C2744 (82796)	EA		1					5	4
X1 00184	2920-358-6719	CAP: distributor J2430A (82796)	EA		1					5	3
X1 00185	2920-319-5058	CLIP, COIL D6120 (82796)	EA		1					5	36
X1 00186	2920-294-4001	COIL MAGNETO S2477C (82796)	EA		1					5	19
X1 00187	2920-806-0637	COUPLING ASSEMBLY: impulse SV2563C20 (82796)	EA		1						
X1 00188	2920-939-9835	HUB ASSEMBLY: coupling SZ2563 (82796)	EA		1					6	3
X1 00189	2920-428-7572	SPRING, HELICAL, TORSION: pawl C5963 (82796)	EA		1					6	4
X1 00190		SIIELL. COUPLING ZX5957 (82796)	EA		1					6	1

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
X1 00191	2920354-0741	SPRING, SPIRAL, TORSION: drive D2565 (82796)	EA		1					6	2
X1 00192	2920-714-5869	COVER, MAGNETO COIL B6030A (82796)	EA		2					6	16
X1 00193	2920-455-7098	FRAME, MAGNETO RX2425 (82796)	EA		1					6	18
X1 00194	2920-354-0750	HOLDER ASSEMBLY, CAM WICK G2788 (82796)	EA		1					5	33
X1 00195	2920-691-7884	INSULATOR, STANDOFF: high tension cable P2474X (82796)	EA		1					5	2
X1 00196	5315-616-5514	KEY, WOODRUFF: rotor to impulse coupling MS35756-6 (96906)	EA		1					6	21
X1 00197	5310-737-2632	NUT, CASTELLATED, HEXAGON: impulse coupling M2570 (82796)	EA		1					6	23
X1 00198	5310-428-7558	NUT: ground switch B2735A (82796)	EA		1					5	10
X1 00199	2920-354-0766	PLATE ASSEMBLY, BEARING SUPPORT V4631 (82796)	EA		1					5	14
X1 00200	2920-31 5-1970	ROTOR, MAGNETO DW2480 (82796)	EA		1					5	15
X1 00201	5305-616-6013	SCREW, ASSBLED WASHER: breaker arm terminal and contact support 6S6U (82796)	EA		2						
X1 00202	5305-272-5306	SCREW, MACHINE: breaker arm terminal and contact support	EA		2					5	27
X1 00203	5310-013-1044	WASHER, LOCK: breaker arm terminal and contact support 131044 (00000)	EA		2					5	26
X1 00204	5305-103-2684	SCREW, ASSEMBLED WASHER: coil clip 6S3W (82796)	EA		1						
X1 00205	5305-984-4982	SCREW, MACHINE: coil clip MS35225-25 (96906)	EA		1					5	34

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
X1 00206	5310-209-0788	WASHER, LOCK: coil clip MS35335-30 (96906)	EA		1					5	35
X1 00207	5305-285-5282	SCREW, ASSEMBLED WASHER: contact support 8S6U (82796)	EA		1						
X1 00208	5305-012-1832	SCREW, MACHINE: contact support 8S6N (82796)	EA		1					5	31
X1 00209		WASHER, LOCK: contact support 121841 (00000)	EA		1					5	23
X1 00210	5305-647-2056	SCREW: condenser mtg 8S4U (82796)	EA		1					5	24
X1 00211	5305-958-5473	SCREW, MACHINE: bearing support 8S6G (82796)	EA		4					5	13
X1 00212	5305-647-2059	SCREW: vent cover 65N (82796)	EA		2					6	14
X1 00213	5305-723-9380	SETSCREW: coil bridge 25SS14A (82796)	EA		2					6	15
X1 00214	5930-358-7735	SWITCH, PUSH: ground CX2514C (82796)	EA		1						
X1 00215	5975-831-0182	BUSHING, GROUND SWITCH D4373 (82796)	EA		1					5	8
X1 00216	2920-740-6251	BUTTON, PUSH: ground switch S2514 (82796)	EA		1					5	11
X1 00217	2920-047-4176	SPRING, HELICAL, COMPRESSION: ground switch C2513A (82796)	EA		1					5	9
X1 00218	5310-647-2054	WASHER, FLAT: contact support B5%9 (82796)	EA		1					5	25
X1 00219	5310-270-2172	WASHER, FLAT: contact support locking D2458 (82796)	EA		1					5	32
X1 00220		WASHER, LOCK: condenser mtg 121841 (00000)	EA		1					5	23

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
X1 00221	5310-013-1044	WASHER, LOCK: vent cover 131044 (00000)	EA		2					6	13
X1 00222	2920-714-5868	WIRE FABRIC: vent C6032B (82796)	EA		2					6	17
O 00223	5310-188-7848	NUT, PLAIN, HEXAGON: magneto mtg	EA		1	*	*	*	*	6	12
X1 00224	5315-831-0140	PIN, STRAIGHT THREAD: impulse coupling S2568 (82796)	EA		1					6	20
O 00225	5305-206-1071	SCREW, CAP, HEXAGON HEAD: magneto mtg	EA		1	*	*	*	*	6	19
P 0 00226	2920-922-2174	SPARK PLUG: engine BR8S (19728)	EA		1	2	7	13	25	5	21
X1 00227		GASKET: spark plug A5-9 (19728)	EA		1					5	20
O 00228	5310-928-9824	WASHER, SPECIAL: magneto mtg	EA		3	*	*	*	*	6	11
00229		GROUP 22 - BODY CHASSIS OR HULL, AND ACCESSORY ITES									
00230		2210 - DATA PLATES AND INSTRUCTION HOLDERS									
X2 0 00231		PLATE, IDENTIFICATION: engine SD35K (66289)	EA		1						
X2 0 00232		PLATE, IDENTIFICATION: pump serial Number 5639 (05748)	EA		1						
O 00233	5305-253-5614	SCREW, TAPPING, THREAD FORMING: identification plate	EA		6	*	*	*	*		
O 00234	5305-954-5207	SCREW, TAPPING, THREAD FORMING: identification plate	EA		4	*	*	*	*		
00235		GROUP 55 - PUMPS									
00236		5500 - PUMP ASSEMBLY									
X2 0 00237		HANDLE, LIFTING: pump 12713 (05748)	EA	1						7	1

