(Revision of ASME Y14.34-2008)

# **Associated Lists**

**Engineering Drawing and Related** 

Engineering Drawing and Documentation Practices

And Documentation Practic

AN AMERICAN NATIONAL STANDARD



Adopting Activity:

(Project DRPR-2014-001)

Army — AR

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(Revision of ASME Y14.34-2008)

# Engineering Drawing and Documentation Practices of Proceedings of Procedure **Associated Lists**

**Engineering Drawing and Related** 

AN AMERICAN NATIONAL STANDARD



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### **FOREWORD**

This Standard establishes the requirements for associated lists and ties them together with the engineering drawing and related documentation practices in the Y14 series. It is not the intent of this Standard to be a stand-alone document. An accurate perception of associated lists practices is derived by treating ASME Y14.34, ASME Y14.100, ASME Y14.24, and ASME Y14.35 as a composite set.

This Standard is a revision of ASME Y14.34-2008, Associated Lists. Changes contained in this revision are intended to improve standardization and harmonize practices and methodology between industry and government.

The successful revision of this Standard is attributed to the subcommittee members and their respective companies, and the department and agencies of the U.S. government.

Suggestions for improvement of this Standard are welcome. They should be sent to The American Society of Mechanical Engineers, Secretary, Y14 Standards Committee, Two Park Avenue, New York, NY 10016-5990.

The following is a summary of the significant changes incorporated in this revision:

- Reformatted the Standard to add 1.2 ASME Y14 Series Conventions in its entirety, to renumber the figure numbers, and to renumber accordingly due to the reformatting.
- Section 2 Renamed and updated.
- Section 3 Definitions.
  - (a) added definition for Deletion List
  - (b) added definition for Field of Drawing
  - (c) added definition for Product Data Management (PDM) System
  - (d) added definition for Salvage List
  - (e) updated definitions duplicated from other standards as applicable
- Paras. 4.1.1 and 4.1.2 revised to include stipulations regarding the use of PDM systems.
- Para. 4.7 revised to clarify list identifiers and to associate specific prefixes to respective lists
- Para. 5.3.2(b)(5) added NOTE that adds the requirement for entering a dash or the abbreviation REF in QTY REQUIRENT when listing reference drawings or documents in a parts list.
- Para. 5.3.3 added to address the use of deletion lists and salvage lists for modification and kit drawings.
- Addressed DoD comments deferred from the last revision.
- Clarified Design Activity Identification (DAI) requirements/examples in Figs. 4-1, 5-3, 7-1, and 8-1

This revision was approved as an American National Standard on November 8, 2013.

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(The following is the roster of the Committee at the time of approval of this Standard.)

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Secretary, Y14 Standards Committee The American Society of Mechanical Engineers Two Park Avenue New York, NY 10016-5990 http://go.asme.org/Inquiry

**Proposing Revisions.** Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically. >

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

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Requests for Cases shall provide a Statement of Need and Background Information. The request should identify the Standard and the paragraph, figure, or table number(s), and be written as a Question and Reply in the same format as existing Cases. Requests for Cases should also indicate the applicable edition(s) of the Standard to which the proposed Case applies.

Attending Committee Meetings. The Y14 Standards Committee regularly holds meetings and/or telephone conferences that are open to the public. Persons wishing to attend any meeting and/or telephone conference should contact the Secretary of the Y14 Standards Committee. Future Committee meeting dates and locations can be found on the Committee Page at go.asme.org/Y14committee.

### **ASSOCIATED LISTS**

### 1 GENERAL

### 1.1 SCOPE

This Standard establishes the minimum requirements for the preparation and revision of application lists, data lists, index lists, parts lists, and wire lists. In addition, this Standard presents certain options that may be incorporated into application lists, data lists, index lists, parts lists, and wire lists at the discretion of the design activity. It is essential that this Standard be used in close conjunction with ASME Y14.24, ASME Y14.35, ASME Y14.41, and ASME Y14.100.

### 1.2 ASME Y14 Series Conventions

The conventions in paras. 1.2.1 through 1.2.10 are used in this and other ASME Y14 standards.

