

TM 11-7010-200-34P-19-1

TECHNICAL MANUAL

ILLUSTRATED PARTS BREAKDOWN

**TIME SIGNAL CONTROLLER, TD1190/UYQ
PART NUMBER 103498**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY
NOVEMBER 1979**

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 30 November 1979

TM 11-7010-200-34P-19-1, 30 November 1979, is published for the use of all concerned. This manual is a reprint of TO 31S5-4-530-14, 11 March 1978.

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Units org under fol TOE:
29-134 (1)
29-136 (1)
29-207 (2)
29-610 (2)
Acct # M0497 (2)
" # D0741 (1)
" # H0534 (1)
" # A0049 (1)
" # S0392 (3)
" # J0861 (10)
" # C0214 (2)

NG: NONE

USAR: NONE

For explanation of abbreviations see, AR 310-50.

ILLUSTRATED PARTS BREAKDOWN TECHNICAL MANUAL

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TIME SIGNAL CONTROLLER, TD-1190/UYQ
ILLUSTRATED PARTS BREAKDOWN

SECTION I

INTRODUCTION

1-1. GENERAL. This Illustrated Parts Breakdown (IPB) Technical Manual (T M) is necessary for the support of the Time Signal Controller TD/1190/UYQ, 103498, a separate individual assembly used in conjunction with one or more Automated Communication Terminal configuration of the general communication network. The manual is divided into four sections, Section I, Introduction; Section II, Group Assembly Parts Section III, Numerical Index; and Section IV, Reference

1-2 SCOPE. This IPB TM reflects the listing of repair parts and/or assemblies. Under certain conditions, when ordering replacement parts only a complete assembly or subassembly may be obtainable. Although the part or parts necessary are separately listed in the GAPL (Section II), and are under the specific assembly or subassembly, they cannot be obtained alone; i.e., **Electrical Power** Cable Assembly, Part No. 103207 (in the **Expanded Power** Supply Chassis - No. 103039-01).

1-3 GROUP ASSEMBLY PARTS LIST. This section contains the complete group assembly parts list separated into figures by main groups, or assemblies, and keyed to the associated illustration by figure and index numbers. The GAPL listing may be arranged in either seven or eight columns: Figure and Index Number; Reference Designation column alone or with a separate Locator column; Description of Item; Part Number; (Manufacturer's) Code Identification Number; Units per Assembly; and Usable on Code column.

1-3.1 Figure and Index Number Column. The first item in the figure and index number column is the figure number of the illustration of the assembly listed. The figure number is not repeated thereafter except with the first item of listings continued on succeeding pages. The second number is the index number to key the part to the illustration callout. Identical parts occurring in the same general location on the equipment are illustrated and indexed but once. The relation of each part to its Next Higher Assembly (NHA) or main group is shown either by indentation or by figure cross-reference note. However, since certain (particular) illustrations may be delineated by a grid pattern, certain index numbers (callouts) may be used to indicate the location of different components (more than one) within a particular grid subdivision. In other illustrations, multiple use of the same index callout number may be used; these illustrations may not necessarily have a grid pattern incorporated.

1-3.2 Reference Designation Column. This column contains all reference designations used in this IPB and assigned in the unit.

1-3.3 Locator Column. This optional column is used when an illustration or figure represents a circuit card or similar assembly which is subdivided by a grid pattern (usually delineated on the card assembly by the manufacturer). The alphanumeric code used in this column delineates the close location of the particular component(a), where a letter may be absent in the code, this indicates an opted choice on the part of the designer to obviate possible error in identification. When both a letter and number code is absent, or a reference designation (sequential) is missing, this will indicate that either the component is not used or the particular grid space remains devoid of components.

1-3.4 Description Column. The names used are the same as those assigned on the manufacturing drawings or in the Defense Supply Agency Cataloging Handbook H6. Attaching parts are listed immediately below the items to which they attach. The relation of each part to its next higher assembly is either shown by indention or cross reference. Where a descriptor declares "SAME AS ~~xxx~~," this indicates that this line item is identical to its first appearance entry in the GAPL.

1-3.4.1 Indention. Parts listed in this column are indented to indicate item relationship or NHA. The nomenclature of each assembly is followed in the list (except for attaching parts) by the nomenclature of its components indented one column to the right. This indention indicates the relationship of the component to the assembly. To determine the next higher assembly of a part or assembly, note the column in which the first word of the nomenclature appears. The first item directly above, which appears one column to the left, is the NRA (except for attaching parts).

