

CHANGE

No. 1

**HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 30 November 1982**

**OPERATOR AND ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL
TOOL LISTS AND MAINTENANCE ALLOCATION CHART, DIALS TA-45/GT,
TA-45B/GT, AND TA-45C/GT (NSN 5805-00-224-9249)**

TM 11-5805-269-12P, 10 June 1964, is changed as follows:

Page 5, Section III.1 is added after Section III.

By Order of the Secretary of the Army:

Official:

E. C. MEYER
General, United States Army
Chief of Staff

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

SECTION III.1

CROSS REFERENCE INDEX. The Cross-Reference Index is a cross-reference listing of part number to National Stock Number.

a. Use of Cross-Reference Index . To order a part listed in the Cross-Reference Index, note part number and then cross-reference that part number to the National Stock Number in the cross-reference index. Then order through normal ordering channels.

b. Ordering Part Numbers Without National Stock Number. If the part number does not have a National Stock Number, then order the part through normal ordering channels using the part number and the FSCM.

CROSS REFERENCE INDEX

Parts With AN FSN

FSN	NEW NSN	FSCM	PART NUMBER
58051270958	5805001270958	80063	SM-B-61294
58051271322	5805001271322	04773	D65112
58051271324	NONE	40477	3D-78541-A
58051282277	NONE	78711	82050A
58052249249	5805002249249	80058	TA-45/GT-TA-45B/U
58052249249	5805002249249	80058	TA-45/GT-TA-45B/U
58054076264	5805004076264	28528	UP-38925
58054076288	NONE	78711	81053
58054076303	5805004076303	78711	81080
58054076335	NONE	28528	UP-38973
58054076336	NONE	80063	SC-B-24474

CROSS REFERENCE INDEX

Parts With NO FSN

OLD PART NUMBER	NEW NSN	FSCM	NEW PART NUMBER
TA-45/GT		80058	
TA-45B/GT		80058	
TA-45C/GT		80058	

☆ U. S. GOVERNMENT PRINTING OFFICE: 1987 O-181-421 (70053)

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR AND ORGANIZATIONAL MAINTENANCE
REPAIR PARTS AND SPECIAL TOOL LISTS
AND MAINTENANCE ALLOCATION CHART,
DIALS TA-45/GT, TA-45B/GT, AND TA-45C/GT

Headquarters, Department of the Army, Washington 25, D. C.

10 June 1964

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SECTION I

INTRODUCTION

1. Scope

a. This manual includes an operator's maintenance repair parts and special tools list and an organizational maintenance repair parts and special tools list.

- (1) The operator's maintenance repair parts and special tools list lists items supplied for initial operation. All items authorized for basic operator maintenance of the equipment are also listed.
- (2) The organizational maintenance repair parts and special tools list, lists the quantities of

- repair parts authorized for organizational maintenance and is a basis for requisitioning by organizations which are authorized the major item of equipment. End items of equipments are issued on the basis of allowances prescribed in equipment authorization tables and other documents that are a basis for requisitioning.
- (3) The maintenance allocation chart assigns maintenance functions and repair operations to be performed by the lowest appropriate maintenance echelon.

*This manual supersedes TM 11-5805-269-12P, 13 July 1959.

This copy is a reprint which includes current pages from Change 1.

b. Columns are as follows:

- (1) *Federal stock number.* This column lists the 11-digit Federal stock number.
- (2) *Designation by model.* The dagger (†) indicates model in which the part is used.
- (3) *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.
- (4) *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.
- (5) *Expendability.* Nonexpendable items are indicated by NX. Expendable items are not annotated.
- (6) *Quantity authorized.* Under "Items Comprising an Operable Equipment," the column lists the quantity of items supplied for the initial operation of the equipment.
- (7) *Quantity incorporated in unit.* This column lists the quantity of each part found in a given assembly, component, or equipment.
- (8) *Organizational.* The quantities indicated in this column are maximum levels of repair parts authorized to be kept on hand by units performing organizational maintenance. The quantities are based on 100 equipments to be maintained for a 15-day period.
- (9) *Illustration.* Not used.