### 1.2.1 Mandatory, Recommended, Guidance, and Optional Words

- (a) The words "shall" and "will" establish a mandatory requirement
- (b) The word "should" establishes a recommended practice.
- (c) The word "may" establishes an optional practice.
- (d) The words "typical," "example," "for reference," or the Latin abbreviation "e.g." indicate suggestions given for guidance only.
- (e) The word "or" used in conjunction with a mandatory requirement or a recommended practice indicates that there are two or more options for complying with the stated requirement or practice.
- **1.2.2 Cross-Reference of Standards.** Cross-reference of standards in text with or without a date following the standard designator shall be interpreted as follows:
- (a) Reference to other ASME Y14 standards in the text without a date following the standard designator indicates that the issue of the standard identified in the References section (section 2) shall be used to meet the requirement.
- (b) Reference to other ASME Y14 standards in the text with a date following the standard designator indicates that only that issue of the standard shall be used to meet the requirement.
- **1.2.3 Invocation of Referenced Standards.** The following examples define the invocation of a standard when specified in the References section (section 2) and referenced in the text of this Standard:
- (a) When a referenced standard is cited in the text with no limitations to a specific subject or paragraph(s) of the standard, the entire standard is invoked. For example, "Dimensioning and tolerancing shall be in accordance with ASME Y14.5 is invoking the complete standard because the subject of the standard is dimensioning and tolerancing and no specific subject or paragraph(s) within the standard are invoked.
- (b) When a referenced standard is cited in the text with limitations to a specific subject or paragraph(s) of the standard, only the paragraph(s) on that subject is invoked. For example, "Assign part or identifying numbers in accordance with ASME Y14.100" is invoking only the paragraph(s) on part or identifying numbers because the subject of the standard is engineering drawing practices and part or identifying numbers is a specific subject within the standard.
- (c) When a referenced standard is cited in the text without an invoking statement such as "in accordance with," the standard is for guidance only. For example, "For gaging principles see ASME Y14.43" is only for guidance and no portion of the standard is invoked.
- **1.2.4 Parentheses Following a Definition.** When a definition is followed by a standard referenced in parentheses, the standard referenced in parentheses is the source for the definition.
- **1.2.5 Notes.** Notes depicted in this Standard in ALL UPPERCASE letters are intended to reflect actual drawing entries. Notes depicted in initial uppercase or lowercase letters are to be considered supporting data to the contents of this Standard and are not intended for literal entry on drawings. A statement requiring the addition of a note

with the qualifier "such as" is a requirement to add a note, and the content of the note is allowed to vary to suit the application.

- **1.2.6 Acronyms and Abbreviations.** Acronyms and abbreviations are spelled out the first time used in this Standard followed by the acronym or abbreviation in parentheses. The acronym is used thereafter throughout the text.
- **1.2.7 Units.** The International System of Units (SI) is featured in this Standard. It should be understood that U.S. Customary units could equally have been used without prejudice to the principles established.
- **1.2.8 Figures.** The figures in this Standard are intended only as illustrations to aid the user in understanding the practices described in the text. In some cases figures show a level of detail as needed for emphasis. In other cases, figures are incomplete by intent so as to illustrate a concept or facet thereof. The absence of figure(s) has no bearing on the applicability of the stated requirements or practice. To comply with the requirements of this Standard, actual data sets shall meet the content requirements set forth in the text. To assist the user of this Standard, a listing of the paragraph(s) that refer to an illustration appears in the lower right-hand corner of each figure. This listing may not be all inclusive. The absence of a listing is not a reason to assume inapplicability. Some figures are illustrations of models in a three-dimensional environment. Figures illustrating drawings in digital format have a border included. When the letter "h" is used in figures for letter heights or for symbol proportions, select the applicable letter height in accordance with ASME Y14.2.
- **1.2.9 Precedence of Standards.** The following are ASME Y14 standards that are basic engineering drawing standards:

ASME Y14.1	Decimal Inch Drawing Sheet Size and Format
ASME Y14.1M	Metric Drawing Sheet Size and Format
ASME Y14.2	Line Conventions and Lettering
ASME Y14.3	Line Conventions and Lettering Orthographic and Pictorial Views Dimensioning and Tolerancing
ASME Y14.5	Dimensioning and Tolerancing
ASME Y14.24	Types and Applications of Engineering Drawings
ASME Y14.34	Associated Lists
ASME Y14.35	Revision of Engineering Drawings and Associated Documents
ASME Y14.36M	Surface Texture Symbols
ASME Y14.38	Abbreviations and Acronyms for Use on Drawings and Related Documents
ASME Y14.41	Digital Product Definition Data Practices
ASME Y14.100	Engineering Drawing Practices

All other ASME Y14 standards are considered specialty types of standards and contain additional requirements or make exceptions to the basic standards as required to support a process or type of drawing.

**1.2.10 Unless Otherwise Specified (UOS).** The phrase "unless otherwise specified" or UOS is used to indicate a default requirement. The phrase is used when the default is a generally applied requirement and an exception may be provided by another document or requirement.

### 2 REFERENCES

The following revisions of American National Standards form a part of this Standard to the extent specified herein. A more recent revision may be used provided there is no conflict with the text of this Standard. In the event of a conflict between the text of this Standard and the references cited herein, the text of this Standard shall take precedence.

ASME Y14.1-2012, Decimal Inch Drawing Sheet Size and Format

ASME Y14.1M-2012, Metric Drawing Sheet Size and Format

ASME Y14.2-2008, Line Conventions and Lettering

ASME Y14.24-2012, Types and Applications of Engineering Drawings

ASME Y14.35-2014, Revision of Engineering Drawings and Associated Documents

ASME Y14.41-2012, Digital Product Definition Data Practices

ASME Y14.44-2008, Reference Designations for Electrical and Electronics Parts and Equipment

ASME Y14.100-2013, Engineering Drawing Practices

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### 3 DEFINITIONS

### 3.1 Alphanumeric Arrangement

alphanumeric arrangement: an ordered grouping of symbols, numbers, and letters used to form an identification.