1-3.4.2 Cross-Reference. The notation ("See Fig, for det breakdown") following the description of a part indicates that further breakdown of the part will be shown on the figure noted. The notation ("See Fig. for NRA") following the description of a part indicates that the correct assembly relationship of the part will be shown on the figure and index number noted.

1-3.5 Part Number Column.

1-3.5.1 Part numbers used in this column are selected according to the following order of preference: military standards, design activity numbers and vendor numbers. When a vendor's number is used and an alternate source is known, the alternate vendor and part number is also listed.

1-3.5.2 The part numbers in this manual have been converted by deleting all dashes and spaces between alphabetic and numerical characters. Further, all diagonals (/) denoting fractions in part numbers have been converted to dashes (-) and diagonals between alphabetic and numerical characters have been deleted.

1-3.6 Code Identification Column. The codes listed in this column comprise a five-digit code of the actual manufacturer. This is obtained in accordance with the Federal Supply Code for Manufacturer's Cataloging Handbooks H4-1 and H4-2 and any amendments thereto. Where a coded identification number is not

entered, the individual items responsibility remain that of prime contractor 52483, GTE Information Systems. An alpha numerical listing of the applicable manufacturer's codes for this IPB technical manual is included at the end of Section I, see Table 1-1.

1-3.7. Units Per Assembly Column. The quantity shown in this column represents the units required for one next higher assembly or subassembly. The notation "REF" (reference) indicates this item has been previously listed under its next higher assembly. The "See Fig" notation in the description of the item will indicate the figure and index number at which the units per assembly can be determined.

1-3.8. Usable On Code Column. Usable On Codes shall be employed to indicate specific usability items. Tire code used will be the same as the revision, i.e., "A" Usable On Code = Revision A, "G1" Usable On Code = Revision G1. The absence of a code indicates that this part is used in all models or revisions covered by this technical manual.

1-4. NUMERICAL INDEX. This section contains an alpha numeric listing of all parts that comprise the article.

1-4.1. Part Number Column. The order of precedence in beginning the part number arrangement on the first (left-hand) position of the part number is as follows:

Letters A through Z

Numerals 0 through 9

The second and succeeding positions of the part number from left to right are as follows:

- a. Space (blank column)
- b. Diagonal (slant)
- c. Point (period)
- d. Dash (-)
- e. Letters A through Z
- f. Numerals 0 through 9

Alphabetic "O's" are considered as numerical "zeros." "No Number" and "Commercial Parts" are listed in alphabetical sequence by the identifying noun in the part number column.

1-4.2. Figure and Index Number Column. The entries in this column provide a cross-reference by means of figure and index numbers to the listing of the part number in Section II (GAPL). The figure and index numbers for government standard and contractor standard hardware are listed showing the first appearance only in Section II.

1-4.3 Quantity-Per Article. The quantity shown in this column is the total quantity required for each article. The abbreviation "REF" (reference) indicates that this item has been listed twice in Section II once under its next higher assembly with the total quantity used and once as a referenced item where a detail breakdown is listed,

1-4.4 Source Code Column. Source codes are entered in the first and second positions of the uniform format and indicate to maintenance and supply personnel the source of acquisition for the item for replacement purposes, i.e., procured, stocked, manufactured, or assembled. Source codes, when and if assigned, are Source, Maintenance and Recoverability Codes assigned in accordance with NAVAIR INST 4423.2.

1-4.5 Repair Code Column. The use of this column shall remain at the discretion of the prime contractor.

1-5 REFERENCE DESIGNATION INDEX.

1-5.1 The Reference Designation Index lists the electrical part reference designation numbers (first column) with their corresponding part numbers (third column) in an alphabetical and numerical sequence. This type of sequence differs from the alphanumeric sequence used described in paragraph 1-4.1 for the Numerical Index. This sequence is shown in the following example:

B1
w1
1A1
3A2R9
3A2RIO
3A2RII
etc.

1-5.2 The figure and index numbers for locating a part in Section II (GAPL) appear opposite each reference designation number (in the second column). The part number remains in its original alphanumeric presentation.

1-6. ABBREVIATIONS. Abbreviations used in this manual are in accordance with MIL-STD-12-c.