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
X2 0		PLUG, PIPE: drain 00238 3207 (05748)	EA	1						7	11
00239 0	5505 - SUCTION 4730-277-6845	AND/OR DISCHARGE ASSEMBLY ADAPTER, STRAIGHT, PIPE TO HOSE: discharge	EA	1	*	*	*	*	*	7	4
00240 0	4730-277-6845	ADAPTER, STRAIGHT, PIPE TO HOSE: suction 00241	EA	1	*	*	*	*	*	7	4
X2 0	4320-353-0600	FLANGE, PIPE: suction 3063 (05748)	EA	1						7	9
00242 0	5310-732-0558	NUT, PLAIN, HEXAGON: suction flange	EA	3	*	*	*	*	*	7	i0
00243 X2 0		PLUG, PIPE: priming 3208 (05748)	EA	1						7	3
00244 X2 0		TEE, PIPE: discharge 3438 (05748)	EA	1						7	2
00245 X2 0	4320-353-0602	VALVE, LIFT CHECK 3065SA (05748)	EA	1							
00246 X1	4320-353-0601	GASKET: check valve 3064 (05748)	EA	1						7	6
00247 X2 0	5305-012-0583	SCREW, MACHINE: check valve weight 2847 (05748)	EA	1						7	8
00248 X2 0		WEIGHT, CHECK VALVE large 1508 (05748)	EA	1						7	5
00249 X2 0	4510-919-2660	WEIGHT, CHECK VALVE small 1339 (05748)	EA	1						7	7
00250 X2 0		5508 - LUBRICATORS	EA	1							
00251 X2 0		COUPLING, PIPE: pump seal grease line 3226 405748)	EA	1						7	13