### 3.2 Application Data

application data: the next assembly(ies), and the model number, nomenclature, or equivalent designator of the assembled unit(s), of which a part or assembly is a component.

### 3.3 Application List

application list: application data presented in a separate list. See Figs. 3-1 and 3-2.

### 3.4 Approval

approval: an indication that the document meets requirements for preparation and content. See Fig. 4-1.

### 3.4.1 Approval Indicator

approval indicator: any symbol adopted by the design activity to indicate approval (ASME Y14.100).

### 3.5 Associated List

associated list: a tabulation of engineering information pertaining to an item depicted on an engineering drawing or by a set of drawings, e.g., application list, data list, index list, parts list, and wire list.

### 3.6 Bulk Items

bulk items: those constituents of an assembly or part, such as oil, wax, solder, cement, ink, damping fluid, grease, flux, welding rod, twine, or chain, that satisfy one or more of the following criteria:

- (a) the quantity required cannot readily be predetermined
- (b) the physical nature of the material is such that it is not adaptable to pictorial representation
- (c) the finished size is obtainable through use of such tools as shears, pliers, or knives, without further machining operation
- (*d*) the final configuration is such that it can be described in writing without the necessity of pictorial representation (ASME Y14.100).

### 3.7 Commercial and Government Entity (CAGE) Code

commercial and government entity (CAGE) code: a five-character code that provides a unique activity identifier used by the government for activity identification (ASME Y14.100).

### 3.8 Data List

data list; a tabulation of all engineering drawings, associated lists, specifications, standards, subordinate data lists and nonbracketed in-house documents necessary to meet the technical design disclosure requirements. See Figs. 3-3 and 3-4.

### 3.9 Deletion List

deletion list: a tabulation of items to be removed and not reinstalled.

### 3.10 Design Activity

design activity: an organization that has, or has had, responsibility for the design of an item (ASME Y14.100).

### 3.10.1 Current Design Activity

current design activity: the design activity currently responsible for the design of an item. This may be the original design activity or a design activity to which the design responsibility has been transferred (ASME Y14.100).

### 3.10.2 Original Design Activity

*original design activity:* the design activity originally responsible for the design and identification of an item, whose drawing number and activity identification is shown in the title block of the drawings and associated documents (ASME Y14.100).

### 3.11 Design Activity Identification (DAI)

design activity identification (DAI): the application of a unique identifier that distinguishes an activity or organization from another activity or organization. Examples of activity identification include activity name, activity name and address, or CAGE code (ASME Y14.100).

### 3.12 Digital Data

digital data: data stored on a computer system that employs a display on which the user and the computer interact to create or alter entities for the production of layouts, drawings, numerical control tapes, or other engineering data (ASME Y14.100).

### 3.13 Document

document: a term applicable to the specifications, drawings, lists, standards, pamphlets, reports, and printed, typewritten, or otherwise created information relating to the design, procurement, manufacture, testing, or acceptance inspection of items or services (ASME Y14.100).

### 3.14 Drawing

drawing: an engineering document or digital data file(s) that discloses, directly or by reference, by means of graphic or textual presentations, or by combinations of both, the physical or functional requirements of an item (ASME Y14.100).

### 3.15 Engineering Data

engineering data: engineering documents such as drawings, associated lists, accompanying documents, specifications, standards, or other information prepared or used by a design activity and relating to the design, manufacture, procurement, testing, or inspection of items (ASME Y14.100).

### 3.16 Field of Drawing

field of drawing: the area of a drawing that contains the product definition of an item (ASME Y14.100).

### 3.17 Find Number or Item Number

*find number* or *item number*: a reference number assigned to designate an item on the field of the drawing, in lieu of using the item's part or identifying number. It is entered as a cross-reference to the line of the parts list where the item's actual part or identifying number and description are given.

NOTE: Reference designations for electrical and electronic parts and equipment, in accordance with ASME Y14.44, may be used as find numbers or item numbers.

### 3.18 Flag Note

flag note: a note whose text is prefixed by a note identification enclosed within a symbol (flag). The note is cross-referenced to a specific area on a drawing or associated list by entering the flag at the point of application.

### 3.19 Identification Cross-Reference Drawing

*identification cross-reference drawing:* an administrative-type drawing that assigns a compatible identifier(s) to provide a cross-reference to the original incompatible identifier(s) (ASME Y14.24).

### 3.20 Index List

*index list*: a tabulation of data lists and subordinate index lists pertaining to the item(s) to which the index list applies. See Figs. 3-5 and 3-6.

### 3.21 Item

*item*: a nonspecific term used to denote any unit or product, including materials, parts, assemblies, equipment, accessories, and computer software (ASME Y14.100).

