

DEPARTMENT OF THE ARMY TECHNICAL MANUAL
TM 11-900A

DEPARTMENT OF THE AIR FORCE TECHNICAL ORDER
TO 35C2-3-35-11
*C 5

POWER UNIT PE-75-AF

TM 11-900A }
TO 35C2-3-35-11 }
CHANGES No. 5 }

DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
WASHINGTON 25, D.C., 18 December 1961

TM 11-900A/TO 35C2-3-35-11, 8 August 1952, is changed as follows:

Page 1, paragraph 1. Delete subparagraph *b* and substitute the following:

b. Appendix I contains a list of current references applicable to the equipment. Appendix II contains a Maintenance Allocation Chart. Appendix III contains a Basic Issue Items List.

Page 2, paragraph 2 (page 1 of C 3). Add subparagraph *e*.

e. *Comments or Suggestions*. Any comments concerning omissions and discrepancies in appendix II and appendix III will be prepared on DA Form 2028 and forwarded direct to Commanding Officer, U.S. Army Signal Materiel Support Agency, ATTN: SIGMS-ML, Fort Monmouth, N.J.

2.1. Index of Equipment Publications

(Added)

Refer to DA Pamphlet 310-4 to determine what changes to or revisions of this manual are current.

APPENDIX II (Added)

MAINTENANCE ALLOCATION

Section I. INTRODUCTION

1. General

a. This appendix assigns maintenance functions to be performed on components, assemblies, and subassemblies by the lowest appropriate maintenance echelon.

b. Columns in the maintenance allocation chart are as follows:

(1) *Component*. This column shows only the nomenclature or standard item name. Additional descriptive data is in-

*These changes supersede so much of TM 11-6115-206-10P, 13 July 1959, as pertains to PE-75-AF and so much of TM 11-6115-206-20P, 13 July 1959, as pertains to Maintenance Allocation for PE-75-AF.

cluded only where clarification is necessary to identify the component. components, assemblies, and subassemblies are listed in top-down order. That is, the assemblies which are part of a component are listed immediately below that component, and the subassemblies which are part of an assembly are listed immediately below that assembly. Each generation break-down (components, assemblies, or subassemblies) are listed in disassembly order or alphabetical order.

- (2) *Maintenance function.* This column indicates the various maintenance functions allocated to the echelons.
 - (a) *Service.* To clean, to preserve, and to replenish lubricants.
 - (b) *Adjust.* To regulate periodically to prevent malfunction.
 - (c) *Inspect.* To verify serviceability and to detect incipient electrical or mechanical failure by scrutiny.
 - (d) *Test.* To verify serviceability and to detect incipient electrical or mechanical failure by use of special equipment such as gages, meters, etc.
 - (e) *Replace.* To substitute serviceable components, assemblies, or subassemblies, for unserviceable components, assemblies, or subassemblies.
 - (f) *Repair.* To restore an item to serviceable condition through correction of a specific failure or unserviceable condition. This function includes but is not limited to welding, grinding, riveting, straightening, and replacement of parts other than the trial and error replacement of running spare type items such as fuses, lamps, or electron tubes.
 - (g) *Align.* To adjust two or more components of an electrical system so that their functions are properly synchronized.
 - (h) *Calibrate.* To determine, check, or rectify the graduation of an instrument, weapon, or weapons system, or components of a weapons system.
 - (i) *Overhaul.* To restore an item to *completely serviceable* condition as prescribed by serviceability standards developed and published by heads of technical services. This is accomplished through employment of the technique of "Inspect and Repair Only as Necessary" (IROAN). Maximum utilization of diagnostic and test equipment is combined with minimum disassembly of the item during the overhaul process.
 - (j) *Rebuild.* To restore an item to a standard as near as possible to original or new condition in appearance, performance, and life expectancy. This is accomplished through the maintenance technique of complete disassembly of the item, inspection of all parts or compo-

nents, repair or replacement of worn or unserviceable elements using original manufacturing tolerances and/or specifications and subsequent reassembly of the item.