00252 X2 0	4730-277-3390	CUP, GREASE: pump seal 1684 (05748)	EA	1						7	12
00253 X2 0		NIPPLE, PIPE: pump seal grease line 3261 (05748)	EA	1						7	14
00254											

SECTION II

TM 5-4320-220-20P

(1) SMR CODE INDEX NO.	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF ISSUE	(5) UNIT OF MEAS	(6) QTY INC IN UNIT	(7) 15 DAY ORGANIZATIONAL MAINTENANCE ALW				(8) ILLUSTRATION	
						(a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100	(a) FIGURE NO.	(b) ITEM NO.
00255		GROUP 76 - FIRE FIGHTING EQUIPMENT COMPONENTS									
00256		7638 - PORTABLE FIRE FIGHTING EQUIPMENT									
P 0 00257	4210-555-8837	EXTINGUISHER, FIRE, MONOBRM4OTRIFLUOROMETHANE	EA		1	*	*	*	*	*	
00258		GROUP 95 - GENERAL USE STANDARDIZED PARTS									
00259		9501 - HARDWARE SUPPLIES AND BULK MATERIEL, COMMON									
P 0 00260	4010-186-9388	CHAIN, WELDLESS	FT		*	*	*	*	*	3	
P 0 00261	5330-841-2729	PAPER, GASKET	SH		*	*	*	*	*	2	
P 0 00262	4710-277-7581	TUBE, COPPER	FT		*	*	*	*	*	2	
P 0 00263	4710-277-5525	TUBE, COPPER	FT		*	*	*	*	*	10	

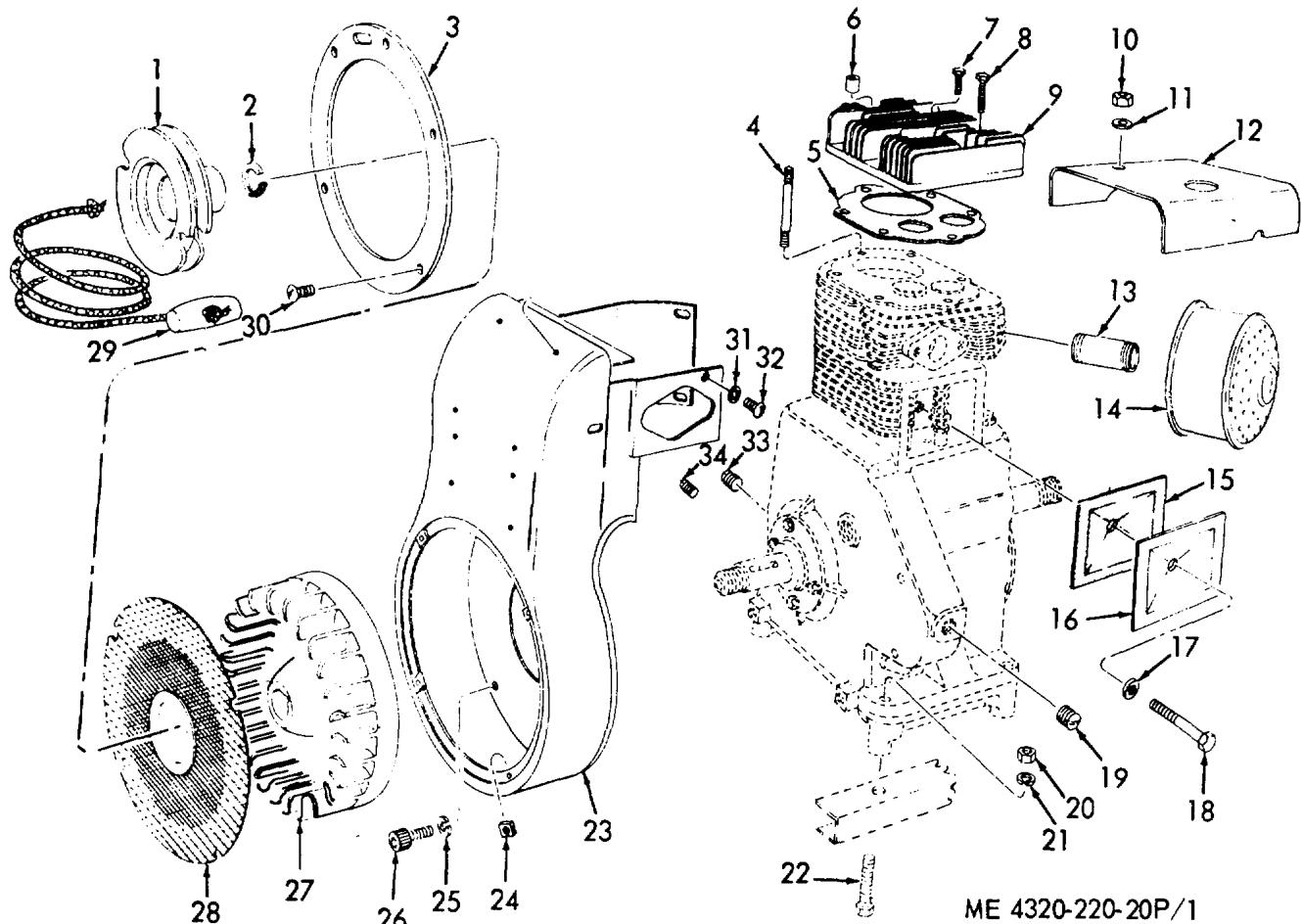
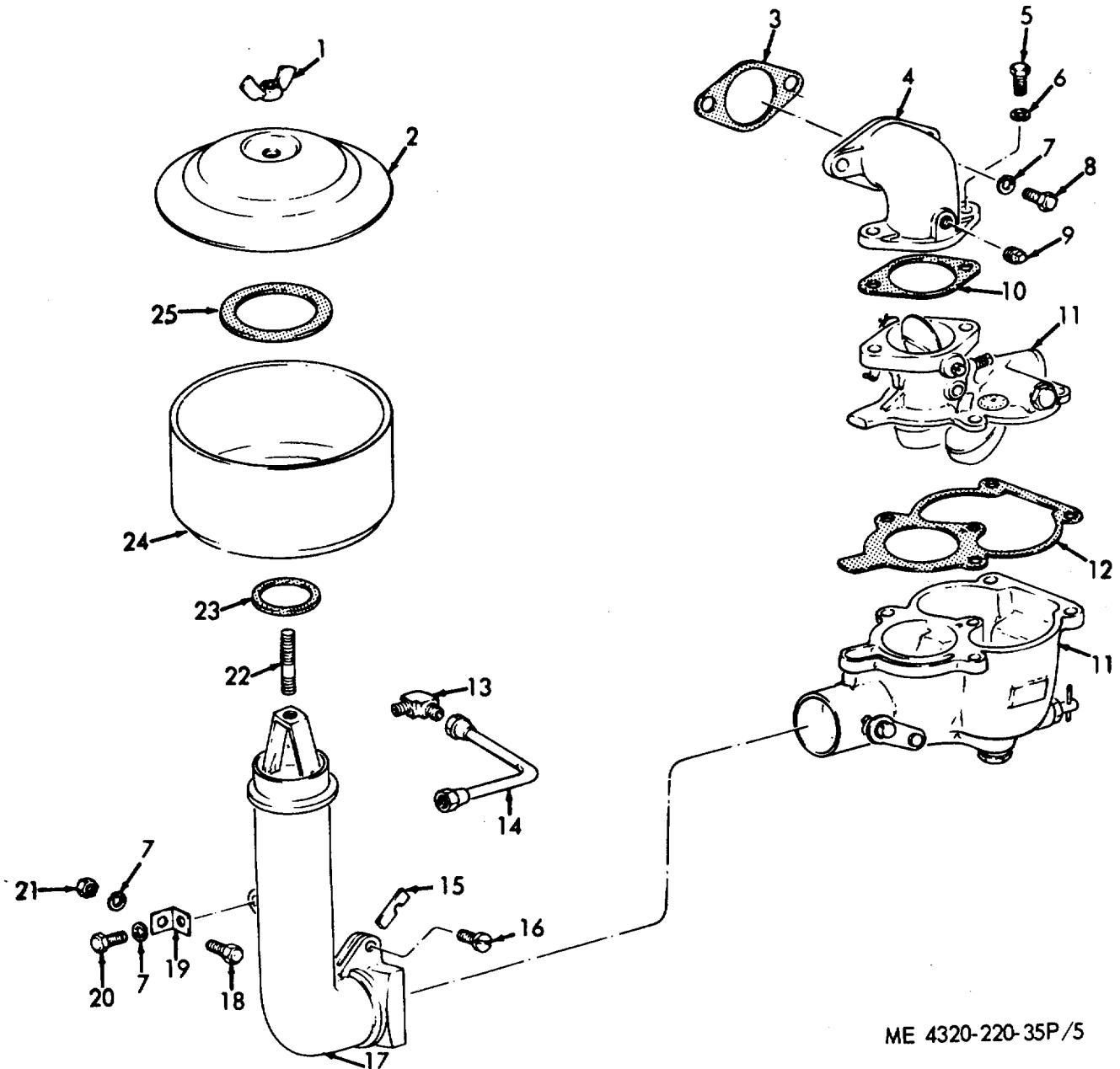