2. Parts for Maintenance

When this equipment is used by signal service organizations organic to the theater headquarters or communication zones to provide theater communications, those repair parts authorized up to and including fourth echelon are authorized for stockage by the organization operating this equipment.

3. Requisitioning Information

- a. The allowance factors are based on 100

equipments. In order to determine the number of parts authorized for the specific number of equipments supported, the following formula will be used and carried out to two decimal places.

$$\begin{array}{r} \text{Specific number of equipments supported} \\ \times \frac{\text{allowance factor}}{100} = \\ \text{Number of parts authorized.} \end{array}$$

b. Fractional values obtained from above computation will be rounded to whole numbers as follows:

- (1) When the total number of parts authorized is less than one, the quantity authorized will be one.
- (2) For all values above one, fractional values below 0.5 will revert to the next lower number, fractional values of 0.5 or larger will advance to the next higher whole number.

c. The number of parts authorized, determined after application of a and b above, represent one prescribed load for a 15-day period. The items and computed quantities thereof must be on hand or on order at all times.

d. Major commanders will determine the number of prescribed loads second echelon units and organizations will carry. Unit and organizations authorized additional prescribed loads will utilize the formula explained in a above, but will multiply the number of equipments supported by the number of authorized prescribed loads before completing the formula. Fractional values will be rounded to whole numbers as described above.

4. Reporting Of Equipment Manual Improvements

The direct reporting, by the individual user, of errors, omissions, and recommendations for improving this equipment manual, is authorized and encouraged. DA Form 2028 will be used for reporting these improvements. This form may be completed using pencil, pen, or typewriter.

DA Form 2028 will be completed in triplicate and forwarded by the individual using the manual. An original and one copy will be forwarded direct to: Commanding General, U. S. Army Electronics

Command, ATTN: AMSEL-MR-MP-P, Fort Monmouth, New Jersey, 07703. One information copy will be furnished to the individual's immediate supervisor (officer, noncommissioned officer, supervisor, etc).

SECTION II. FIRST ECHELON FUNCTIONAL PARTS LIST

FEDERAL STOCK NO.	DESIGNATION BY MODEL					DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	ILLUSTRATION	
										FIG. NO.	ITEM NO.
5805-224-9249						DIAL TA-45/GT; TA-45B, C/GT: NOTE: Model Column 1 refers to TA-45/GT Model Column 2 refers to TA-45B/GT Model Column 3 refers to TA-45C/GT ITEMS COMPRISING AN OPERABLE EQUIPMENT DIAL TA-45/GT; TA-45B, C/GT: (Basic component)					
ORD THRU AGC	†	†	†			TECHNICAL MANUAL TM 11-5805-269-12P: RUNNING SPARE ITEMS NO PARTS AUTHORIZED FOR STOCKAGE AT FIRST ECHELON		NX	1		
									1		

TA-45/GT, B, and, C

SECTION III. SECOND ECHELON FUNCTIONAL PARTS LIST

FEDERAL STOCK NO.	DESIGNATION BY MODEL					DESCRIPTION	UNIT OF ISSUE	EXP	QTY IN UNIT	2nd ORGANIZATIONAL	ILLUSTRATION	
	1	2	3								FIG. NO.	ITEM NO.
	1	2	3			DIAL TA-45/GT; TA-45B, C/GT						
						NOTE: Model Column 1 refers to TA-45/GT Model Column 2 refers to TA-45B/GT Model Column 3 refers to TA-45C/T						
5805-224-9249						DIAL TA-45/GT; TA-45B, C/GT		NX				
5805-407-6336		†				CARD, DIAL NUMBER: Sig dwg No. SC-B-24474			1	4		
5805-128-2277		†	†			CARD, DIAL NUMBER: Telephonics part/dwg No. 82050A			1	4		
5805-407-6264		†				HOLDER, CARD: Fed Tele and Rad part/dwg No. UP-38925			1	4		
5805-127-1322		†	†			HOLDER, CARD: Telephonics part/dwg No. 81079			1	4		
5805-127-1324		†				PLATE, RETAINER: dial number card fastener: Auto Elec p/n D-78541-A			1	4		
5805-407-6288		†	†			PLATE, RETAINER: dial number card fastener; Telephonics part/dwg No. 81053			1	4		
5805-407-6303		†	†			SPRING: used to retain card and window; Telephonics part/dwg No. 81080			1	4		
5805-407-6335		†				WINDOW: number card cover. Fed Tele and Rad part/dwg No. UP-38973			1	4		
5805-127-0958		†	†			WINDOW: number card cover; Sig dwg No. SM-B-61294						

