R. RAY

COMPILED | CHECKED

APPROVED

TMC SPECIFICATION NO. S-729

TITLE:

INSTRUCTIONS

for

TMC PART NUMBERS,

TMC MATERIAL LISTS,

and

TMC NUMERICAL PARTS LISTS

DATE 16 October 1963 SHEET 2 OF 28	TMC SPECIFICATION NO. S - 729	D
COMPILED / CHECKED	TITLE: INSTRUCTIONS FOR TMC MATERIAL LISTS AND NUMERICAL PARTS LISTS	
APPROVED		

I N D E X

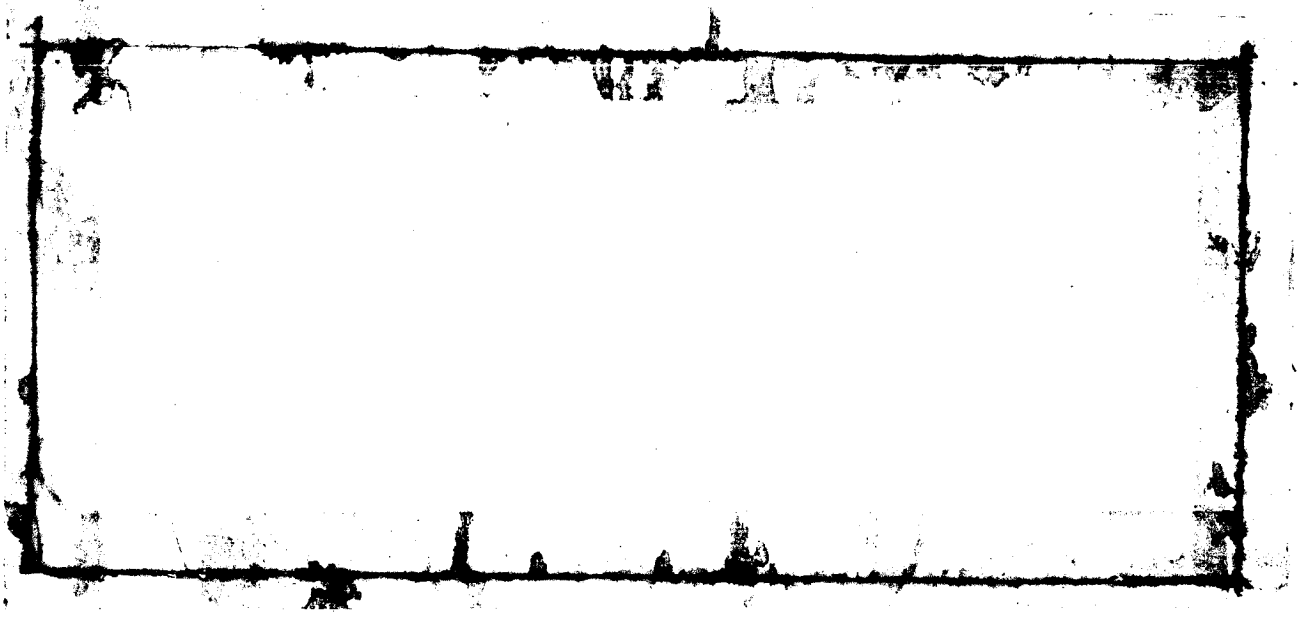
OGILVIE PRESS, INC., BROOKLYN 17, N. Y. STOCK NO. 459M 8444

DATE 16 October 1963	TMC SPECIFICATION NO. S - 729	D
SHEET 3 OF 28		
COMPILED / CHECKED	TITLE: INSTRUCTIONS FOR TMC MATERIAL LISTS AND NUMERICAL PARTS LISTS	
APPROVED		

I. PURPOSE

A. The purpose of this specification is to explain the structure of the TMC Material Lists, Numerical Parts Lists, Drawing Numbers and Part Numbers.

This specification applies only to new lists prepared after December 31, 1963.



II. EXPLANATION OF THE BASIC TMC DRAWING AND PART NUMBER SYSTEM

A. With limited exceptions (see B3a, below) the TMC Drawing No. and the TMC Part No. are one and the same.

B. The basic TMC Part No. consists of prefix letters to indicate the type of item, followed by numbers for identification purposes. (Examples: BB100; TE101; CA320)

1. Prefix Explanation:

(a) Prefix letters are generally significant letters to catagorize the item. (Examples: A=Assembly; CA= Cable; WI=Wire or Cable [Bulk]; TE=Terminal)

For more detailed Prefix explanations, see Appendix A.

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2. "FAMILY" Type Part Numbers

(a) A "family" type part number is used to standardize a drawing in order to cover more than one size, color, etc., of one type of item. (Example: The basic TMC Part No. may be TE120 [Terminal, Lug, Spade Type]. Since this lug is available in different screw sizes etc., it is made into a family type drawing with the basic TMC Part Numbers followed by dash numbers.
Example: TE120-1, TE120-2, etc.)
Note that this system is followed through to a much greater level of number-letter combinations to cover a wide variance of similar items. (Example: SCB0632BN20, MS202-8-8.650, CA412-60-25.37).

3. SPECIAL APPLICATION Numbers

(a) For Government Support Purposes, Special Design Purposes, and other varied reasons, a two numbers system was devised for certain items. This system consists of a double letter prefix number (Example: AX1000) which is the TMC Part No.; and a supporting production assembly No. (Example: A5000), which is used to manufacture the item. The TMC Part No. drawing is used for stocking, spare parts replacement and publication purposes. The Production Assembly drawing and number is used internally only and is not released to TMC customers. This system is used for items which Engineering decides will be used for spare parts replacement assemblies and for sub-sections of major units for which the manufacturing info should be proprietary.
A Material List or Numerical Parts List will always show this type of item as a double number. The Part No. will be listed in the Part No. Column (i.e., AX1000), and the production assembly No. will be on the same line in the Remarks Column prefixed with a # symbol, (i.e., #A5000). If a list shows either one of these types of numbers by itself, then the double number system does not apply. (Example: It is possible to have a production assembly drawing [for building purposes] of an item or section which will not be used for replacement, and it will have only a number such as A1020. It is also possible for an item to be a sub-section of a unit with a two letter prefix and no supporting assembly, as all information will be on the double letter prefix drawing. This might be a number such as AX238).