1-7. HOW TO USE THE ILLUSTRATED PARTS BREAKDOWN

(See following pages)

HOW TO USE THE ILLUSTRATED PARTS BREAKDOWN

SECTION 17
Landing Gear

SECTION 17 (Cont)

TABLE OF CONTENTS

Part No.	Description	Part No.	Description
2-302	Landing Gear Shock Strut Assembly	2-400	Hydraulic Station 200 to 200 Hydraulic
2-303	Rear Landing Gear Shock Strut	2-401	Hydraulic Station 200 to 200 Hydraulic
2-304	Forward Landing Gear Shock Strut	2-402	Hydraulic Station 200 to 200 Hydraulic
2-305	Shock Strut Assembly	2-403	Hydraulic Station 200 to 200 Hydraulic
2-306	Shock Strut Assembly	2-404	Hydraulic Station 200 to 200 Hydraulic
2-307	Shock Strut Assembly	2-405	Hydraulic Station 200 to 200 Hydraulic
2-308	Shock Strut Assembly	2-406	Hydraulic Station 200 to 200 Hydraulic
2-309	Shock Strut Assembly	2-407	Hydraulic Station 200 to 200 Hydraulic
2-310	Shock Strut Assembly	2-408	Hydraulic Station 200 to 200 Hydraulic
2-311	Shock Strut Assembly	2-409	Hydraulic Station 200 to 200 Hydraulic
2-312	Shock Strut Assembly	2-410	Hydraulic Station 200 to 200 Hydraulic
2-313	Shock Strut Assembly	2-411	Hydraulic Station 200 to 200 Hydraulic
2-314	Shock Strut Assembly	2-412	Hydraulic Station 200 to 200 Hydraulic
2-315	Shock Strut Assembly	2-413	Hydraulic Station 200 to 200 Hydraulic
2-316	Shock Strut Assembly	2-414	Hydraulic Station 200 to 200 Hydraulic
2-317	Shock Strut Assembly	2-415	Hydraulic Station 200 to 200 Hydraulic
2-318	Shock Strut Assembly	2-416	Hydraulic Station 200 to 200 Hydraulic
2-319	Shock Strut Assembly	2-417	Hydraulic Station 200 to 200 Hydraulic
2-320	Shock Strut Assembly	2-418	Hydraulic Station 200 to 200 Hydraulic
2-321	Shock Strut Assembly	2-419	Hydraulic Station 200 to 200 Hydraulic
2-322	Shock Strut Assembly	2-420	Hydraulic Station 200 to 200 Hydraulic
2-323	Shock Strut Assembly	2-421	Hydraulic Station 200 to 200 Hydraulic
2-324	Shock Strut Assembly	2-422	Hydraulic Station 200 to 200 Hydraulic
2-325	Shock Strut Assembly	2-423	Hydraulic Station 200 to 200 Hydraulic
2-326	Shock Strut Assembly	2-424	Hydraulic Station 200 to 200 Hydraulic
2-327	Shock Strut Assembly	2-425	Hydraulic Station 200 to 200 Hydraulic
2-328	Shock Strut Assembly	2-426	Hydraulic Station 200 to 200 Hydraulic
2-329	Shock Strut Assembly	2-427	Hydraulic Station 200 to 200 Hydraulic
2-330	Shock Strut Assembly	2-428	Hydraulic Station 200 to 200 Hydraulic
2-331	Shock Strut Assembly	2-429	Hydraulic Station 200 to 200 Hydraulic
2-332	Shock Strut Assembly	2-430	Hydraulic Station 200 to 200 Hydraulic
2-333	Shock Strut Assembly	2-431	Hydraulic Station 200 to 200 Hydraulic
2-334	Shock Strut Assembly	2-432	Hydraulic Station 200 to 200 Hydraulic
2-335	Shock Strut Assembly	2-433	Hydraulic Station 200 to 200 Hydraulic
2-336	Shock Strut Assembly	2-434	Hydraulic Station 200 to 200 Hydraulic
2-337	Shock Strut Assembly	2-435	Hydraulic Station 200 to 200 Hydraulic
2-338	Shock Strut Assembly	2-436	Hydraulic Station 200 to 200 Hydraulic
2-339	Shock Strut Assembly	2-437	Hydraulic Station 200 to 200 Hydraulic
2-340	Shock Strut Assembly	2-438	Hydraulic Station 200 to 200 Hydraulic
2-341	Shock Strut Assembly	2-439	Hydraulic Station 200 to 200 Hydraulic
2-342	Shock Strut Assembly	2-440	Hydraulic Station 200 to 200 Hydraulic
2-343	Shock Strut Assembly	2-441	Hydraulic Station 200 to 200 Hydraulic
2-344	Shock Strut Assembly	2-442	Hydraulic Station 200 to 200 Hydraulic
2-345	Shock Strut Assembly	2-443	Hydraulic Station 200 to 200 Hydraulic
2-346	Shock Strut Assembly	2-444	Hydraulic Station 200 to 200 Hydraulic
2-347	Shock Strut Assembly	2-445	Hydraulic Station 200 to 200 Hydraulic
2-348	Shock Strut Assembly	2-446	Hydraulic Station 200 to 200 Hydraulic
2-349	Shock Strut Assembly	2-447	Hydraulic Station 200 to 200 Hydraulic
2-350	Shock Strut Assembly	2-448	Hydraulic Station 200 to 200 Hydraulic
2-351	Shock Strut Assembly	2-449	Hydraulic Station 200 to 200 Hydraulic
2-352	Shock Strut Assembly	2-450	Hydraulic Station 200 to 200 Hydraulic