- (3) *1st, 2d, 3d, 4th, 5th echelon.* The symbol X indicates the echelon responsible for performing that particular maintenance operation, but does not necessarily indicate that repair parts will be stocked at that level. Echelons higher than the echelon marked by X are authorized to perform the indicated operation.
- (4) *Tools required.* This column indicates codes assigned to each individual tool equipment, test equipment, and maintenance equipment referenced. The grouping of codes in this column of the maintenance allocation chart indicates the tool, test, and maintenance equipment required to perform the maintenance function.
- (5) *Remarks.* Entries in this column will be utilized when necessary to clarify any of the data cited in the preceding columns.

c. Columns in the allocation of tools for maintenance functions are as follows:

- (1) *Tools required for maintenance functions.* This column lists tools, test, and maintenance equipment required to perform the maintenance functions.
- (2) *1st, 2d, 3d, 4th, 5th echelon.* The dagger (†) symbol in these columns indicates the echelons normally allocated the facility.
- (3) *Tool code.* This column lists the tool code assigned.

2. Maintenance by Using Organizations

When this equipment is used by signal services organizations organic to theater headquarters or communication zones to provide theater communications, those maintenance functions allocated up to and including fourth echelon are authorized to the organization operating this equipment.

Section II. MAINTENANCE ALLOCATION CHART

(1) Part or component	(2) Maintenance function	(3) 1st ech	(4) 2d ech	(5) 3d ech	(6) 4th ech	(8) Tools required	(9) Remarks	
POWER UNIT PE-75-AF	Service	X				2, 7, 13, 14	Clean exterior. Lubricates and cleans air cleaner. Voltage, spark plugs, ignition contact points, belts, and governor. Valves. Opens and shorts. Carburator float level, valve clearance and ignition timing. Compression, generator windings. Grinds or replaces valves. Plus shop support.	
	Adjust		X			11		
	Inspect	X		X		10		
	Test		X			3, 11		
	Repair			X		4, 6, 8, 9, 10, 12.		
	Align		X			1, 4, 5, 6, 8, 9, 10, 12.		
	Rebuild				X	11		
	Replace				X	10		
	Rebuild				X	10		
	Replace				X	10, 11		
ENGINE, GASOLINE PD-31/U, PD-31A/U.	Replace		X			11	Plus shop support.	
AIR CLEANER, INTAKE ASSEMBLY	Repair		X			11		
CARBURETOR ASSEMBLY	Replace		X			11		
	Repair		X			11		
	Rebuild			X		10		
MAGNETIC IGNITION ASSEMBLY	Repair		X			11		
	Replace			X		10		
GENERATOR G-40/U	Rebuild				X	10		Plus shop support.
SUPPRESSOR, ELECTRICAL NOISE F-155/U.	Replace				X	10		

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Section II. FUNCTIONAL PARTS LIST

Section III. ALLOCATION OF TOOLS FOR MAINTENANCE FUNCTIONS

(1) Tools required for maintenance functions	(2) 1st ech	(3) 2d ech	(4) 3d ech	(5) 4th ech	(6) 5th ech	(7) Tool code	(8) Remarks
PE-75-AF (continued)							
COMPRESSION GAGE FSN 4910-250-2423			(†)	(†)	(†)	1	
PLIERS FSN 5120-223-7397	(†)					2	
MULTIMETER AN/URM-105		(†)				3	
MULTIMETER TS-352/U			(†)	(†)	(†)	4	
OHMMETER ZM-21/U			(†)	(†)	(†)	5	
SCALE SPRING FSN 6670-291-8721			(†)	(†)	(†)	6	
SCREWDRIVER FSN 5120-277-9491	(†)					7	
TACHOMETER FSN 6625-405-6352			(†)	(†)	(†)	8	
THERMOMETER MX-1570/G			(†)	(†)	(†)	9	
TOOL EQUIPMENT TE-111			(†)	(†)	(†)	10	
TOOL SET GENERAL MECHANIC'S FSN 5180-754-0641		(†)		(†)	(†)	11	
VACUUM GAGE FSN 4910-387-9582			(†)	(†)	(†)	12	
WRENCH FSN 5120-293-2432	(†)					13	
WRENCH TL-476/U FSN 5120-240-5328	(†)					14	