When a double number system does exist for a part, it will be indicated as such on the Material List.

(b) For Production Control purposes, an item with a double number, such as a part number of AX1000, and a production assembly number A5000, will be referred to, for ordering, etc., as AX1000 (A5000). After the item is made and received, it will be stocked with only the part number, AX1000.

The Production Dept., Industrial Engineering Dept., etc., would order the part from stock with the part No. only, AX1000.

(c) Another double number system is used to indicate a lettered part. Example: If a chassis, i.e. MS5000, requires lettering (stamping info), it will get an "LD" drawing such as LD6000. The final lettered item will be known and stocked as LD6000 /MS5000.

If the item is not yet lettered, it would be known as just MS5000. This type of part No. (LD6000/MS5000.) will appear in the Electrical/Mechanical Section of a list as a double number. Since the unlettered part may also be ordered and/or stocked, this part number also will appear with "used on" information referring to the LD number.

4. PARTS [illegible] (See Appendix C)

EXPLANATION OF TMC MATERIAL LISTS (ML) AND NUMERICAL PARTS LISTS (NPL).

A. Material List -

1. A material List is a list of all items required to support a complete TMC model. The list may include other supporting lists which must be used in conjunction with the main list. A Material List will reflect a complete TMC model as described in Sales Service or Technical Bulletins.

B. Numerical Parts List -

1. A Numerical Parts List is a list of all items required to support a sub-section or sub-assembly of a complete TMC Model. A Numerical Parts List will never reflect a complete TMC Model as published in Sales Service or Technical Bulletins.

IV. EXPLANATION OF SECTIONS OF MATERIAL LISTS AND PARTS LISTS

A. Cover Sheet (See Appendix B)

1. As indicated on ML and NPL Cover Sheets, our lists are divid d into seven major sections. These sections are:

1. **Supporting N tes**
2. **Supporting Lists**
3. **Electrical/Mechanical**
4. **Supporting Assemblies/Reference Drawings**
5. **Specifications**
6. **Loose Items**
7. **Parts P culiar**

A further brief explanation of these seven sections follows:

(a) "Supporting Notes" Section

This section will contain special instructions for which space is not available in the other sections.

(b) "Supporting Lists" Section

When a unit requires reference to other lists in order to build it, these lists will be shown in this section.

(c) "Electrical/Mechanical" Section

This section contains a list of all the components which make up the equipment, except for loose items and parts peculiar.

(d) "Supporting Assemblies/Reference Drawings" Section

Contains a list of all breakdown assembly drawings and all reference items such as charts, schematics, installation drawings, etc.
This section will also include items with the double number system (ie; C-5000, # A6000) as explained in this specification, Section II.B.(a) & (b).

(e) "Specifications" Section

This section lists TMC specifications which are applicable to the equipments or components covered by the ML or NPL. It may include specifications for Production Testing (see S-575), and Finish Specifications (see S-509).

(f) "Loose Items" Section

This section will list the items which are to be supplied with the unit as loose items for field support or repair purposes. These items may be packaged seperately from the basic equipment, one or more of the items may be mounted on the unit in some manner.

(g) "Parts Peculiar" Section

This section will list certain deviations, changes, additions, deletions, etc. that must be made to the basic unit involved for some special application.

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V. EXPLANATION OF MATERIAL LIST AND NUMERICAL PARTS LIST FORMS

A. The same forms will be used for both M.L.'S and NPL'S. These will be of two types:

1. Preliminary forms for use by Material List Writers.

2. Final forms for use by Data Processing.

B. Cover Sheet

1. The Cover Sheet (see Appendix B) will take the same general form for both Preliminary and Final lists. It will carry the following information:

a. Title
b. Model No.
c. Revision No.
d. "used on" information
e. List Sections and Sheet Numbers for same
f. List of last reference symbols
g. List of missing symbols
h. [redacted] the following:

(1) Compiled
(2) Checked
(3) Preliminary Approval
(4) Final Approval
(5) Issue Date

C. Preliminary List Forms (see Appendix B)

1. The forms will be marked off in columns.

2. The top of each sheet will carry the following information:

a. Model No.
b. Section No.
c. Sheet number
d. Total number of sheets
e. Assy Part No.
f. Assy Title
g. Next higher assembly number
h. Quantity per next assembly
i. Assembly Level (see Appendix F)

3. "List Section" Column - This consists of one block per item, and will be filled in with a singl digit t indicate the list section as follows:

(1) Supporting Notes
(2) Supporting Lists
(3) Electrical/Mechanical (See note below)
(4) Supporting Assy/Ref Dwgs.
(5) Specifications
(6) Loose Items
(7) Parts Peculiar

NOTE: Leave List Section blank for Section 3 items.

4. "Part Number" Column

(a) The number appearing in this column is the TMC Part & Drawing number. This number will be used for stocking, ordering, etcetera. Part numbers are limited to 20 digits, including dashes, slant signs and spaces.

(b) When ordering a copy of the TMC drawing for a particular part from the Reproduction Dept., the following conditions apply:

(1) If the Material List part number is, for example, GA126, the drawing number is also GA126.

(2) If the TMC part number is followed by a dash, with more digits, such as GA137-3, the TMC drawing number is GA137.

5. "Description" Column

(a) This column briefly describes the item. Description is limited to 14 digits, including spaces and punctuation.

The description will be selected and abbreviated in accordance with Military Handbook H-61, TMC SPEC. S-570, MIL-STD-12, and Eng. Coord Abbreviated Description Handbook.

6. "Item Location" Column, consisting of the "Used on Assembly", "Used to Mount" and "Qty per Used to Mount" Columns.

(a) "Used on Assembly" Column

(1) The drawing number for the assembly in which the line item is used is entered in this column. Entries are limited to 12 digits. It is essential that an entry be made in this column for each line item. It should be noted that some MS, PM, and PX drawings serve as assembly drawings in that they have mounted components listed thereon.

(b) "Used to Mount" Column

(1) This column is most generally used to indicate and "pinpoint" the function of mounting hardware and similar items. An entry in this column indicates what major items the particular line item mounts. All hardware must be accounted for in this manner.

(c) "Quantity per Used to Mount" Column

(1) This column indicates how many of the total "quantity per assy" per line item are used to mount the parti ular part shown in the "used to mount" column.