Figure 1. Cylinder Head, Pulley, Flywheel, and Shroud.

INDEX TO PARTS, FIGURE 1

Reference Number	Functional Group	Item Name	Reference Number	Functional Group	Item Name
1	0107	PULLEY	18	0105	BOLT
2	0107	WASHER	19	0101	PLUG
3	0502	RETAINER	20	0100	NUT
4	0101	STUD	21	0100	WASHER
5	0101	GASKET	22	0100	BOLT
6	0502	SPACER	23	0502	SHROUD
7	0101	SCREW	24	0502	NUT
8	0101	BOLT	25	0502	WASHER
9	0101	HEAD	26	0502	SCREW
10	0101	NUT	27	0103	FLYWHEEL
11	0101	WASHER	28	0502	SCREEN
12	0502	COVER	29	0107	ROPE AY
13	0401	NIPPLE	30	0502	SCREW
14	0401	MUFFLER	31	0502	WASHER
15	0105	GASKET	32	0502	SCREW
16	0105	COVER	33	0106	PLUG
17	0105	WASHER	34	0106	PLUG

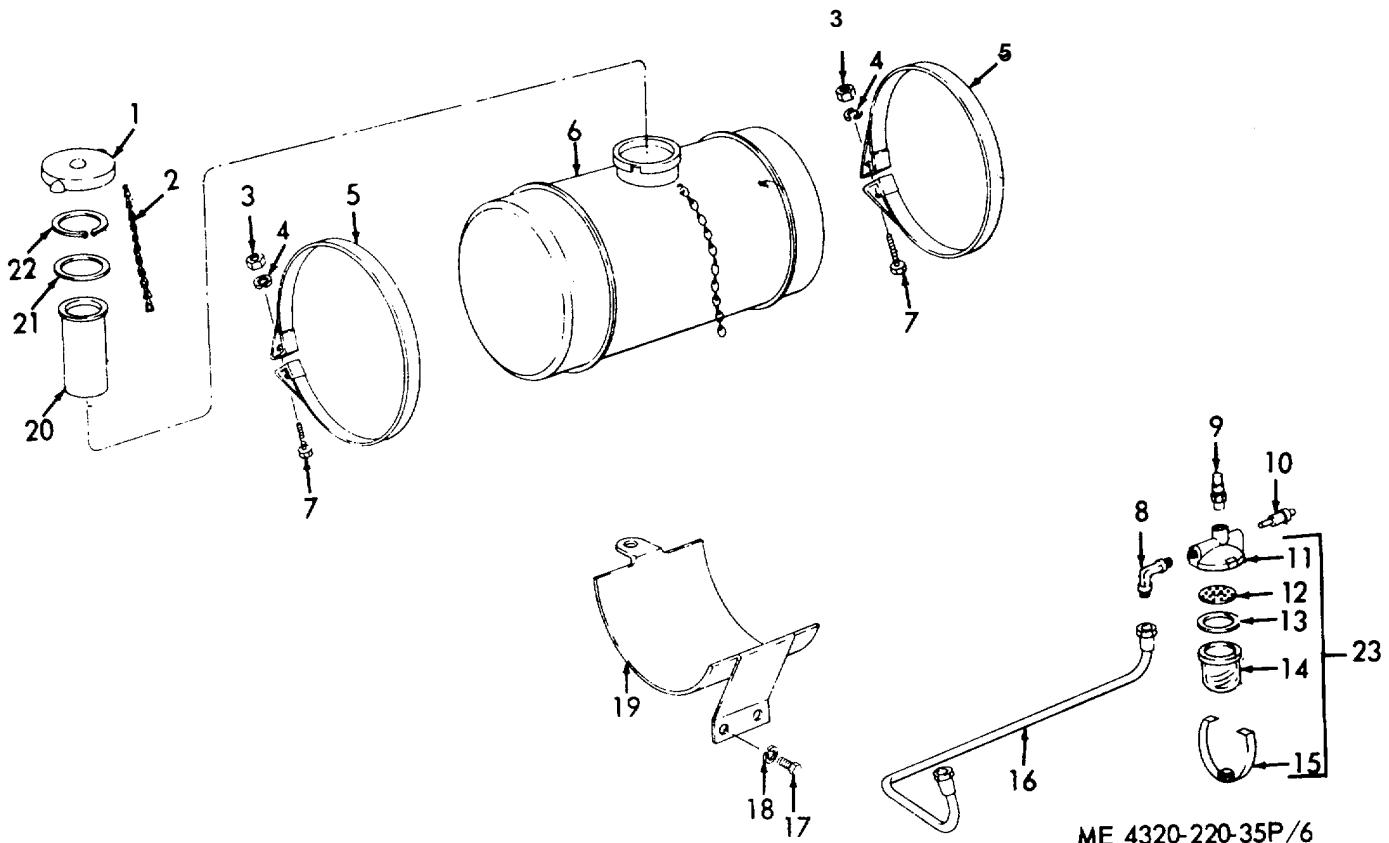


ME 4320-220-35P/5

Figure 2. Air Cleaner and Carburetor.

INDEX TO PARTS, FIGURE 2

Reference Number	Functional Group	Item Name	Reference Number	Functional Group	Item Name
1	0304	NUT	13	0106	ELBOW
2	0304	CAP	14	0106	TUBE AY
3	0108	GASKET	15	0304	GASKET
4	0108	MANIFOLD	16	0304	SCREW
5	0301	BOLT	17	0304	BRACKET
6	0301	WASHER	18	0304	SCREW
7	0108	WASHER	19	0304	SUPPORT
7	0304	WASHER	20	0304	BOLT
8	0108	SCREW	21	0304	NUT
9	0108	PLUG	22	0304	STUD
10	0301	GASKET	23	0304	WASHER
11	0301	CARBURETOR	24	0304	CUP
12	0301	GASKET	25	0304	WASHER

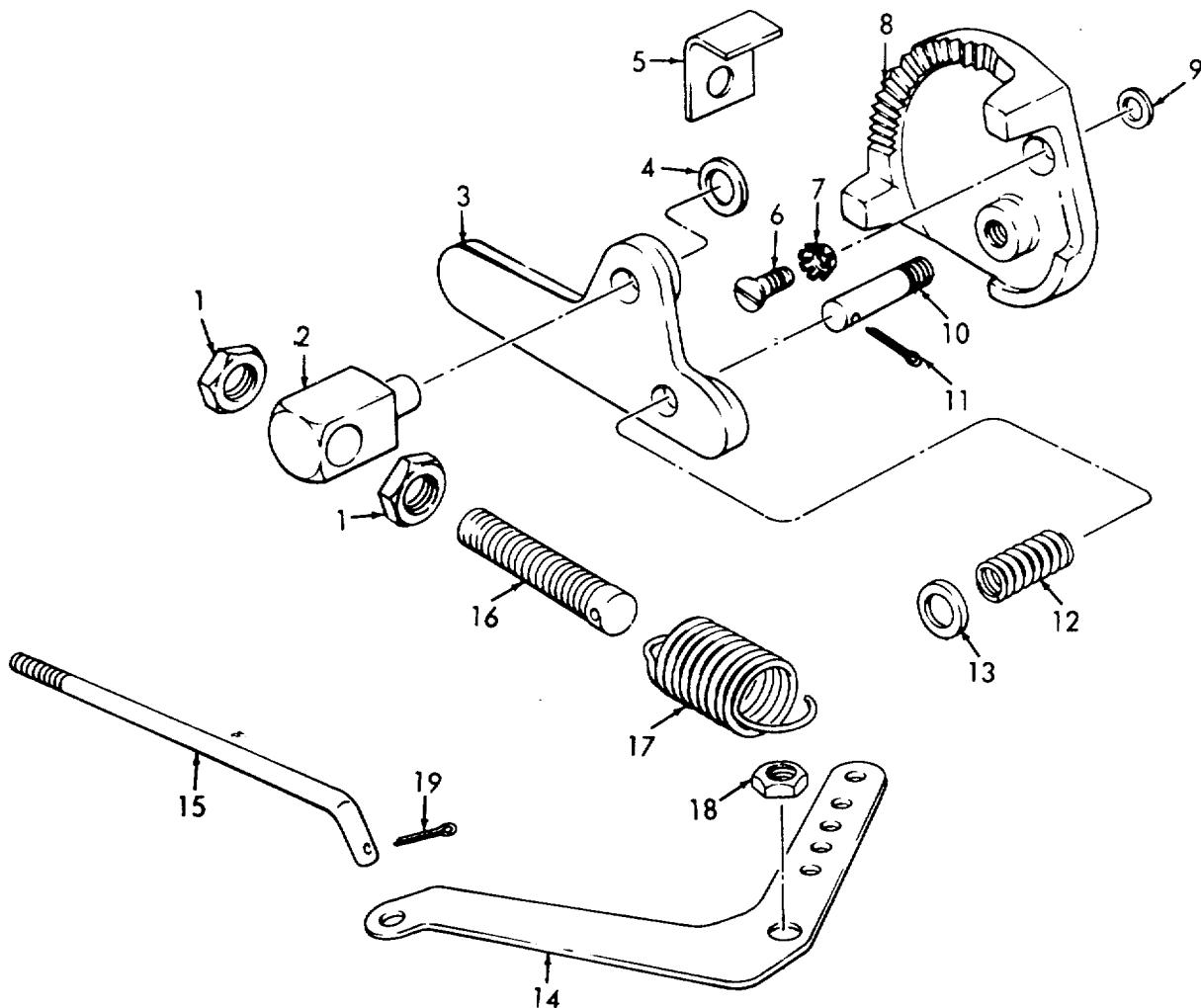


ME 4320-220-35P/6

Figure 3. Fuel Tank and Strainer.