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APPENDIX III (Added)

BASIC ISSUES ITEMS FOR POWER UNIT
PE-75-AF

Section I. INTRODUCTION

1. Scope

a. This appendix lists items supplied for initial operation and for running spares. The list includes tools, accessories, parts, and material issued as part of the major end item. The list includes all items authorized for basic operator maintenance of the equipment. End items of equipment are issued on the basis of allowances prescribed in equipment authorization tables and other documents that are a basis for requisitioning.

b. Columns are as follows:

- (1) *Source, maintenance, and recoverability code.* Not used.
- (2) *Federal stock number.* This column lists the 11-digit Federal stock number.
- (3) *Designation by model.* Not used.
- (4) *Description.* Nomenclature or the standard item name and brief identifying data for each item are listed in this column. When requisitioning, enter the nomenclature and description.
- (5) *Unit of issue.* The unit of issue is each unless otherwise indicated and is the supply term by which the individual item is counted for procurement, storage, requisitioning, allowances, and issue purposes.
- (6) *Expendability.* Nonexpendable items are indicated by NX. Expendable items are not annotated.
- (7) *Quantity authorized.* Under "Items Comprising an Operable Equipment", the column lists the quantity of items supplied for the initial operation of the equipment. Under "Running Spares and Accessory Items", the quantities listed are those issued initially with the equipment as spare parts. The quantities are authorized to be kept on hand by the operator for maintenance of the equipment.
- (8) *Illustration.* The "Item No." column lists the reference designations that appear on the part in the equipment. These same designations are also used on any illustrations of the equipment. The numbers in the "Figure No." column refer to the illustrations where the part is shown.

Section II. FUNCTIONAL PARTS LIST

(2) Federal stock number	(4) Description	(6) Expendability	(7) Quantity authorized	(8) Illustrations	
				Figure No.	Item No.
6115-228-6815	POWER UNIT PE-75-AF: gen, 120 vac, 60 cyc, single phase, 2.5 kw, 2 wire; 1800 rpm; prime mover, one cyl, air cooled, 2800 rpm manually cranked by rope, 2800 rpm; w/radio interference; 36 in. lg x 19 in. wide x 23½ in. h o/a.	NX		1	H628 through H631.
Ord through AGC	ITEMS COMPRISING AN OPERABLE EQUIPMENT				
2805-356-1985	POWER UNIT PE-75-AF: (BASIC COMPONENT)	NX	1		
4730-261-4225	TECHNICAL MANUAL TM 11-900A (Not installed)		2		
2910-399-7670	COVER: Webb Mfg No. PB-8651 (Not installed)		1		
6115-356-1001	ELBOW, PIPE TO TUBE: brass (Not installed)		1		
2910-356-2045	FUEL ADAPTER ASSEMBLY: Sig/dwg SC-C-99551 (Not installed)		4		
4730-541-7598	HANDLE: Sig/dwg ES-B-107633		1		
5120-223-7397	LINE FUEL: Sig/dwg SC-B-90693 (Not installed)		1		
5120-277-9491	NOZZLE, FUEL AND OIL SERVICING: Sig/dwg SC-B-52842 (Not installed)	NX	1		
5120-278-0326	PLIERS: Bonny Tool No. B-26 (Not installed)	NX	1		
	SCREWDRIVER TL-358/U: Stanley No. 81-4 (Not installed)	NX	1		
	SCREW STARTER, HAND: Fed Spec No. GGG-S-121C, type III, class I (Not installed).	NX	1		
2990-288-4727	STARTER ROPE: Br and Str 292897 (Not installed)	NX	1	10	4.
5120-293-2432	WRENCH: Burner No. 221 (Not installed)	NX	1		
5120-240-5328	WRENCH TL-476/U: Crescent Tool No. AC-18 (Not installed)	NX	1		
	RUNNING SPARES AND ACCESSORY ITEMS				
2910-269-7127	BOWL, FUEL CLEANER: Br and Str No. 68487 (Not installed)		1	42	090.
2910-171-3676	GASKET: Br and Str No. 68477 (Not installed)		4	42	089.
2940-374-3790	GASKET: Br and Str No. 27401 (Not installed)		1	40	06.
5330-298-0184	GASKET: Br and Str No. 67247 (Not installed)		2	40	014.
2920-580-9848	SPARK PLUG: Champion No. XEJ-8 (Not installed)		2	36	E4.
2990-288-4727	STARTER ROPE: Br and Str No. 292897 (Not installed)		1	10	4.