7. "Quantity per Assembly" Column

(a) This column is limited to six digits. It indicates the total quantity used for the assembly listed in the "Used on Assembly" Column. An entry must be made for each occurence of the assembly.

(b) Quantities are in units except for raw materials. The latter shall be listed by inches per the following examples:

(1) Ten feet nine inches = 129
(2) Eleven inches = 11

(c) In case an indefinite, or "as required" quantity is to be indicated, place an "X" in this column. The "X" will not appear in the Final List, but will advise the key punch operator that a specific quantity is not available. NOTE: An "X" generally should be used for items such as solder, compound, adhesive, lacing cord, but not for wire, cable, tape, etc.

8. "Reference Symbol" Column

(a) This column lists reference symbols pertaining to the line item involved, if appropriate. This column is limited to 10 digits. If more space is needed to list all reference symbols, use additional lines.

9. "Remarks" Column

(a) This column is limited to ten digits and is used to reference an item to a supporting note or to list the manufacturing assembly number for a "double-number" assembly.

D. Final List Forms (See Appendix I)

1. These forms ar similar to the Preliminary List Forms except for the following:

(a) The "Section" column will not be printed out, but the components will be sorted out by sections and listed alpha-numerically within sections.

(b) The total quantity per unit of each component will be computed and recorded.

(c) The "Used to Mount" & "Qty per Used to Mount" Columns will not be printed out, as this information shall be transferred to a TMC drawing form in the Drafting Section of Engineering.

VI. PREPARATION OF MATERIAL LISTS

A. The following procedure will be followed by the Engineering Department with regard to the writing of Material Lists:

1. Each list will be hand-written in "top down break-down" form. This list will be complete, including "used on" information from assembly drawings. Items will be marked to indicate appropriate list sections. However, they need not be arranged in alpha-numerical order and total quantities need not be computed.

2. A copy of all assemblies which will require "non-pictorial" type drawings will be submitted to the Drafting Section. The Drafting Section will create all necessary drawings from this information listing all "Used to Mount" data and complete "Buildup" data.
(Eng. Coord. Section may perform this function)

3. The completed hand-written list and all assembly drawings will be signed by the supervisor of Eng. Coord. and certified by him as to its correctness.

4. Upon completion of "3" above, the Eng. Coord. Supervisor will retain the original Material List and send one copy to Data Processing.

5. The run-off list from Data Processing will be returned to the Engineering Co-Ordination Section with the copy to be checked and receive final approval.

B. During the process described above, the Material Lists will be treated as "blue flag" documents. That is, they will not be released to Material control, Production, etc. unless approval is given by the Supervisor of the Eng. Coord. Section.

COVER SHEET
APPENDIX B

MODEL REV

USED ON
MODEL SECTION

TITLE

SHEET NO.

LIST SECTIONS
1. SUPPORTING NOTES
2. SUPPORTING LISTS
3. ELECTRICAL/MECHANICAL
4. SUPP ASSY/REF DWGS
5. SPECIFICATIONS
6. LOOSE ITEMS
7. PARTS PECULIAR

LAST SYMBOLS

COMPILED
CHECKED
APPROVED
FNL APPR
ISS DATE

MISSING SYMBOLS

TMC SPECIFICATION NO. S - 729

D

COMPILED | CHECKED

TITLE: INSTRUCTIONS FOR TMC MATERIAL LISTS AND NUMERICAL PARTS LISTS

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APPENDIX C

TMC PART NUMBER FORMAT

I. The following rules will be followed governing the construction of all TMC part numbers, (including old numbers, and all new numbers).

II. There will be no dash between the prefix letter(s) and the first numerical digit.
EXAMPLE: TE-100 should now be written and recorded as TE100.
CA-120 should now be CA120.
NOTE: Although old drawings, assemblies, material lists, etc., will not immediately reflect this change, it will be incorporated on all IBM keypunch documents made in the future.

III. There will be no dashes or spaces between number and letter combinations within a part number.
EXAMPLE: 1, CN-114-R10-4J will be CN114R10-4J (dash between first number "4" and letter "R" is omitted).

IV. If a dash already appears in a part number between letters and letters or numbers and numbers, it will be maintained and recorded in that manner.
EXAMPLE: CU-139-2B will now be CU139-2B (dash omitted between first letters and first numbers, but maintained between number (9) and number (2).
EXAMPLE: CN-114-R10-4J will now be CN114R10-4J (dash omitted between number (114) and letter (R), dash maintained between number (10) and number (4).

V. There shall be no interpolation made by any person by insertion of dashes into numbers due to "assumption" that one belongs there.
EXAMPLE: TE1032AE25R should not be written TE103-2AE25R, but is, in fact, correct as first written above.

VI. When writing numbers on lists, documents, etc., which will be submitted to Data Processing for keypunching, the following general rules shall be followed.

A. Write in all capitals.
B. Capital I (as Inductor) should be written I
C. Capital Z (as in Zebra) should be written Z
D. Capital S (as in Socket) should be written S
E. Capital J should be written J
F. Numeral 1 should be written 1
G. Numeral 0 should be written Ø
H. Capital O should be written O

VII. The following section shows the printout capabilities of the Data Processing machines now used by TMC, (extracted from IBM 407 Accounting Machine Reference Manual).

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	2	3	4	5	6	7	8	9	0			
/	.	,	$	¤	*	%	@	-	( )			

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MATERIAL LIST

REV.

PAGE \ OF

PART NUMBER	DESCRIPTION	USED ON	QUANTITY	QUANTITY PER UNIT	REFERENCE SYMBOLS	REMARKS

SHEET 26 OF 28

APPENDIX E

S729 REV D

THE TECHNICAL MATERIEL CORPORATION

MAMARONECK, NEW YORK

TMC SPECIFICATION NO. S- 729

D

COMPILED | CHECKED

TITLE: INSTRUCTIONS FOR TMC MATERIAL LISTS AND NUMERICAL PARTS LISTS

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A P P E N D I X F

BLOCK DIAGRAMS

1. An assembly block diagram serves as a guide to orderly compilation of material lists and accounting for the components therein. Refer to attached diagram of RAC-30A for example.