### 3.22 Parts List

parts list: a tabulation of all parts and bulk materials used in the item(s), except those materials that support a process and are not retained, such as cleaning solvents and masking materials.

### 3.22.1 Integral Parts List

integral parts list: a parts list prepared and revised as part of an engineering drawing.

### 3.22.2 Separate Parts List

separate parts list: a parts list prepared as a document separate from the engineering drawing to which it is associated, and one that may be revised independently of the drawing. See Figs. 3-7 and 3-8.

NOTE: Other terms previously used to describe a parts list are list of materials, bill of materials, stock list, and item list.

### 3.23 Product Data Management (PDM) System

product data management (PDM) system: an automated database system for managing the creation, change, and archive of all information related to a product. PDM facilitates the retrieval, review, approval, release, and control of product definition data.

### 3.24 Revision Authorization Document

revision authorization document: a document recognized as the authority for making a change to a drawing or associated documentation. Revision authorization documents are frequently identified by terms such as alteration notice (AN), advance drawing change notice (ADCN), change in design (CID), drawing change notice (DCN), engineering change notice (ECN), engineering order (ECO), or notice of revision (NOR) (ASME Y14.35).

### 3.25 Salvage List

salvage list: a tabulation of items to be removed and reinstalled in the same or new location, with or without rework.

### 3.26 Wire List

wire list: a list of tabular data and instructions necessary to establish wiring connections. See Figs. 3-9 and 3-10.

### 4 COMMON REQUIREMENTS FOR ASSOCIATED LISTS

### 4.1 Format

- **4.1.1** When a list is prepared as a separate document without the use of a PDM system, it shall utilize a format size of either A (8.5 in. × 11 in.) or B (11 in. × 17 in.) for decimal inch sizes, or A4 (210 mm × 297 mm) or A3 (297 mm × 420 mm) for metric sizes, and follow format design and preparation as provided herein. See ASME Y14.1 or ASME Y14.1M, Lines and lettering shall be in accordance with ASME Y14.2.
- **4.1.2** PDM systems that manage product definition data may be used to provide access to product definition data in lieu of creating separate associated lists.

Associated lists shall be prepared in accordance with this Standard and made available when users of the product definition data do not use the PDM system.

Preprinted formats need not be utilized when the automated operation can provide product definition data in similar format.

### 4.2 Block and Column Size and Arrangement

The size and arrangement of all blocks and columns shall be determined by the preparing activity according to the method of preparation used. Additional blocks or columns may be added by the preparing activity.

### 4.3 Sheet Numbering

The sheets of a multisheet list shall initially be numbered consecutively with whole Arabic numbers. The total quantity of sheets shall be entered on the cover sheet, first sheet, or the last sheet. In lieu of total quantity of sheets, a statement such as "END OF LIST" may be added on the last sheet. The total quantity of sheets shall be the actual sheet count.

### 4.4 Cover Sheets

When a separate list is prepared and a cover sheet is used, it shall include the mandatory information shown in Fig. 4-1; other information may also be included.

### 4.5 Revisions

Revisions shall be prepared in accordance with ASME Y14.35M and as detailed in paras. 4.5.1 through 4.5.3.

- **4.5.1** New items may be added at the end of a list or inserted in the list.
- **4.5.2** In lieu of a REVISION DATE and REV AUTHORIZATION NO block, lists may include a REVISION HISTORY block.
  - **4.5.3** Items that are relocated due to additions or deletions are not considered revised.

### 4.6 Heading Requirements

- **4.6.1** The requirements in Fig. 4-1 shall apply to each sheet in preparation of separate associated lists heading information, except where noted as optional. The locations of heading information may vary to suit the needs of the preparing activity.
- **4.6.2** Continuation sheets of a separate associated list may limit heading information to DAT, IDENTIFYING NO, REVISION, and SHEET.

### 4.7 List Identification

List identification is established through the associated drawing number or Part of Identifying Number (PIN) and the original DAI. The identifier shall be prefixed by the letters PL (for Parts List), DL (for Data List), IL (for Index List), WL (for Wire List), or AL (for Application List) as applicable. When Deletion Lists and Salvage Lists are prepared as separate lists, the prefixes XL and SL shall be used, respectively. This prefix becomes an integral part of the list identifier. When no associated drawing exists, associated lists shall be assigned a drawing number with the associated prefix PL, DL, IL, WL, XL, SL, or AL. The 32-character PIN limit shall not apply in those instances where the applicable associated list prefix plus the drawing number exceeds 32 characters.

### 5 PARTS LIST PREPARATION

A parts list shall be prepared for each assembly drawing and may be prepared for other drawings. An integral parts list may be prepared on drawing graphic sheets or on drawing sheets separate from the drawing graphic sheets. See Figs. 5-1 and 5-2. A separate parts list shall be prepared separate from the drawing. Parts list columnar heading may be placed at the top or bottom of columns. See Figs. 5-1 and 5-2. In accordance with the following, some requirements apply to all methods, while others apply to only one method. When application data is included in a parts list, it shall be entered in the NEXT ASSY and USED ON columns of Fig. 5-3.