WHEN THE PART NUMBER IS NOT KNOWN

- 1 Determine the function and application of the part required. Turn to the Table of Contents and select the appropriate title. Note the illustration page number.
- 2 Turn to the page indicated and locate the desired part on the illustration.
- 3 From the illustration, obtain the index number assigned to the part desired. Refer to the accompanying description for specific information regarding the part.

HOW TO USE THE ILLUSTRATED PARTS BREAKDOWN

The diagram illustrates the process of finding a part number for a propeller assembly. It includes a pictorial representation of the propeller (callout 3) and a detailed assembly drawing (callout 6). Two data tables are shown: Section III Numerical Index (callout 2) and Section IV Reference Designation Index (callout 4). Callout 1 points to the Reference Designation Index, callout 5 points to the Numerical Index, and callout 4 points to the Reference Designation Index. Callout 3 points to the pictorial representation, and callout 6 points to the assembly drawing.

WHEN THE PART NUMBER OR REFERENCE DESIGNATION IS KNOWN

- 1 When the part number is known, refer to Section III Numerical Index. Locate the part number and note the figure and index number assigned to the part number.
- 2 Turn to the figure number indicated and locate the index number referenced in the Numerical Index.
- 3 If a pictorial representation of the part, or its location is desired, refer to the same index number on the accompanying illustration.
- 4 When the reference designation is known, refer to Section IV, Reference Designation Index. Locate the reference designation and note the figure and index number and the part number assigned.
- 5 Turn to the figure indicated and locate the index number referenced in the Reference Designation Index.
- 6 If a pictorial representation of the part, or its location is desired, refer to the same index number on the accompanying illustration.

CODE	MANUFACTURERS NAME AND ADDRESS
00779	AMP Inc. P.O. Box 3608 Harrisburg, PA 17105
01295	Texas Instruments, Inc. Semiconductor Group P.O. Box 5012 13500 N. Central Expressway Dallas, TX 75222
03508	General Electric Co. Semi-Conductor Products Dept. Electronics Park Syracuse, NY 13201
04713	Motorola, Inc. Semiconductor Products Div. 5005 E. McDowell Road Phoenix, AZ 85036
07707	USM Corp. USM Fastener Div. 510 River Road Shelton, CT 06484
08524	Deutsch Fastener Corp. P.O. Box 92925 7001 W. Imperial Hwy. Los Angeles, CA 90045
09922	Burndy Corp. Richards Ave. Norwalk, CT 06852
14752	Electro Cube Inc. 1710 S. Del Mar Ave. San Gabriel, CA 91776
33809	Texas Instruments, Inc. P.O. Box 5012 13500 N. Central Expressway Dallas, TX 75222

Table 1-1

MANUFACTURERS' CODE LIST (Cont'd.)