INDEX TO PARTS, FIGURE 3

Reference Number	Functional Group	Item Name	Reference Number	Functional Group	Item Name
1	0306	CAP	13	0309	WASHER
2	0306	CHAIN	14	0309	BOWL
3	0306	NUT	15	0309	BAIL
4	0306	WASHER	16	0306	TUBE AY
5	0306	STRAP'	17	0306	SCREW
6	0306	TANK AY	18	0306	WASHER
7	0306	SCREW	19	0306	BRACKET
8	0306	ELBOW	20	0306	STRAINER
9	0306	STANDPIPE	21	0306	WASHER
10	0309	VALVE AY	22	0306	RING
11	0309	COVER	23	0309	STRAINER AY
12	0309	STRAINER ELEMENT			FUEL

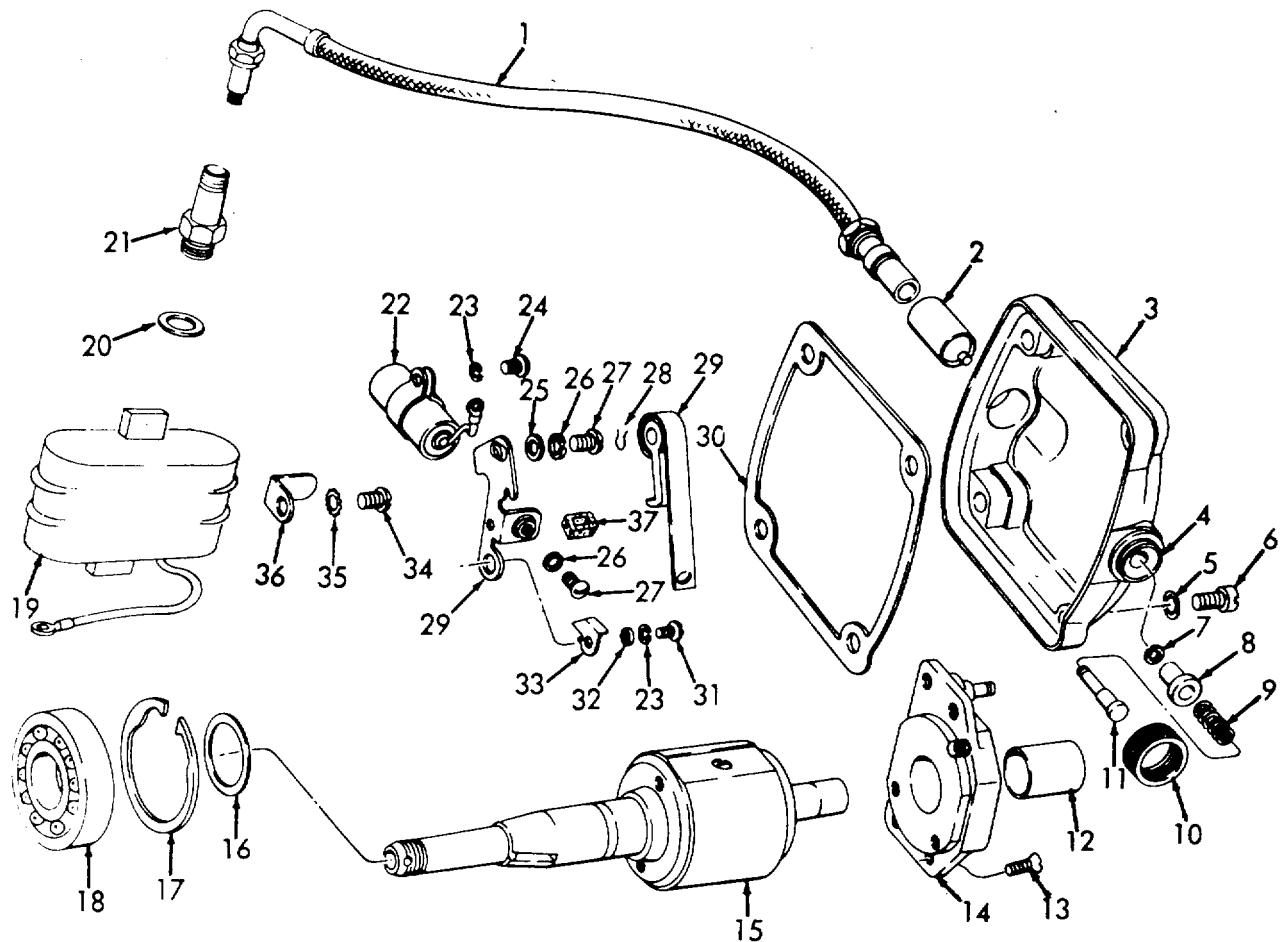


ME 4320-220-35P/7

Figure 4. Governor Controls.

INDEX TO PARTS, FIGURE 4

Reference Number	Functional Group	Item Name	Reference Number	Functional Group	Item Name
1	0308	NUT	11	0308	PIN
2	0308	BLOCK	12	0308	SPRING
3	0308	LEVER	13	0308	WASHER
4	0308	WASHER	14	0308	LEVER
5	0308	BRACE	15	0312	ROD
6	0308	SCREW	16	0308	SCREW
7	0308	WASHER	17	0308	SPRING
8	0308	BRACKET	18	0308	NUT
9	0308	GASKET	19	0312	PIN
10	0308	PIN			