G. H. DECKER,
General, United States Army,
Chief of Staff.

Official:

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The Adjutant General.

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Director of Administrative Services.

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USASA (2)
CNGB (1)
Tech Stf, DA (1) except CSigO (18)
Tech Stf Bd (1)
USCONARC (5)
USAARTYBD (1)
USAARMBD (2)
USAIB (1)
USARADB (2)
USAABELCTBD (1)
USAAVNBD (1)
USAATBD (1)
ARADCOM (2)
ARADCOM, Rgn (2)
OS Maj Comd (3)
OS Base Comd (2)
LOGCOMD (2)
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Instl (2)
Fort Monmouth (63)
USATC AD (2)
USATC Armor (2)
USATC Engr (2)
USATC FA (2)
USATC Inf (2)
USAOMC (3)
Svc Colleges (2)
Br Svc Sch (2)

GENDEP (2) except Atlanta
GENDEP (none)
Sig Sec, GENDEP (5)
Sig Dep (12)
WRAMC (1)
USA Trans Tml Comd (1)
Army Tml (1)
POE (1)
OSA (1)
CMLCMATCOM (5)
Dugway PG (5)
USAPRDC (5)
Aberdeen PG (5)
USMA (5)
Mil Msn (Paraguay, Ecuador, Bolivia, Guatemala) (5)
USAEPG (2)
AFIP (1)
AMS (1)
Army Pictorial Cen (2)
EMC (1)
Yuma Test Sta (2)
USACA (3)
USASSA (20)
USASSAMRO (1)
USASEA (1)
USA Caribbean Sig Agcy (1)
USA Sig Msl Spt Agcy (13)
Sig Fld Maint Shops (3)
USA Corps (3)
JBUSMC (2)
AFSSC (1)

Units organized under following

TOE's:

1-7 (2)
1-17 (2)
1-107 (2)
1-127 (2)
1-207 (2)
5-343 (2)
5-352 (2)
5-412 (2)
6-100 (2)
6-101 (2)
6-200 (2)
6-201 (2)
6-300 (2)
6-301 (2)
6-525 (2)
6-565 (2)
6-575 (2)
6-576 (2)
7 (2)
9-500 AA-AC (2)
10-105 (2)
10-106 (2)
10-107 (2)
10-202 (2)
10-206 (2)
10-377 (2)
10-445 (2)
10-448 (2)
10-467 (2)
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11-57 (2)
11-95 (2)

11-96 (2)
11-97 (2)
11-98 (2)
11-117 (2)
11-155 (2)
11-157 (2)
11-500 AA-AE (4)
11-555 (2)
11-557 (2)
11-587 (2)
11-592 (2)
11-597 (2)
12-17 (2)
17 (2)
19-55 (2)
19-56 (2)
19-57 (2)
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29-56 (2)
30-600 AA-AE (2)
32-57 (2)
33-77 (2)
33-600 AA-AC (2)
39-51 (2)
39-52 (2)
39-62 (2)
44-7 (2)
44-8 (2)
44-12 (2)
44-15 (2)
44-16 (2)
44-17 (2)
44-36 (2)
44-70 (2)
44-102 (2)
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44-436 (2)
44-437 (2)
44-535 (2)
44-536 (2)
44-537 (2)
55-137 (2)
57 (2)
57-5 (2)

NG: State AG (3); units—same as Active Army except allowance is one copy to each unit.

USAR: None.

For explanation of abbreviations used, see AR 320-50.