CODE	MANUFACTURERS NAME AND ADDRESS
52483	GTE Information Systems, Inc. Anaheim Operations 5300 E. La Palma Ave. Anaheim, CA 92807
71785	TRW Electronic Components Cinch Connector Operations 1501 Morse Ave. Elk Grove Village, IL 60007
72136	Electro Motive Corp. Subsidiary of International Electronics Corp. South Park and John Sts. Willimantic, CT 06226
72982	Erie Technological Products, Inc. 644 W. 12th St. Erie, PA 16512
73138	Beckman Instruments, Inc. Helipot Div. 2500 Harbor Blvd. Fullerton, CA 92634
73803	Texas Instruments, Inc. Metallurgical Materials Div. 34 Forest St. Attleboro, MA 02703
81349	Military Specifications
91506	Augat Inc. 33 Perry Ave. Attleboro, MA 02703
92194	Alpha Wire Corp. 711 Lidgerwood Ave. Elizabeth, NJ 07207
96906	Military Standards

SECTION II
GROUP ASSEMBLY PARTS LIST

2 - 2

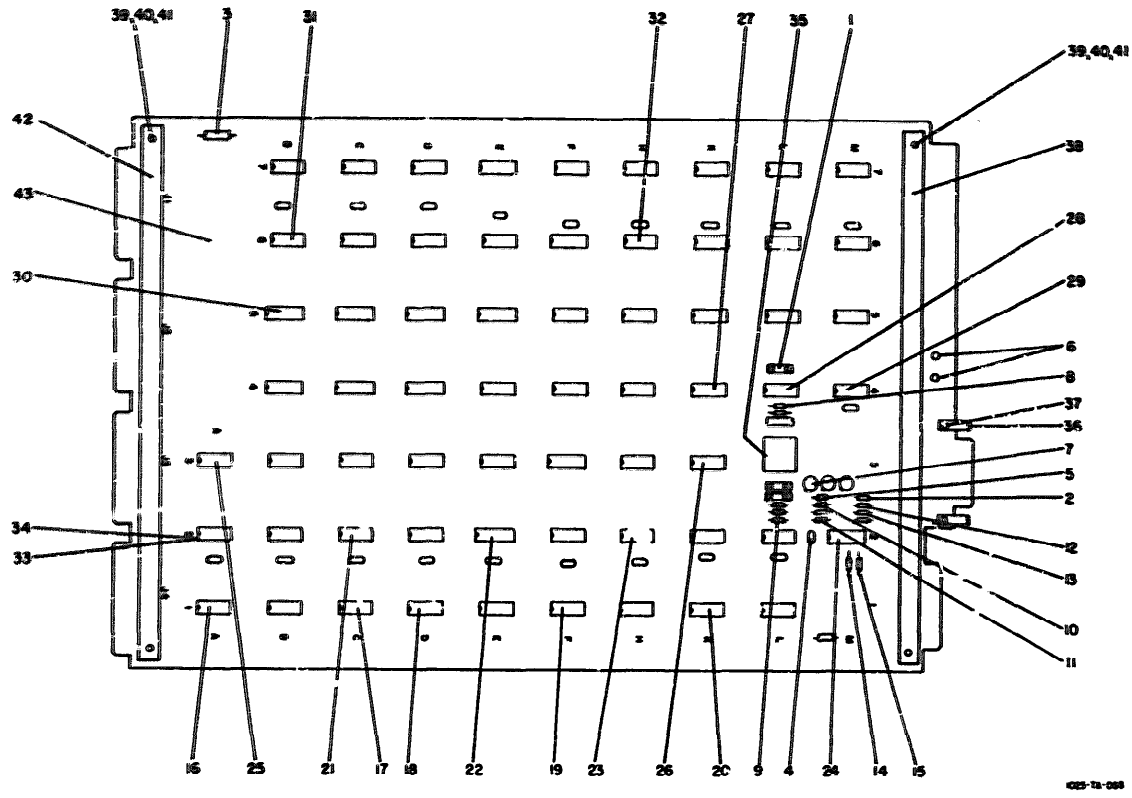


Figure 1. Time Signal Controller

SECTION II
GROUP ASSEMBLY PARTS LIST

TO 31S5-4-530-14

Figure Index No.	Ref. Des.	Locator	Description	Part Number	Code Ident	Units Per Assy	Usable on Code
			TIME SIGNAL CONTROLLER . . .	103498		1	
-1	C1	4L	CAPACITOR, FIXED PLASTIC 0.1ME.+20%, 200V. . . .	21531B104M	14752	1	
	C2	4L	S A M E A S C 1			1	
	C3	3L	S A M E A S C 1			1	
	C4	3L	S A M E A S C 1			1	
-2	C5	3M	CAPACITOR, FIXED, CERAMIC .01MF, +80%, -20%, 100v	805-00025V0-1032	72982	1	
	C6	6M	S A M E A S C 5			1	
	C7	4M	S A M E A S C 5			1	
	C8	6L	S A M E A S C 5			1	
	C9	2L	S A M E A S C 5			1	
	C10	6K	S A M E A S C 5			1	
	C11	2K	S A M E A S C 5			1	
	C12	6H	S A M E A S C 5			1	
	C13	2H	S A M E A S C 5			1	
	C14	6F	S A M E A S C 5			1	
	C15	2F	S A M E A S C 5			1	
	C16	6E	S A M E A S C 5			1	
	C17	2E	S A M E A S C 5			1	
	C18	6D	S A M E A S C 5			1	
	C19	2D	S A M E A S C 5			1	
	C20	6C	S A M E A S C 5			1	

GROUP ASSEMBLY PARTS LIST

Figure & Index No.	Ref. Des.	Locator	Description		Code Ident	Units Per Assy	Use