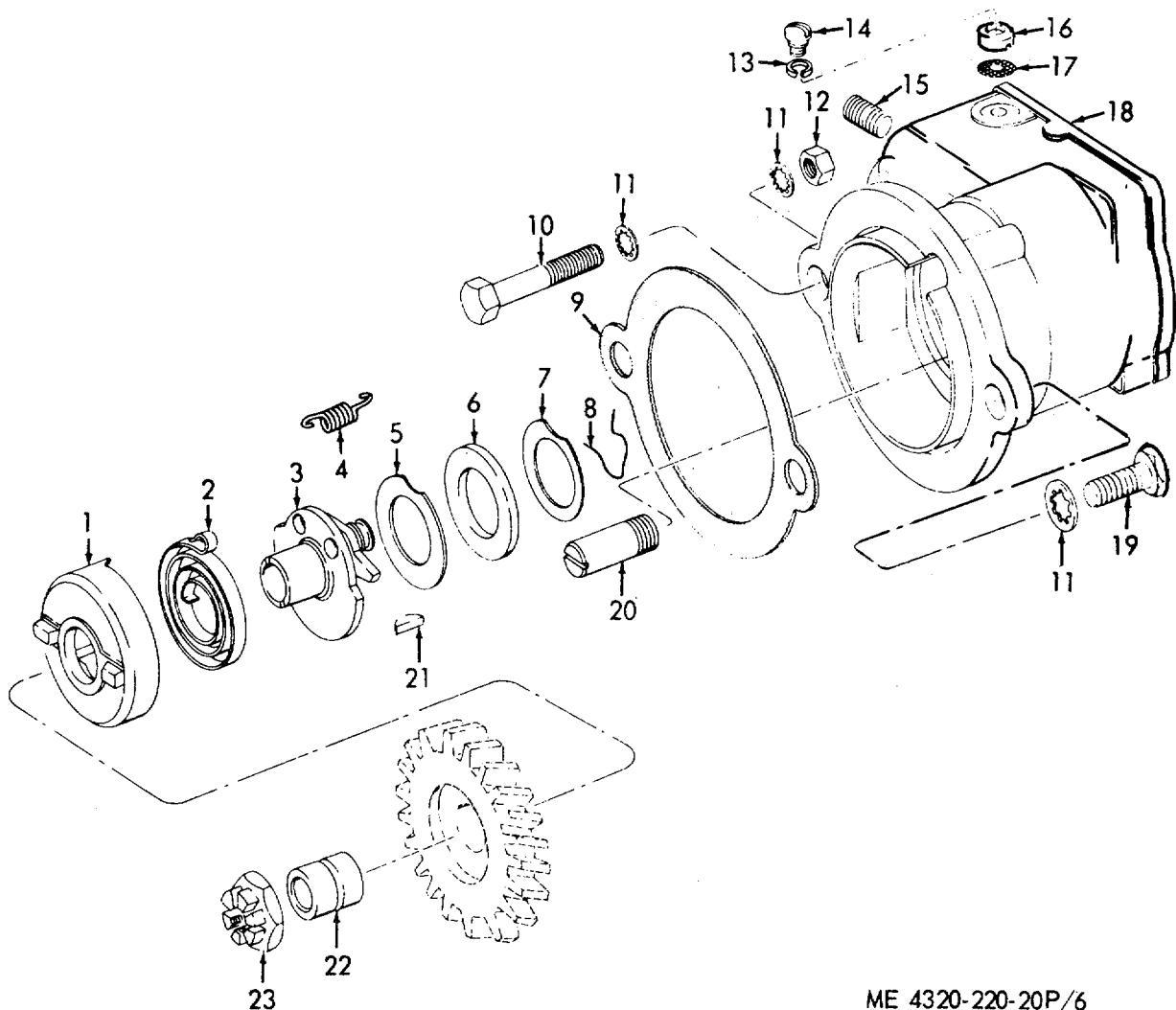


ME 4320-220-35P/8

Figure 5. Magneto, Rotor End.

INDEX TO PARTS, FIGURE 5

Reference Number	Functional Group	Item Name	Reference Number	Functional Group	Item Name
1	0605	CABLE AY	20	0605	GASKET
2	0605	INSULATOR	21	0605	SPARK PLUG
3	0605	CAP	22	0605	CAPACITOR
4	0605	BUSHING	23	0605	WASHER
5	0605	WASHER	24	0605	SCREW
6	0605	SCREW	25	0605	WASHER
7	0605	RING	26	0605	WASHER
8	0605	BUSHING	27	0605	SCREW
9	0605	SPRING	28	0605	RING
10	0605	NUT	29	0605	CONTACT SET
11	0605	BUTTON	30	0605	GASKET
12	0605	BEARING	31	0605	SCREW
13	0605	SCREW	32	0605	WASHER
14	0605	PLATE AY	33	0605	HOLDER AY
15	0605	ROTOR	34	0605	SCREW
16	0605	SHIM	35	0605	WASHER
17	0605	RING	36	0605	CLIP
18	0605	BEARING	37	0605	WICK
19	0605	COIL			

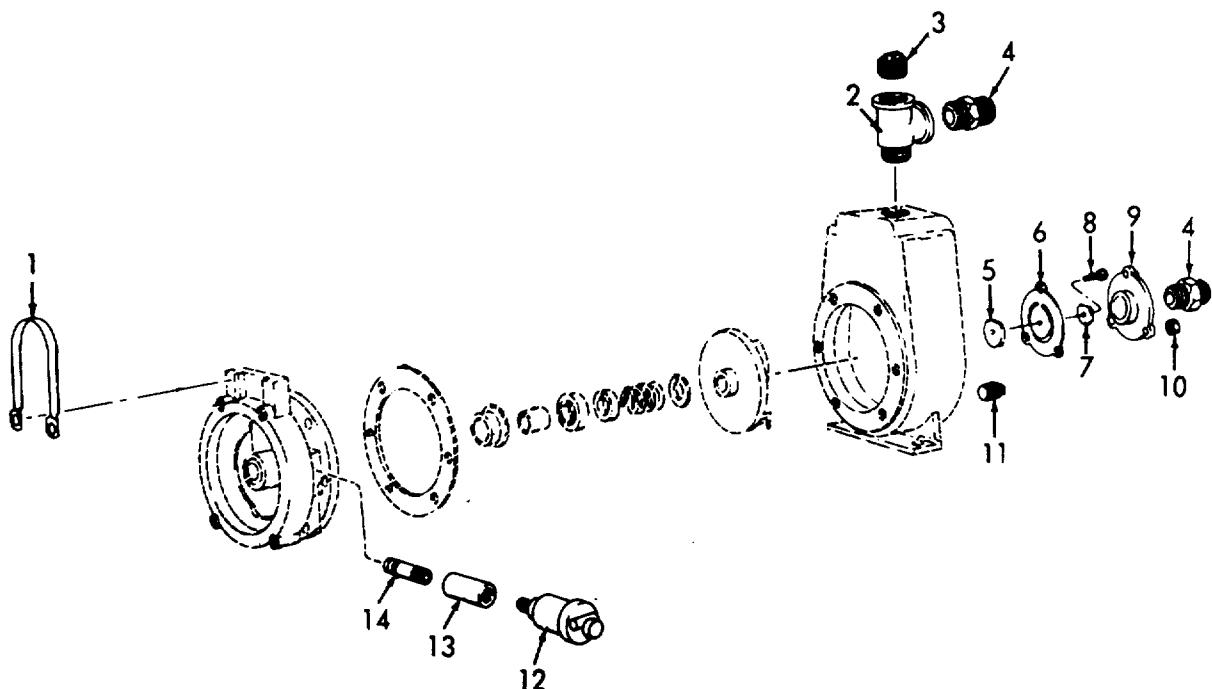


ME 4320-220-20P/6

Figure 6. Magneto, Drive End.