### 5.1 Integral Parts List Format

When an integral parts list is prepared as a separate sheet or sheets of the drawing, the size of the sheets should be the same size as the other sheets of the drawing. The PL prefix shall not be used with integral parts lists.

- **5.1.1** When an integral parts list is included on a drawing sheet or sheets that denote the graphic presentation, the heading shall be PARTS LIST, as shown in Fig. 5-1 or 5-2.
  - **5.1.2** Each sheet of an integral parts list shall be numbered as a sheet(s) of the drawing.
  - **5.1.3** An integral parts list shall be located in accordance with Figs. 5-1 and 5-2.

### 5.2 Separate Parts List Format

**5.2.1 Heading Requirements.** For heading requirements, see para. 4.6.

### 5.2.2 Cross-Reference

- **5.2.2.1** When a separate parts list is used, the engineering drawing with which the parts list is associated shall contain a cross-reference note, e.g., "SEE SEPARATE PARTS LIST." For manually prepared drawings, the cross-reference note shall be located above the title block. For electronically prepared drawings, the cross-reference note shall be located in the general notes, see ASME Y14.41.
- **5.2.2.2** When drawing data, e.g., notes, application data, and wire data, are provided on a separate parts list, a note with content and location similar to that required by para. 5.2.2.1 shall be used.

### 5.3 Integral and Separate Columnar Entries

- **5.3.1** The column entries shall include the mandatory information shown in Fig. 5-3. Other information may also be included. Other types of notes may be added or referenced in the NOTES OR REMARKS column.
  - **5.3.2** Optional columns may be included, but need not be limited to, listing the following entries:
- (a) Unit of Measure. Units of measure other than quantity may be entered in this column, or in the quantity column per Fig. 5-3.
  - (b) Drawing or Document Number. The following information may be entered:
- (1) the document number applicable to the material from which a listed part delineated on the corresponding drawing is fabricated
- (2) the document number applicable to a listed item for which a designation type, class, condition, or other information has been entered in the part or identifying number column
  - (3) the drawing number applicable to a listed item in the part or identifying number column
- (4) the document number when the part is defined by a number that must be decoded by using the procurement specification
  - (5) referenced documents

NOTE: When a reference document is listed in a Drawing or Document Number column enter wash or REF in the corresponding QTY REQD column.

- (c) Size. A SIZE column may be included to indicate the document size.
- (d) Materials. A MATERIALS column may be included to specify material used in the fabrication of items detailed on the related drawing. An included materials column may also be used to delineate materials used in subordinate details, assemblies, and items identified on control or modifying drawings.
- **5.3.3 List Entries for Modification and Kit Drawings.** Design activities that prepare modification and kit drawings may include deletion lists and/or salvage lists as additional column entries or headings within the parts lists, by using separate lists, or as tables on the field of the drawing to identify and segregate lists of components, deleted items, and salvaged items.

### **6 APPLICATION LIST PREPARATION**

### 6.1 Integral Application List

When application data is provided integral to the drawing but separate from an integral parts list, the data shall be presented in an application block per ASME Y14.1 or ASME Y14.1M.

### 6.2 Separate Application List

- **6.2.1 Heading Requirements.** For heading requirements, see para. 4.6.
- **6.2.2 Column Entries.** The column entries in Fig. 6-1 shall apply, as a minimum, in preparation of a separate application list.

### 7 DATA LIST PREPARATION

### 7.1 Heading Requirements

For heading requirements, see para. 4.6.

### 7.2 Content

Data list entries shall be segregated into the following order of groups:

- (a) drawings
- (b) lists
- (c) specifications
- (d) standards
- (e) publications
- (f) other documents referenced on drawings and associated lists

Listings within each group should be arranged by DAI and further listed in alphanumeric arrangement.

NOTE: When lists are prepared using digital data, the sequence of groups is optional, provided the segregation of groups is maintained. When revising manually prepared lists, the new entries may be added to the end of the existing list following the same sequence.

### 7.3 Column Entries

Complete the data list columns in accordance with Fig. 7-1.

### **8 INDEX LIST PREPARATION**

### 8.1 Heading Requirements

For heading requirements, see para. 4.6.

### 8.2 Content

Index list entries shall be segregated into the following order of groups:

- (a) data lists
- (b) index lists

Listings within each group should be arranged by DAI and further listed in alphanumeric arrangement.

NOTE: When lists are prepared using digital data, the sequence of groups is optional, provided the segregation of groups is maintained. When revising manually prepared lists, the new entries may be added to the end of the existing list following the same sequence.

### 8.3 Column Entries

Complete the index list columns in accordance with Fig. 8-1.

### 9 WIRE LIST PREPARATION

### 9.1 Heading Requirements

For heading requirements, see para. 4.6.