2. The Model Number or Part Number of the equipment, for which the list is being prepared, appears at "ZERO" level. The major sub-assemblies appear on the 1st Level; in this case the Final Assembly, A3082 and Loose Items.

3. The break-down of items on the 1st Level are shown on the Second Level. In this example, A3082 consists of AX381, AX315 and Misc. Parts. The break-down of AX381 and AX315 is shown on the Third Level. This process continues until all of the components are accounted for. In a complex unit, as many as ten levels may be necessary.

4. It is possible for the same part number, particularly in the case of hardware, to occur on more than one level.

NOTE: A block will be shown for each assembly. No block will be shown for parts.

Any block which is a multiple use item shall have the quantity shown as indicated on block "A102" in figure on next sheet.

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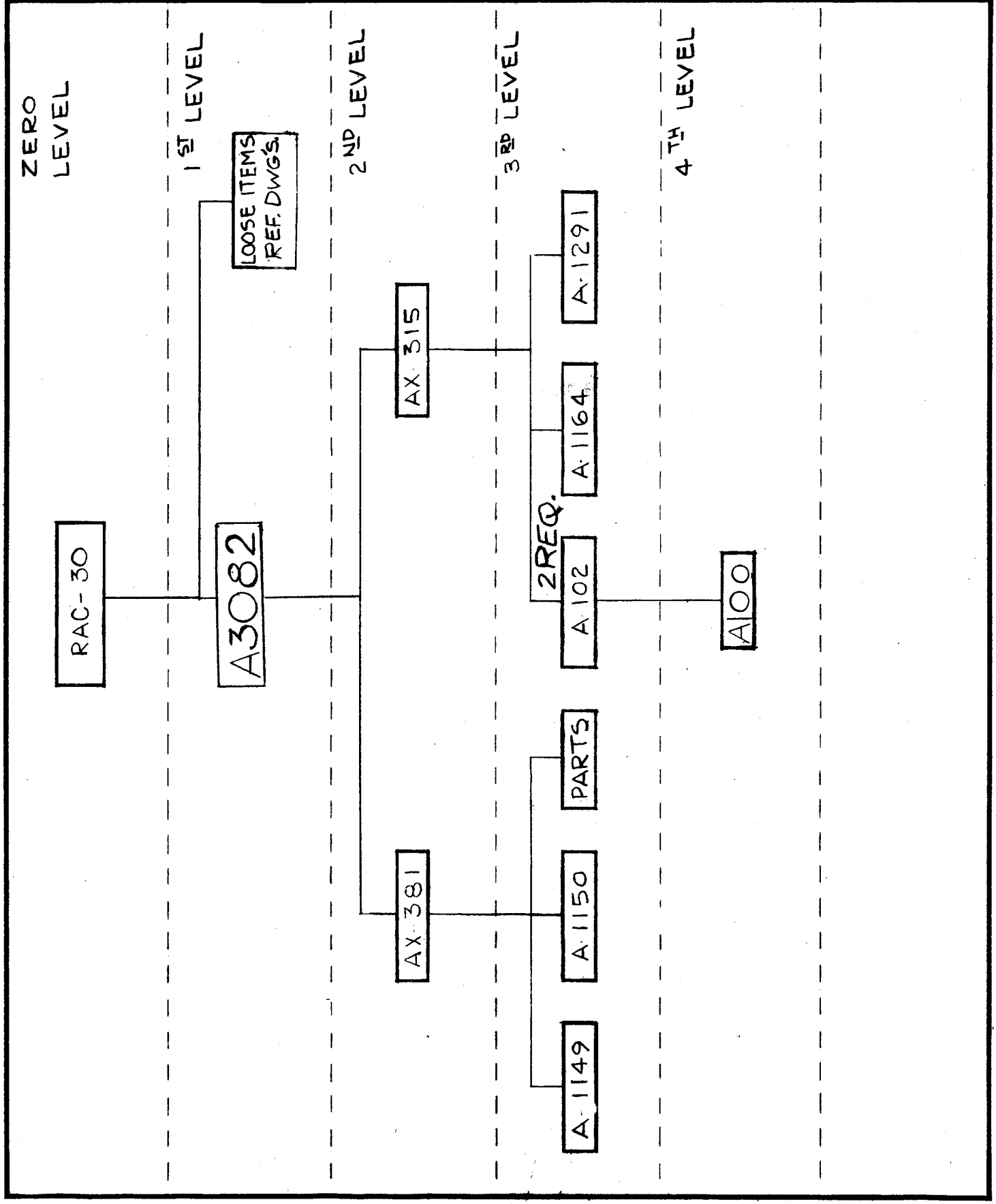
APPENDIX F



OGILVIE PRESS, INC., BROOKLYN 17, N. Y. STOCK NO. 459M 8444

REVISION SHEET

THE TECHNICAL MATERIAL CORP.
MAMARONECK NEW YORK

S729
LIST NO.

DATE	REV.	SHEET	EMN #	DESCRIPTION	APP.
7/21/64	C	----	11864	Revised shts. 12,15,16,17,18,20 per EMN	
12/22/65	D	----	15467	Revised shts. 4,7,8,10,11,12,13,14,17,19,20,21,24,25,27, 28 per EMN	
3/6/67	E	------	17930	COMPLETELY REVISED PER EMN	

TMC SPECIFICATION			NO. S 729
REV: E			
COMPILED: L. GABEL R. HAY	CHECKED:	APPD:	SHEET 1 OF 27
TITLE:			

DOCUMENTATION

OF

TMC PART NUMBERS,

TMC MATERIAL LISTS,

and

TMC NUMERICAL PARTS LISTS

I N D E X

I. PURPOSE

A. The purpose of this specification is to explain the structure of the TMC Material Lists, Numerical Parts Lists, Drawing Numbers and Part Numbers.

This specification applies only to new lists prepared after January 1, 1967.

II. EXPLANATION OF THE BASIC TMC DRAWING AND PART NUMBER SYSTEM

A. With limited exceptions (see B3a, below) the TMC Drawing Number and the TMC Part Number are one and the same.

B. The basic TMC Part Number consists of prefix letters to indicate the type of item, followed by numbers for identification purposes.

(Examples: BB100; TE101; CA320)

1. Prefix Explanation:

(a) Prefix letters are generally significant letters to catagorize the item. (Examples: A=Assembly; CA= Cable; WI=Wire or Cable (Bulk); TE=Terminal)

For more detailed Prefix explanations, see Appendix A.