INDEX TO PARTS, FIGURE 6

Reference Number	Functional Group	Item Name	Reference Number	Functional Group	Item Name
1	0605	SHELL	13	0605	WASHER
2	0605	SPRING	14	0605	SCREW
3	0605	FJB AY	15	0605	SETSCREW
4	0605	SPRING	16	0605	COVER
5	0605	WASHER	17	0605	WIRE FABRIC
6	0605	SEAL	18	0605	FRAME
7	0605	WASHER	19	0605	SCREW
8	0605	RING	20	0605	PIN
9	0605	GASKET	21	0605	KEY
10	0605	BOLT	22	0605	BEARING
11	0605	WASHER	23	0605	NUT
12	0605	NUT			



ME 4320-220-20P/7

Figure 7. Compressor Pump and Base Rails.

INDEX TO PARTS, FIGURE 7

Reference Number	Functional Group	Item Name	Reference Number	Functional Group	Item Name
1	5500	HANDLE	8	5505	SCREW
2	5505	TEE	9	5505	FLANGE
3	5505	PLUG	10	5505	NUT
4	5505	ADAPTER	11	5500	PLUG
5	5505	WEIGHT	12	5508	CUP
6	5505	GASKET	13	5508	COUPLING
7	5505	WEIGHT	14	5508	NIPPLE

**SECTION V. INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER
CROSS-REFERENCE TO INDEX NUMBER**

<u>STOCK NUMBER</u>	<u>INDEX NUMBER</u>	<u>STOCK NUMBER</u>	<u>INDEX NUMBER</u>
2805-251-3219	00011	2920-740-6251	00216
2805-251-3219	00051	2920-806-0637	00187
2805-310-7667	00147	2920-922-2174	00226
2805-310-7668	00149	2920-939-9835	00188
2805-353-5859	00086	2940-047-4495	00075
2805-353-5904	00009	2940-141-9296	00069
2805-353-5908	00004	2940-315-1916	00083
2805-360-8334	00022	2940-464-3772	00045
2805-360-8334	00038	2940-830-0150	00070
2805-366-6136	00035	2990-224-8188	00129
2805-366-9739	00013	2990-536-2962	00113
2805-366-9739	00025	2990-603-4790	00140
2805-371-4616	00154	2990-618-6556	00048
2805-374-3129	00052	2990-625-9303	00047
2805-377-4977	00150	2990-677-2375	00143
2805-536-8805	00008	2990-874-3232	00110
2805-536-8805	00024	3110-144-8998	00164
2805-546-3730	00006	4010-186-9388	00103
2805-546-3730	00023	4010-186-9388	00260
2805-604-8225	00017	4210-555-8837	00257
2805-695-8784	00015	4320-353-0600	00242
2805-695-8784	00039	4320-353-0601	00247
2805-705-7796	00027	4320-353-0602	00246
2910-099-5639	00131	4510-919-2660	00250
2910-358-5327	00135	4710-277-5525	00107
2910-366-6289	00105	4710-277-5525	00263
2910-371-4613	00098	4710-277-7581	00091
2910-447-9260	00005	4710-277-7581	00262
2910-447-9260	00077	4730-011-6352	00106
2910-654-3498	00059	4730-018-9566	00053
2910-740-3354	00089	4730-045-9769	00043
2910-807-7153	00061	4730-231-5632	00087
2910-830-5496	00100	4730-249-9721	00090
2910-846-0943	00101	4730-254-6228	00042
2910-980-1705	00062	4730-277-3390	00253
2910-992-8627	00111	4730-277-6845	00240
2920-047-4176	00217	4730-277-6845	00241
2920-047-4530	00012	4730-366-6256	00029
2920-047-4530	00162	4730-812-4303	00094
2920-286-2712	00182	5305-068-0500	00081
2920-294-4001	00186	5305-012-0583	00248
2920-315-1970	00200	5305-012-1832	00208
2920-319-5055	00167	5305-103-2684	00204
2920-319-5058	00185	5305-206-1071	00225
2920-354-0741	00191	5305-225-3839	00054
2920-354-0750	00194	5305-269-3211	00088
2920-354-0766	00199	5305-269-3213	00030
2920-356-1221	00176	5305-269-3219	00003
2920-358-6442	00183	5305-272-5306	00202
2920-358-6719	00184	5305-281-6387	00173
2920-428-7572	00189	5305-285-5282	00207
2920-455-7098	00193	5305-614-0245	00174
2920-585-4059	00165	5305-616-6013	00201
2920-602-4263	00169	5305-647-2056	00210
2920-654-3499	00181	5305-647-2059	00212
2920-675-0548	00161	5305-723-9380	00213
2920-691-7884	00195	5305-808-9977	00078
2920-708-3516	00163	5305-954-5207	00233
2920-714-5868	00222	5305-954-5207	00234
2920-714-5869	00192	5305-958-5245	00125

**SECTION V. INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER
CROSS-REFERENCE TO INDEX NUMBER**

<u>STOCK NUMBER</u>	<u>INDEX NUMBER</u>	<u>STOCK NUMBER</u>	<u>INDEX NUMBER</u>
5305-958-5473	00211	5310-647-2054	00218
5305-984-4982	00205	5310-702-1797	00032
5305-988-1721	00153	5310-732-0558	00016
5305-988-1723	00152	5310-732-0558	00243
5306-207-6474	00058	5310-737-2632	00197
5306-207-9152	00074	5310-809-4058	00119
5306-207-9156	00020	5310-809-8544	00120
5306-225-8504	00021	5310-814-5973	00104
5306-225-8504	00037	5310-928-9824	00228
5306-272-3742	00160	5315-265-9197	00117
5307-275-3755	00031	5315-616-5514	00196
5307-275-3759	00082	5315-831-0140	00224
5310-013-1044	00203	5315-839-2325	00116
5310-013-1044	00221	5330-147-3307	00007
5310-013-4551	00079	5330-147-3307	00060
5310-013-4551	00096	5330-176-4123	00066
5310-188-7848	00223	5330-245-5460	00072
5310-194-0021	00108	5330-253-2469	00073
5310-194-9211	00126	5330-285-5061	00010
5310-205-7981	00178	5330-291-9873	00065
5310-205-9981	00033	5330-292-1504	00014
5310-205-9981	00040	5330-292-1504	00026
5310-209-0788	00206	5330-358-5683	00064
5310-270-2172	00219	5330-366-7148	00168
5310-285-1591	00179	5330-508-3010	00063
5310-366-6163	00080	5330-841-2729	00122
5310-407-9566	00067	5330-841-2729	00261
5310-407-9566	00157	5340-143-5280	00171
5310-428-7558	00198	5340-256-7147	00118
5310-479-6859	00018	5340-576-5825	00177
5310-576-1783	00128	5340-699-9964	00170
5310-576-5752	00175	5340-779-5991	00155
5310-582-5965	00055	5340-816-4239	00172
5310-582-5965	00084	5340-974-9537	00093
5310-582-5965	00099	5910-644-6204	00166
5310-582-5965	00156	5930-358-7735	00214
5310-584-8731	00028	5975-831-0182	00215
5310-596-6326	00148	9390-292-0355	00180
5310-637-1058	00123		