### 9.2 Content

- **9.2.1** A wire list provides the information necessary for making wiring connections for one or more related assemblies. A separate wire list or an integral wire list may be prepared on drawing graphics sheets or separate from the drawing graphics sheets similar to parts lists in Figs. 5-1 and 5-2. A wire list includes, as applicable
  - (a) location identification and termination methods for each end of wire terminating on associated drawing
  - (b) a description of each wire (type, size, and color)
  - (c) connection of items with wire leads
- (d) material (wire, sleeving, other required material) and process requirements for connections when they are not specified on the associated drawing
  - (e) reference to the associated drawing, connection diagram, interconnection diagram, or wiring harness drawing
- **9.2.2** When an integral wire list is prepared as a separate sheet or sheets of the drawing, the size of the sheets should be the same size as the other sheets of the drawing. The WL prefix shall not be used with integral wire lists.

### 9.3 Column Entries

Columnar arrangement of wire lists may be in accordance with Fig. 9-1, or may vary to suit the design activity.

	DESIGN ACT AJAX CO I		CONTRACT NO N00000-05-D-000	DAI 1 00000	LIST NO	AL15	-P38795P	RE	VISION A
LIST TITLE LID, H	YBRID	END ITE	EM 15-P38000P	APPROVED R. DE FA	ACTS	REV /	AUTHORIZATION NO H12345	SHEET	1
PART OR ID	ENTIFYING NU	/BER		NEXT ASSEMBLY	1		USED O	N	
	38795P001 38795P001	C.C	ON. Click to	01-P38791P001 01-P39871P001			ATRM ATRM		
				TO TUIL	O <sub>K</sub> O <sub>F</sub>				
REV DESCRIPTI	ON DATE	E <b>I</b> APV	D REV DESCR	IPTION DA	ATE APVD	REV	DESCRIPTION	DATE	APV
REV DESCRIPTI	ON DATE	E APV	D REV DESCR	IPTION DA	ATE APVD	REV	DESCRIPTION	DATE	APV
REV DESCRIPTI	ON DATE	E APV	D REV DESCR	IPTION DA	ATE APVD	REV	DESCRIPTION	DATE	APV

Fig. 3-1 Application List — Manually Generated Format

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### Fig. 3-2 Application List — Digitally Generated Format

CONTRACT NO APPLICATION LIST AJAX CO. INC. DAI AL 15-P38795P REV A N00000-94-C-0000 PIN 15-P38795P001 00000 SHEET 1

END ITEM 15-P38000P TITLE: LID, HYBRID REV. AUTH. NO: H12345

DATE: 95/05/10 APPROVED: R. DE BOLT

NEXT ASSEMBLY PART OR IDENTIFYING NUMBER **USED ON** 01-P38791P001 15-P38795P001 **ATRM** 

01-P39871P001 15-P38795P001 **ATRM** 

3.3

Fig. 3-3 Data List — Manually Generated Format

Fig. 3-4	Separate	Data	List —	Digitally	Generated	<b>Format</b>
----------	----------	------	--------	-----------	-----------	---------------

PHILADELPHIA, PA 000 LIST TITLE END ITEM APP	FRACT NO DAI LIST NO D0-88-A- DL 8267742 19200 PROVED REV AUTHORIZATION NO. FREMBLER MCO 12345-1	REV C SH 1
	NO OF NOMENCLATURE OR DESCRIPTION SH  1 NUT, ROUND 1 PKG DATA SHEET- NUT, ROUND 1 RETAINER 1 PKG DATA SHEET, NUT, ROUND 1 SEGMENT ASSEMBLY 1 PARTS LIST - SEGMENT ASSEMBLY 1 SCREW, MACH, FL, CSK 82°, CROSS REC, CRES ST, UNF-2A	NOTES
	OF ASAMA POZO	3.8