2. "FAMILY" Type Part Numbers

(a) A "family" type part number is used to standardize a drawing in order to cover more than one size, color, etc., of one type of item. (Example: The basic TMC Part No. may be TE120 (Terminal, Lug, Spade Type). Since this lug is available in different screw sizes etc., it is made into a family type drawing with the basic TMC Part Numbers followed by dash numbers.

(Example: TE120-1, TE120-2, etc.)

NOTE that this system is followed through to a much greater level of number-letter combinations to cover a wide variance of similar items.

(Example: SCBP0632BN20, MS202-8-8.650, CA412-60-25.37)

3. SPECIAL APPLICATION Numbers

(a) For Government Support Purposes, Special Design Purposes, and other varied reasons, a two numbers system was devised for RF transformers with a TR prefix. This system consists of a double number (Example: TR001) which is the TMC Part No.; and a supporting production assembly No. (Example: A142), which is used to manufacture the item. The TMC Part No. drawing is used for stocking, spare parts replacement and publication purposes. The Production Assembly drawing and number is used internally only and is not released to TMC customers. This system is used for RF transformers which Engineering decides will be used for spare parts replacement assemblies and for sub-sections of major units for which the manufacturing info should be proprietary. The material list will show this type of item by listing the TMC Part No. with the quantity required and also listing the manufacturing assembly drawing with a (0) zero quantity so as not to duplicate.

(b) For Material Control purposes, an item with a double number, such as a part number of TR001, and a production assembly number A142, will be referred to, for ordering, etc., as TR001 and list A142 as a reference. After the item is made and received, it will be stocked with only the part number TR001.

The Production Dept., Industrial Engineering Dept., etc., would order the part from stock with the part No. only, TR001.

(c) Another double number system is used to indicate a lettered part. Example: If a chassis, i.e. MS5000, requires lettering (stampling info), it will get an "LD" drawing such as LD6000. The final lettered item will be known and stocked as LD6000/MS5000.

If the item is not yet lettered, it would be known as just MS5000. This type of part No. (LD6000/MS5000) will appear in the material list as a double number. Since the unlettered part may also be ordered and/or stocked, this part No. also will appear with "used on" information referring to the "LD" number.

4. PART NUMBER Format

(See Appendix C)

III. EXPLANATION OF TMC MATERIAL LISTS (ML) AND NUMERICAL PARTS LISTS (NPL)

A. Material List -

1. A material list is a list of all items required to support a complete TMC model. This list may include other supporting lists which must be used in conjunction with the main list. A material list will reflect a complete TMC model as described in Sales Service or Technical Bulletins.

B. Numerical Parts Lists -

1. A numerical parts list is a list of all items required to support a sub-section or sub-assembly of a complete TMC Model. A numerical parts list will never reflect a complete TMC Model as published in Sales Service or Technical Bulletins.

IV. EXPLANATION OF MATERIAL LIST AND NUMERICAL PARTS LIST FORMS

A. The same forms will be used for both ML's and NPL's. These will be of two types:

1. Preliminary forms for used by Material List Writers.

2. Final forms for use by Reproduction.

B. Cover Sheet

1. The Cover Sheet (see Appendix B) will take the same general form for both Preliminary and final lists. It will carry the following information:

a. Title
b. Model Number
c. Revision Number
d. "Used On" Model
e. Consists of Supporting Lists
f. Total Sheets
   (1) Compiled
   (2) Checked
   (3) Eng.Approval
   (4) Final Approval
   (5) Issue Date

C. Preliminary List Forms (see Appendix D)

1. The forms will be marked off in columns.

2. The top of each sheet will carry the following information:

   a. Model Number
   b. Section Number
   c. Sheet Number
   d. Total number of sheets
   e. Assy Part Number
   f. Assy Title
   g. Next higher assembly number
   h. Quantity per next assembly

3. "Part Number" Column

   (a) The number appearing in this column is the TMC Part and Drawing number. This number will be used for stocking, ordering, etc. Part numbers are limited to 20 digits, including dashes, slant signs and spaces.

   (b) When ordering a copy of the TMC drawing for a particular part from the Reproduction Dept., the following conditions apply:

      (1) If the Material List part number is, for example, GA126, the drawing number is also GA126.

      (2) If the TMC part number is followed by a dash, with more digits, such as GA137-3, the TMC drawing number is GA137.

4. "Description" Column

   (a) This column briefly describes the item. Description is limited to 14 digits, including spaces and punctuation.

   The description will be selected and abbreviated in accordance with Military Handbook H-61, TMC Spec. S-570, MIL-STD-12, and Eng. Coord. Abbreviated Description Handbook.

5. "Item Location" Column, consisting of the "Used On Assembly", "Used to Mount" and "Qty per Used to Mount" Columns.

   (a) "Used on Assembly" Column

      (1) The drawing number for the assembly in which the line item is used is entered in this column. Entries are limited to 19 digits. It is essential that an entry be made in this column for each line item. It should be noted that some MS, PM, and PX drawings serve as assembly drawings in that they have mounted components listed thereon.

   (b) "Used to Mount" Column (Preliminary Parts List Only)

      (1) This column is most generally used to indicate and "pinpoint" the function of mounting hardware and similar items. An entry in this column indicates what major items the particular line item mounts. All peculiar hardware must be accounted for in this manner.

   (c) "Quantity per Used to Mount" Column (Preliminary Parts List Only)

      (1) This column indicates how many of the total "quantity per assy" per line item are used to mount the particular part shown in the "used to mount" column.

6. "Quantity per Assembly" Column

   (a) This column is limited to six digits. It indicates the total quantity used for the assembly listed in the "Used on Assembly" Column. An entry must be made for each occurence of the assembly.

   (b) Quantities are in units except for raw materials. The latter shall be listed by inches per the following examples:

      (1) Ten feet nine inches = 129
      (2) Eleven inches = 11

   (c) In case an indefinite, or "as required" quantity is to be indicated, place an "X" in this column. The "X" will not appear in the Final List , but will advise the key punch operator that a specific quantity is not available. NOTE: An "X" generally should be used for items such as solder, compound, adhesive, lacing cord, but not for wire, cable, tape, etc.