<u>REFERENCE NO.</u>	<u>MFG CODE</u>	<u>INDEX NO.</u>	<u>REFERENCE NO.</u>	<u>MFG CODE</u>	<u>INDEX NO.</u>
AB101-5S1	66289	00027	C5949	82796	00164
AN500-10-10	81352	00174	C5963	82796	00189
A2437A	82796	00167	C6032B	82796	00222
A2492A	82796	00179	DW2480	82796	00200
A2492C	82796	00178	D2458	82796	00219
A2572	82796	00182	D2565	82796	00191
A5-9	19728	00227	D4373	82796	00215
A5950A	82796	00165	D6120	82796	00185
A7419	78940	00072	FMXDE1 B7U	82796	00181
BK85	66289	00086	G2788	82796	00194
BR8S	19728	00226	03861	82796	00176
B1291-6	66289	00076	HF432	66289	00155
B1291 S1	66289	00075	J2430A	82796	00184
B1498B	82796	00171	KIT82796-1	81336	00163
B2735A	82796	00198	K2498	82796	00168
B5969	82796	00218	LC269A	66289	00052
B6030A	82796	00192	LJ158	66289	00144
CX2514C	82796	00214	L2788	82796	00180
C142-68	79960	00062	MS35225-25	96906	00205
C1498D	82796	00170	MS35335-30	96906	00206
C181-329	79960	00061	MS35756-6	96906	00196
C2513A	82796	00217	M100-2	00165	00133
C2723	82796	00177	M2570	82796	00197
C2744	82796	00183	NC143	66289	00035

**SECTION V. INDEX-FEDERAL STOCK NUMBER AND REFERENCE NUMBER
CROSS-REFERENCE TO INDEX NUMBER (Continued)**

<u>REFERENCE NO.</u>	<u>MFG CODE</u>	<u>INDEX NO.</u>	<u>REFERENCE NO.</u>	<u>MFG CODE</u>	<u>INDEX NO.</u>
PE73	66289	00049	T56-23	79960	00066
PG343A	66289	00083	T56-24	79960	00064
PG504	66289	00098	T56-48	79960	00065
PG504S1	66289	00095	U222	66289	00047
PG563	66289	00111	U268	66289	00048
PH482	66289	00104	VB179A	66289	00115
PI121A	66289	00124	VC35	66289	00114
PK127A	66289	00093	VE304C	66289	00140
PM117	66289	00118	VE584A	66289	00112
PM74	66289	00129	V1498	82796	00172
P2474X	82796	00195	V4631	82796	00199
QB77	66289	00011	WD66B	66289	00143
QB77	66289	00051	WE306A	66289	00100
QC58	66289	00007	WE306GS1	66289	00092
QC58	66289	00060	XA88	66289	00097
QD484	66289	00008	XB78	66289	001 51
QD484	66289	00024	XK4	66289	00044
QD487A	66289	00014	X132	66289	00139
QD487A	66289	00026	YD176C	66289	00161
QD487B	66289	00013	ZX5957	82796	00190
QD487B	66289	00025	10S10D	82796	00173
QD570A	66289	00012	100-1	00165	00134
QD570A	66289	00162	100-1ON	00165	00137
QD571	66289	00010	100-11	00165	00135
QD612A	66289	00015	100-6-7-8-9	00165	00136
QD612A	66289	00039	100A	00165	00132
QD647	66289	00005	176B1	78940	00071
QD647	66289	00077	179B1	78940	00070
QD674	66289	00006	189294	66289	00017
QD674	66289	00023	121841	00000	00209
QD675	66289	00009	121841	00000	00220
QD695	66289	00121	12199A	79960	00059
Q22	66289	00004	12713	05748	00237
RC118	66289	00101	131044	00000	00203
RD127A	66289	00094	131044	00000	00221
RM1280A	66289	00089	1339	05748	00250
RM494	66289	00045	1508	05748	00249
RM980	66289	00105	1684	05748	00253
RX2425	82796	0193	25 SS14A	82796	00213
SA68	66289	00022	2847	05748	00248
SA68	66289	00038	3063	05748	00242
SD35K	66289	00231	3064	05748	00247
SE154	66289	00154	3065SA	05748	00246
SE155	66289	00147	3207	05748	00238
SE157	66289	00150	3208	05748	00244
SE158	66289	00149	3226	05748	00252
SV2563C20	82796	00187	3261	05748	00254
SXY2433X	82796	00166	3438	05748	00245
SZ2563	82796	00188	5639	05748	00232
S2477C	82796	00186	6S3W	82796	00204
S2514	82796	00216	6S5N	82796	00212
S2568	82796	00224	6S6U	82796	00201
TC301-3	66289	00113	615A1	78940	00073
TC432B	66289	00127	8ss4U	82796	00210
TT74D	66289	00110	8S6G	82796	00211
T1 2B1	78940	00069	8S6N	82796	00208
T1498	82796	00169	8s6U	82796	00207
T56-20	79960	00063	830	00165	00131

By Order of the Secretary of the Army:

W. C. WESTMORELAND,
General, United States Army,
Chief of Staff.

Official:

KENNETH G. WICKHAM,
Major General, United States Army,
The Adjutant General.

Distribution

To be distributed in accordance with DA Form 12-25, Section I, (qty rqr block no. 242) organizational maintenance requirements for Pumps, Centrifugal: Fresh Water.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

SOMETHING WRONG WITH PUBLICATION



THEN...JOT DOWN THE
DOPE ABOUT IT ON THIS FORM.
CAREFULLY TEAR IT OUT, FOLD IT
AND DROP IT IN THE MAIL.

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE
NO.

PARA-
GRAPH

FIGURE
NO.

TABLE
NO.

IN THIS SPACE, TELL WHAT IS WRONG
AND WHAT SHOULD BE DONE ABOUT IT.

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS
ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR
RECOMMENDATION MAKE A CARBON COPY OF THIS
AND GIVE IT TO YOUR HEADQUARTERS.

The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 decagram = 10 grams = .35 ounce
 1 hectogram = 10 decagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
----	------------------------	----------------------------	---------------------	----

PIN: 008453-000