SECTION IV

MAINTENANCE ALLOCATION

5. General

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

6. Columns

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

- (1) *Part or component.* This column shows only the nomenclature or standard item name. Additional descriptive data are included 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 breakdown (components, assemblies, or subassemblies) is 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 gauges, 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 components, repair or replacement of worn or unserviceable elements using original

manufacturing tolerances and/or specifications and subsequent reassembly of the item.

- (3) *1st, 2^d, 3^d, 4th, 5th echelons.* 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 column.
 - b. 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, 2^d, 3^d, 4th, 5th echelons.* The dagger (†) indicates the echelons normally allocated the facility.
 - (3) *Tool code.* This column lists the tool code assigned.

Section V. MAINTENANCE ALLOCATION CHART

PART OR COMPONENT	MAINTENANCE FUNCTION	ECHELON					TOOLS REQUIRED	REMARKS
		1 •	2 •	3 •	4 •	5 •		
DIAL TA-45/GT; TA-45B, C/GT CARD, DIAL NUMBER COLLAR, LOCKING FINGER WHEEL HOLLER, CARD NUMBER, PLATE PLATE, RETAINER SPRING WINDOW	service	x					2	Clean dial if dirt, dust, fungus Adjust dial speed Inspect dial number card for legibility card holder for discoloration, finger wheel for freeness of action, number plate for discoloration Test dial speed, test present break measurement Make all tests
	adjust		x	x			2	
	inspect		x					
	test				x		1	
	test					x	1	
	replace		x				2	
	repair		x					
	rebuild					x		
	replace		x					
	replace			x				
	replace			x				
	replace		x					
	replace		x					
replace		x						

Section VI. ALLOCATION OF TOOLS FOR MAINTENANCE FUNCTIONS

PART OR COMPONENT	ECHELON					TOOL CODE	REMARKS
	1 •	2 •	3 •	4 •	5 •		
TA-45/GT; TA-45B, C/GT (continued)							
TEST SET, TELEPHONE AN/PTM-6				†	†	1	
TOOL EQUIPMENT TE-111		†	†	†	†	2	

By Order of Secretary of the Army:

EARLE G. WHEELER,
General, United States Army,
Chief of Staff.

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

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USAECOM (2)
USAMICOM (2)
USASMCOM (3)
USASCC (2)
Armies (1)
11th Air Assault Div (3)
USAARMCDA (2)
USAARTYCDA (2)
USATCDA (2)
USASTC (2)
Svc Colleges (1)
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Sig Dep (OS) (6)
Fort Worth Army Dep (5)
Lexington Army Dep (6)
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Tobyhanna Army Dep (6)
Letterkenny Army Dep (5)
Sharpe Army Dep (3)
Savanna Army Dep (5)
Blue Grass Army Dep (2)
Navajo Army Dep (5)
Charleston Army Dep (1)
USACECDA (2)
USA Elct Rsch & Dev Actv (6)
 White Sands
USA Elct Rsch & Dev Actv (1)
 Fort Huaohuca
Oakland Army Tml (5)

USA Elct Mat Agcy (6)
Chicago Proc Dist (1)
Sig Fld Maint Shops (1)
USASA 1st Fld Sta (1)
WSMR (1)
USAERDL (2)
USA Cold Rgn RE Lab (2)
MAAG (2)
JUSMAG Thailand (2)
JUSMMAG (2)
ARMISH (2)
JUSMMAT (2)
GENMISH (2)
KMAG (2)
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NG: None.

USAR: None.

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

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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 decigram = .035 ounce
 1 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 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 milliliters = .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	1.365	metric tons	short tons	1.102
pound-inches	newton-meters	.11375			

Temperature (Exact)

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