7. "Reference Symbol" Column

(a) This column lists reference symbols pertaining to the line item involved, if appropriate. This column is limited to 9 digits. If more space is needed to list all reference symbols, use additional lines

8. "Remarks" Column

(a) This column is limited to 2 digits and is used to reference an item to a supporting note as listed in TMC specification S1200.

D. Final List Forms (See Appendix E)

1. The forms are in Alpha-Numerical sequence by part number.

(a) Lists in top-down breakdown order can be obtained by a request to the Material List Section.

(b) The total quantity per unit of each component will be computed and recorded.

(c) The "Used to Mount" and "Qty per Used to Mount" Columns will not be printed out, as this information shall be transferred to a TMC drawing form in the Drafting Section of Engineering when required.

(d) "BMA" numbers will never be supported by a drawing. They are numbers assigned by Engineering Coordination for location of parts.

V. PREPARATION OF MATERIAL LISTS

A. The following procedure will be followed by the Engineering Department with regard to the writing of Material Lists:

1. Each list will be hand-written in "top-down breakdown" form. This list will be complete, including "used on" information from assembly drawings. They need not be arranged in alpha-numerical order and total quantities need not be computed.

2. The completed hand-written list will be signed by the supervisor of Material Listing and certified by him as to its correctness.

3. Upon completion of "2" above, the Material Listing Supervisor will have the list keypunched, verified, sorted and finally listed on a reproducable master.

4. The master list for Data Processing will be returned to the Material Listing Section with 2 copies to be checked and receive final approval. After final approval it will then be forwarded to Reproduction for availability.

B. During the process described above, the Material Lists will be treated as "Preliminary" documents. That is, they will not be released to Material Control, Production, etc. unless approval is given by the Supervisor of the Material Listing Section.

TMC SPECIFICATION NO. S - 729 E

COMPILED | CHECKED

TITLE: DOCUMENTATION OF TMC PART NUMBERS, TMC MATERIAL LISTS, AND TMC NUMERICAL PARTS LISTS

APPROVED

A P P E N D I X A

PART NUMBER PREFIXES

	TITLE	PREFIX
A	Adaptor, Between Series (For Connectors)	SA
	Air Dryer, Silica Gel, Air Filters (Purchased)	AD
	Amplifiers, all types	AZ
	AN = Army/Navy Standard	AN
	Antenna Base	AB
	Antenna, Whip	AW
	Assembly, Capacitors, All Types	AM
	Assembly, Coil or Counter	AC
	Assembly, Filter	AF
	Assembly, Gears	AG
	Assembly, Keyer	AK
	Assembly, Miscellaneous	AX
	Assembly, Oscillators, All Types & Ovens	AO
	Assembly, Panel, Power Equipment	AP
	Assembly, Relay or Resistors	AR
	Assembly, Switch	AS
	Assembly, Transformer or Tuner	AT
B	Bags	BG
	Batteries, All Types	BA
	Bearings, All Types	BB
	Blade, Fan	BF
	Blowers, (Purchased) Impellers	BL
	Bill of Material Assemblies, no dwg. req'd	BMA

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APPROVED

A P P E N D I X A

	TITLE	PREFIX
	Boxes, Metal	BX
	Boxes, Other Than Metal	BP
	Braid	BD
	Brushes, Electrical	BR
	Buzzers and Bells	BZ
C	Cables, Co-axial Twin, R.F. also wave guides	RG (Military Standard)
	Cables, With/Without Fittings	CA
	Capacitor, Ceramic, (Fixed)	CC
	Capacitor, Dielectric, Variable	CV
	Capacitor, Electrolytic, Polarized	CE
	Capacitor, Fixed, Air	CO
	Capacitor, Fixed, Mica	CM
	Capacitor, Paper, Fixed, Metal Cases	CP
	Capacitor, Paper, Fixed, Non-metal Cases	CN
	Capacitor, (Special)	CX
	Capacitor, Variable, Air, Trimmer	CT
	Capacitor, Variable, Air, Tuning	CB
	Caps, Hinged, Snap Chain or Screw Type	HB
	Cases, Carrying	CW
	Castings, Metal	CS
	Catches	LK
	Chains	CJ
	Charts	CH
	Circuits, Diagram, and Block Diagram	CK
	Clamp, Armor	MX

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APPENDIX A

	TITLE	PREFIX
	Clamps	CU
	Clamps, Tube	CU
	Cluthes, all types	CZ
	Coil Forms	CF
	Coils, R.F.	CL
	Compressed Metal Parts, Powdered	CQ
	Cords, Lacing, Non-electrical	CD
	Cores, Laminated Iron or Powdered	CI
	Counter	CY
	Coupler, Electrical	DC
	Couplings, Mechanical	MC
	Crystal Holders	HC
	Crystal Units	CR
	Crystal Sockets	TS
D	Delay Lines (Purchased)	DL
	Detent, Switch	DT
	Dial Pointer	DP
	Dials, Drive (Purchased)	DI
	Dies	DE
	Digital Readout Indicators	IC
	Diodes, All Types	DD
	Distributed Amplifier	DA
	Drilling Jig	DJ
	Dynamotors	DM

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A P P E N D I X A

	TITLE	PREFIX
E	Electrolyte	EL
	End Seals	ES
	Engineering proposals	EP
	Envelopes	EN
	Eyelets, Grommet	EY
F	Fabric, Cloth	FA
	Fasteners	FS
	Filter, Discriminator	FD
	Filters, Electrical (Purchased)	FI
	Filters, (Special)	FX
	Flat Washers (Metallic)	FW
	Formed Parts	FP
	Forms, Coil	CF
	Fuse Clips	FC
	Fuse Holders, All Types	FH
	Fuses	FU
G	Gaskets	GA
	Gears	GR
	Generators	GN
	Glass	GS
	Glue,Cements	GP
	Graphs	GP

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	TITLE		PREFIX
H	Handles		HA
	Handset		HS
	Headphones		HP
	Heat Dissipator		HD
	Hinges, Latches		HI
	Holders, Crystal		HC
I	Index, Drawing		IX
	Indicator, digital display		IC
	Installation Drawings, Layouts		ID
	Instruction Books		IN
	Insulating Material		IM
	Insulators, Ceramic (Commercial)		NS
	Insulators, Ceramic	(Special Page)	NS (Military Standard)
	Reservoir, Ink or Other Liquid		IW
J	Jack Panel		JP
	Jack, Phone, Plug		PJ
	Jacks, Receptacles (Except MS - Military Standard)		JJ
	Jigs, All Types		JG
	Junction Boxes		JB
K	Key, All types		KY
	Knobs		MP

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TITLE: DOCUMENTATION OF TMC PART NUMBERS, TMC MATERIAL LISTS, AND TMC NUMERICAL PARTS LISTS.