12

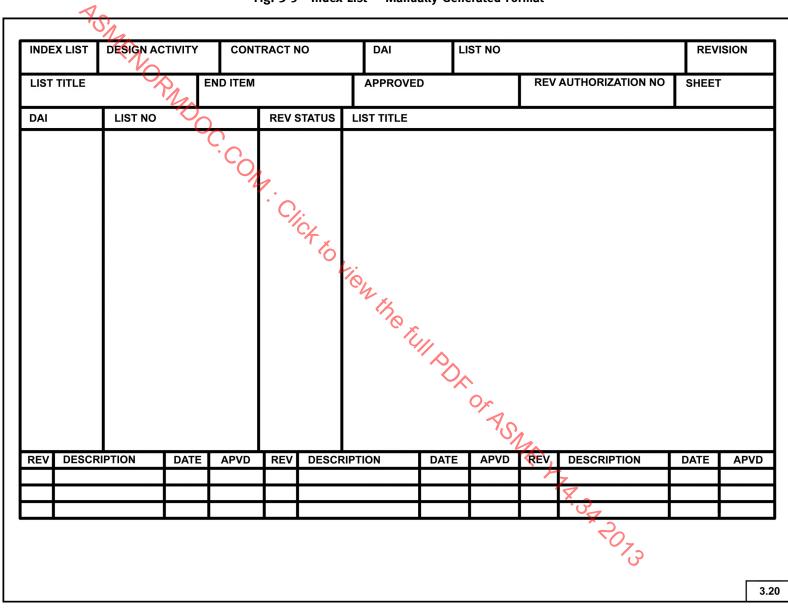


Fig. 3-5 Index List — Manually Generated Format

Fig. 3-6 Separate Index List — Digitally Generated Format

	DESIGN ACTIVITY	CONTRACT NO DAI LIST NO	REV
INDEX LIST		A00000-88-A- IL 8267742	C
	PHILADELPHIA, PA	000 19200	Ŭ
LIST TITL	• • • • • • • • • • • • • • • • • • • •	APPROVED REV AUTHORIZATION NO.	SH
SEGMEN <sup>®</sup>	TASSY 826 <b>7</b> 750	R. TREMBLER MCO 12345-1	1
	Li.		
DAI	LIST NO	REV STATUS LIST TITLE	
	PL8267742	B SEGMENT ASSEMBLY	
	DL8267742	C SEGMENT ASSEMBLY	
B18N4	PL9900A0020	AA SEGMENT SUBASSEMBLY	
B18N4	DL9900A0020	AB SEGMENT SUBASSEMBLY	
		0.5	
		A	
1		<b>'</b> C <sub>A</sub>	3.20

, L'A'3450<sup>27</sup>

14

	S LIST	DESIGN A		CONTRA	ACT NO	DAI		IST NO					SION
LIST	TITLE	9	PA EN	ND ITEM		APPROVE	ED		REV A	AUTHORIZAT	ON NO	SHEET	
FIND NO	QTY REQD	DAI	PART OF	R YING NO		CLATURE CRIPTION	NE	XT ASSY		USED ON		NOTE OR REMARK	
						Lien the to		1					
REV	DESC	RIPTION	DATE	APVD F	REV DES	CRIPTION	DATE	APVD	REV	DESCRIPTI	ON	DATE	APVE
$\dashv$										Z.O.Z			
										20,			

Fig. 3-7 Separate Parts List — Manually Generated Format

PARTS	SLIST	AJA	X CO INC	CONTRAC N00123-94-0		DAI 00000	PL 3115AS2014	REV A SHEET 1 OF 1
TITLE	: PWB	ASSY	END			APPROVED: R. U. DUNN		HORIZATION NO.:H123 DATE: 95/05/10
FIND NO.	QTY I	REQD -1	DAI	DRAWING OR DOCUMENT NO	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION		SUPPLEMENTARY RT/IDENT NO NOTES
001		1 EA		.C	3115AS2016	PWB, I/O BUFFER		
002	1 EA	1 EA			30808-982	PANEL, AOA		
003	1 EA	1 EA		4.	20817-330	EXTR HANDLE - TOP		
004	1 KT	1 KT		•	20817-329	EXTR HANDLE-BOTTOM		
005	1 EA	1 EA			2/100-745	MOUNTING KIT		
006	4 EA	4 EA	96906		MS51957-5	SCREW .0860-56X'.375		
007	8 EA	8 EA	80205		NAS620C2	WASHER .086		
800	4 EA	4 EA	96906		MS35338-134	WASHER .086		
009	4 EA	4 EA	80205		NAS671C2	NUT 086-56		
C001	1 EA	1 EA	81349	MIL-C-39006/25	M39006/25-0226	CAPACITOR .33UF 10-50		
C002	1 EA	1 EA	81349	MIL-C-39006/25	M39006/25-0226	CAPACITOR .33UF-10250		
C003	1 EA	1 EA	81349	MIL-C-39014/5	M39014/05-2255	CAPACITÓR .01UF-10-50		
C004	1 EA	1 EA	81349	MIL-C-39014/5	M39014/05-2255	CAPACITOR .01UF-10-50		
010	1 EA				3115AS2019	PWB, I/O BUFFER	74.34.50,	

Fig. 3-8 Separate Parts List — Digitally Generated Format

Fig. 3-9 Wire List — Manually Generated Format

WIRE LIS	Т		SN ACT AX CO			NTRACT N 00000-95-0				LIST NO WL01-P38791P		PREVISION A	
LIST TITLE CHASSIS ASSY			END ITEM 01-P-3870	ND ITEM 01-P-38700P		ED BOLT			IORIZATION NO 15234-4	SHEET 1	OF 4		
WIRE NO	cc	DLOR	SIZE			WIRE NOTE OR VIEW	RUNS TO	0	TE R EW	FUNCTION ROUTING REMARKS	APPROX LENGTH	FINE	
1A	W	/HT	22	FL22-2			J-13		1	F/F PH TX+		28	
1B	Bl	LUE	22	FL23-2			J1-4	Q		F/F PH TX-		28	
1C	SH	IELD		FL22- 2/FL22-	3		J1-3/J1-4	3/1		GND		28	
2A	V	/HT	22	FL20-2			J1- <b>1</b> 2			F/FPHCV+		28	
2B	В	LU	22	FL21-2			31-2			F/FPHCV-		28	
2C	SH	IELD		FL20- 2/FL21-2	2	:0	<b>3</b> 1-1/J1-2			GND		28	
3A	V	/HT	22	FL26-2	2	7.	J1-8			R/FPHTX+		28	
3B	В	LU	22	FL27-2	2	NO.	J1-9			R/FPHTX+		28	
3C	SH	IELD	22	FL26- 2/FL27-	2	4	J1-8/J1-9		= = =	GND		28	
4A	V	VHT	22	FL24-2	)		J1-6			R/FPHCV+		28	
4B	E	BLU	22	FL25-2			L1-7			R/FPHCV-		28	
4C	SH	IELD		FL24/FL: -7	25		J1-6/J1-7			GND		28	
5	G	RN	22	FL22/23 SHIELD		D	FL20/21 SHIELD	D	)	GND		21	
6	G	RN	22	FL20/21 SHIELD		D	FL24/25 SHIELD		)	GND		21	
7	G	RN	22	FL24/25 SHIELD		D	FL26/27 SHIELD		)	GND		21	

3.26

Fig. 3-10 Wire List — Digitally Generated Format

WIRE LIS		ON ACTIV		ONTRACT N 0000-95-C-0		DAI 00000	LIST NO WL01-P38791P	REVISI A	ON
LIST TITL CHASSIS			ND ITEM I-P-38700P	APPRO\ R. DE BO			HORIZATION NO 15234-4	SHEET 1	OF 4
				WIRE	RUNS		FUNCTION		FINID
WIRE NO	COLOR	SIZE AWG	FROM	NOTE OR VIEW	то	NOTE OR VIEW	REMARKS	APPROX LENGTH	FIND NO
1A	WHT	22	FL22-2		J-13		F/F PH TX+		28
1B	BLUE	22	FL23-2		J1-4		F/F PH TX-		28
1C	SHIELD		FL22- 2/FL22-3		J1-3/J1-4	FUII	GND		28
2A	WHT	22	FL20-2		J1-1	(O	F/FPHCV+		28
2B	BLU	22	FL21-2		J1-2		F/FPHCV-		28
2C	SHIELD		FL20- 2/FL21-2		J151/J1-2		GND		28
3A	WHT	22	FL26-2	٧(	J1-8		R/FPHTX+		28
3B	BLU	22	FL27-2	4	J1-9		R/FPHTX+		28
3C	SHIELD	22	FL26- 2/FL27-2	Clic.	J1-8/J1-9		GND		28
4A	WHT	22	FL24-2		J1-6		R/FPHCV+		28
4B	BLU	22	FL25-2		L1-7		R/FPHCV-		28
4C	SHIELD		FL24/FL25		J1-6/J1-7		GND		28
5	GRN	220	FL22/23 SHIELD	D	FL20/21 SHIELD	D	GND		21
6	GRN	155	FL20/21 SHIELD	D	FL24/25 SHIELD	D	GND		21
7	GRN	22	FL24/25 SHIELD	D	FL26/27 SHIELD	D	GND		21

Fig. 4-1 Separate List Heading

					. 03					
LIST TYPE DESIGN ACTIVIT	TY CONTRA	$\sim$	DAI	LIST NO	REVISION					
(1) (2)	END ITEM	(3)	(4)	(5)	(6)					
LIST TITLE (7)	END ITEM  (8)	APPROVED 9		JTHORIZATION NO	SAGET (11)					
			<u> </u>	7						
<u> </u>	LIST TYPE (Mandatory). Enter APPLICATION LIST, DATA LIST, INDEX LIST, PARTS LIST, or WIRE LIST (as applicable).									
block 4. W		ctivity, name, ar	nd address is be	design whose DAI ap eing used as the DAI						
	J	•	$\sim$							
	red. Subsequent			olicable) under which list may apply may be						
	<b>DAI (</b> Mandatory). Enter the DAI for the original design activity of the associated list. When space is not available enter a flag note that identifies the DAI.									
5 LIST NO (Ma	andatory). Enter th	e list number a	ssigned to the I	ist.						
6 REVISION (N	//andatory).See	SME 14.35M.								
	Optional) Enter the which the list is as		or noun phrase	from the title of the er	ngineering					
item or syste	8 END ITEM or SYSTEM DESIGNATOR (Mandatory). Enter the end item or system designator to which the list applies. When no designator has been assigned, the top assembly part number of the end item shall be entered.									
				ring design activity sh mechanically printed.	all be entered					
	RIZATION NO (M red when a revision			revision authorization d is not provided.	document					
11) SHEET (Man	datory). Enter she	eet number.								
<b>P</b> S				Fig.	8-1 Fig. 5-3 4.4					

Fig. 7-1

4.6.1

3.4