APPROVED

A P P E N D I X A

	TITLE	PREFIX
L	Labels	LA
	Lamps, All Types	BI
	Lens, Indicator	LI
	Lettering, Detail, Stencilling, Stamping, Engraving	LD
	List of Material for Instruction Manuals	LM
	Locks, Latches, Catches	LK
	Lockwashers, All Types (LWE, LWI, LWS)	LW *
	Loudspeakers	LS
	Lubricants, Oil, Greases	LU
M	Machined Parts	PM
	Magnets	MG
	Metal Stamping (Not to be associated with MS - Military Standard)	MS
	Meter Movement and Mechanisms	MM
	Meters	MR
	Microphones	MK
	Military Standard (Were AN Prefixes)	MS
	Miscellaneous Purchased Part	PO
	Motors, incl servo	MO
	Molded Parts, Phenolic, (for Coil Forms, Use CF - Includes Knobs)	MP
	Mounting Blocks	MB
	Mounts, Shock, Vibration, Stabilizers	SH

* LWE - Lockwasher, External
LWI - Lockwasher, Internal
LWS - Lockwasher, Split

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APPROVED

A P P E N D I X A

	TITLE	PREFIX
N	Nails, Spikes, etc.	NA
	Name Plates, Metal Decal, Printed	NP
	Network, All Types (for Network Frequency, Use NF)	NW
	Network Frequency	NF
	Nuts, All Types (Except MS - Military Standard)	NT
O	Oven, Crystal	OC
	Oven Assembly (TMC)	AO
P	Packing Boxes, Cartons	PB
	Packing Cases, Wood	PW
	Padding	PA
	Paper, All Types	PR
	Panel, Jack	JP
	Parts, Machined	PM
	Pens	PZ
	Phenolic Parts, Punched or Machined (for Coil Forms, Use CF)	PP
	Phenolic, Sheets or Formed (Teflon, Plexiglass, Lucite, Nylon, Glass, etc.)	PX
	Photographs (Do Not Assign Numbers, See Tech. Writer)	PH
	Pins, Cotter, Drive, Drift, Tapper, Etc.	PN
	Pipe Fittings, All Types	PF
	Plugs, All Types (Except MS - Military Standard)	PL
	Plugs, Phone Jacks	PJ
	Potentiometers, Special Dual, Triple, etc.	RV
	Printed Circuit board (w/o component)	PC
	Purchased Parts, Miscellaneous	PO

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A P P E N D I X A

	TITLE	PREFIX
R	Racks (for 19" Panels)	RK
	Receptacles, Navy Type	SO (Military Standard)
	Rectifiers	RX
	Relays	RL
	Reservoir, Ink or Other Liquid	IW
	Resistor, Fixed, Composition	RC
	Resistor, Fixed, External Meter Ferrule Type	MF
	Resistor, Fixed Precision	RB
	Resistor, Fixed, Wire Wound, Low Power	RU
	Resistor, Fixed, Wire Wound, Power Type	RW
	Resistor, Fixed, Wire Wound, Mil type	RE
	Resistor, Special	RR
	Resistor, Precision	RN
	Resistor, Variable, Composition	RV
	REsistor, Variable, Wire Wound, Low Operating Temp.	RA
	Resistor, Variable, Wire Wound, Power Type	RP
	R.F. Connectors, Receptacles	UG (Military Standard)
	Rivets, All Types	RI
	Rotors	RO
	Rubber	RY
S	Shock Mounts, Vibration, Stabilizer	SH
	Screen, Screen Grills	SN
	Screw Machine Parts	SM
	Screw, Tapping, Thread Cutting	SF
	Screws, Threaded Type (Except MS and Set Screws)	SC

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APPROVED

A P P E N D I X A

	TITLE	PREFIX
	Screws, Wood, Self-tapping (Except MS)	SD
	Set Screws (Except MS)	SL
	Sockets, Shields	TS
	Solder, Soft and Hard	BS
	Solenoids	SZ
	Spacers	TE
	Springs	SP
	Stator	SX
	Switch, Detent	DT
	Switch, Sensitive, thermostatic	SS
	Switch, Toggle (Except MS)	ST
	Switch, Wafer	WS
	Switches, Other Than Toggle or thermostatic	SW
T	Tags	TG
	Tape, All Types	TA
	Tape Readers, All Types	TD
	Telegraph Key	KY
	Terminal, All Types	TE
	Terminal Strips, All Kinds	TM
	Thermocouple	TH
	Timers	TI
	Tools, All Types	TP
	Track, Slides	TK
	Transformer (0-4999) Inductor (5000-9999) Audio, Power, Pulse	TF

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APPENDIX A

	TITLE	PREFIX
	Transformer, R.F., Fixed (Broadband), Manufactured In House	TR
	Transformer, R.F., Tuned	TT
	Transistors, All Types	TX
	Tube Clamp	CU
	Tubing	TU
	Tuning Slugs, All Types	TY
	Turn-Buckles	TB
	Tubes, Vacuum	TV
	Transformer, R.F., Fixed, 20KC and Above (Purchased)	TZ
V	Vacuum Tubes	TV
	Valves	VA
	Vans, All Types	VN
	Vibrators	VB
	Voltage Regulators	VR
W	Wafers, Switch	WS
	Washers, Flat	FW
	Washers, Special, Other than Flat, Lock or MS	WA
	Wire and Cable Hook Up, Electrical Insulated	LW, MW, HW, FX, HF (Military Standard)
	Wire, Bare	WL
	Wire (Except R.F. and MS)	WI
	Wire Hook Up (Replaced by Military Standard - LW, MW, HW, FX, HF)	SR

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A P P E N D I X A

TITLE	PREFIX
Wood	WD
Wrapping Paper, All Types	WP
Wrenches	WR

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MATERIAL LIST

TOTAL SHEETS

FOR

REVISION

TMC MODEL -

TITLE-

USED ON
MODEL -

CONSISTS OF
SUPPORTING LISTS

LAST SYMBOLS

COMPILED _____
CHECKED _____
ENG APPR _____
FNL APPR _____
ISS DATE _____

MISSING SYMBOLS

TMC PART NUMBER FORMAT

I. The following rules will be followed governing the construction of all TMC part numbers, (including old numbers, and all new numbers).

II. There will be no dash between the prefix letter(s) and the first numerical digit, with one exception - all "A" numbers will contain a dash.
EXAMPLE: TE-100 should now be written and recorded as TE100.
CA-120 should now be CA120.

NOTE: Although old drawings, assemblies, material lists, etc., will not immediately reflect this change, it will be incorporated on all IBM keypunch documents made in the future.

III. There will be no dashes or spaces between number and letter combinations within a part number,
EXAMPLE: CN-114-R10-4J will be CN114R10-4J (dash between first number "4" and letter "R" is omitted)

IV. If a dash already appears in a part number between letters and letters or numbers and numbers, it will be maintained and recorded in that manner.
EXAMPLE: CU-139-2B will now be CU139-2B (dash omitted between first letters and first numbers, but maintained between number (9) and number (2).
EXAMPLE: CN-114-R10-4J will now be CN114R10-4J (dash omitted between number (114) and letter (R), dash maintained between number (10) and number (4).

V. There shall be no interpolation made by any person by insertion of dashes into numbers due to "assumption" that one belongs there.
EXAMPLE: TE1032AE25R should not be written TE103-2AE25R, but is, in fact, correct as first written above.

VI. When writing numbers on lists, documents, etc., which will be submitted to Data Processing for keypunching, the following general rules shall be followed:

1.

A. Write in all capitals.
B. Capital I (as Inductor) should be written I
C. Capital Z (as in Zebra) should be written Z
D. Capital S (as in Socket) should be written S
E. Capital J should be written J
F. Numeral 1 should be written 1
G. Numeral 0 should be written Ø
H. Capital O should be written O

2. The following part numbers should be converted for IBM.

TE104-1	-	TE0104-1
TF104	-	TF0104
CA104	-	CA0104
LD104/MS104	-	LD0104/MS0104
PM104	-	PM0104
A104	-	A-0104

This rule applies only to three (3) digit part numbers of the above catagories. Regardless of the number of digits, a dash (-) should be inserted in all "A" numbers.

VII. The following section shows the printout capabilities of the Data Processing machines now used by TMC.

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
/	.	,	$	¤	*	%	@	-	()	#		
1	2	3	4	5	6	7	8	9	0			

TOTAL SHEETS-

USED ON
MODEL-

CONSISTS OF
SUPPORTING LISTS

PRELIMINARY PARTS LIST

FOR

MODEL _____
TITLE _____

LAST SYMBOLS

MISSING SYMBOLS

REVISIONS

REV.	SHEET(S)	DATE	APPR.

COMPILED _____

CHECKED _____

KEY PUNCHED _____

ENGINEERING JOB ORDER
E_____-_____

§ FOR SPECIAL NOTES,
REFER TO S1200.

SH 24A of 27 APPENDIX D S729 Rev. E

TMC FORM MLT-3P (2-68)

MATERIAL LIST/NUMERICAL PARTS LIST

REV

NEXT HIGHER ASSY:

QTY PER NEXT ASSY:

USED ON MODEL:

ASSY DESC:

USED ON SECTION:

ASSY PART NO:

TOTAL SHEET OF

ASSY SHEET OF

PART NO.	DESCRIPTION	ITEM LOCATION: USED ON ASSEMBLY	ITEM LOCATION: USED TO MOUNT	ITEM LOCATION: QTY PER U/T/M	QTY. PER ASSY.	REFERENCE SYMBOLS	SPECIAL NOTES REFER TO S1200

THE TECHNICAL MATERIEL CORPORATION MAMARONECK, NEW YORK

TMC FORM PML-5 (1-67)

MATERIAL LIST

PAGE OF

PART NUMBER	DESCRIPTION	USED ON	QUANTITY	QUANTITY PER UNIT	REFERENCE SYMBOLS	SPECIAL NOTES REFER TO S 1200

APPENDIX E

CHART, UNIT BREAKDOWN

1. A Unit Breakdown Chart serves as a guide to orderly compilation of material lists and accounting for the components therein. Refer to diagram of RAC-30A for example:

2. The Model Number or Part Number of the equipment, for which the list is being prepared, appears at "ZERO" level. The major sub-assemblies appear on the 1st Level; in this case the Final Assembly, A3082 and Loose items.

3. The breakdown of items on the 1st level are shown on the Second Level. In this example, A3082 consists of AX381, AX315 and Misc.Parts. The breakdown of AX381 and AX315 is shown on the Third Level. This process continues until all of the components are accounted for. In a complex unit, as many as ten levels may be necessary.

4. It is possible for the same part number, particularly in the case of hardware, to occur on more than one level.

NOTE: An indenture will be shown for each assembly. No indenture will be shown for parts.
Any block which is a multiple use item shall have the quantity shown as indicated on indenture "A-0102" in example on next sheet.

CH-1

CH - - -

REV: E

COMPILED: | CHECKED: | APPD: | SHEET 27 OF 27

TITLE:

APPENDIX F

DESCRIPTION	QTY
RAC-30	
◦ LP___	
◦ A-3082	
◦◦ AX381	
◦◦◦ A-1149	
◦◦◦ A-1150	
◦◦◦ PARTS	
◦◦ AX315	
◦◦◦ A-0102	2
◦◦◦◦ A-0100	
◦◦◦ A-1164	
◦◦◦ A-1291	

REVISION SHEET

THE TECHNICAL MATERIEL CORP.
MAMARONECK NEW YORK

5729
CUST. NO.

DATE	REV.	SHEET	EMN #	DESCRIPTION	APP.
21/64	C	----	11864	R vised shts. 12,15,16,17,18,20 per EMN	
12/22/65	D	----	15467	Revised shts. 4,7,8,10,11,12,13,14,17,19,20,21,24,25,27, 28 per EMN	