1	C21	2C	. SAME AS C5			1	
	C22	6B	. SAME AS C5			1	
	C23	2B	. SAME AS C5			1	
-3	C24	7A	. CAPACITOR, FIXED, ELECTROLYTIC, 56 μ PF, \pm 5%, 300V	CSR13F226KM	81349	1	
	C25	2A	. SAME AS C5			1	
	C26	1M	. SAME AS C24			1	
-4	C27	2L	. CAPACITOR, FIXED, MICA, 56 μ PF, \pm 5%, 300V	DM15-561J	72136	1	
-5	CRI	3M	. SEMICONDUCTOR DEVICE, DIODE, SILICON SWITCHING.	IN4608	03508	1	
-6	E1	4N	. CONTACT, ELECTRICAL	61067-1	00779	1	
	E2	4N	. SAME AS E1			1	
-7	Q1	3L	. TRANSISTOR	2N2369A	04713	1	
	Q2	3M	. SAME AS Q1			1	
	Q3	3M	. SAME AS Q1			1	
-8	R1	4L	. RESISTOR, FIXED, FILM, 27 Ω OHMS, \pm 5%, 1/4 W	RL07S471J	81349	1	
	R2	4L	. SAME AS R1			1	
-9	R3	2L	. RESISTOR, FIXED, FILM, 6.8K, \pm 5%, 1/4 W	RL0S682J	81349	1	
	R4	2L	. SAME AS R3			1	
	R5	2L	. SAME AS R3			1	
-10	R6	2M	. RESISTOR, FIXED, FILM, 10K, \pm 5%, 1/4 W	RL7S103J	81349	1	

GROUP ASSEMBLY PARTS LIST

ure dex p.	Ref. Des.	Locator	Description	Part Number	Code Ident	Units Per Assy	Usable on Code
	R7	2M	. SAME AS R6			1	
-11	R8	2M	. RESISTOR, FIXED, FILM, 18K, \pm 5%, 1/4 W	RL07S183J	81349	1	
-12	R9	2M	. RESISTOR, FIXED, FILM, 4.7K, \pm 5%, 1/4 W	RL07S472J	81349	1	
-13	R10	2M	. RESISTOR, FIXED, FILM, 1.8K, \pm 5%, 1/4 W	RL07S182J	81349	1	
	R11	2M	. SAME AS R6			1	
-14	R12	2M	. RESISTOR FIXED, FILM, 200 OHMS, \pm 5%, 1/4 W	RL07S201J	81349	1	
-15	R13	2M	. RESISTOR, FIXED, FILM, 300 OHMS, \pm 5%, 1/4 W	RL07S301J	81349	1	
-16	U1	1A	. INTEGRATED CIRCUIT, HEX INVERTER	SN7404N	01295	1	
	U2	1B	. SAME AS U1			1	
-17	U3	1C	. INTEGRATED CIRCUIT, QUAD 2-INPUT POSITIVE -AND GATE	SN7408N	01295	1	
-18	U4	1D	. INTEGRATED CIRCUIT, DUAL J-K MASTER-SLAVE FLIP- FLOP	SN74107N	01295	1	
	U5	1E	. SAME AS U4			1	
-19	U6	1F	. INTEGRATED CIRCUIT, QUAD 2-INPUT POSITIVE -NAND GATE	SN7400N	01295	1	
	U7	1H	. SAME AS U3			1	
-20	U8	1K	. INTEGRATED CIRCUIT, DUAL D-TYPE, EDGE-TRIGGERED FLIP-FLOP	SN7474N	01295	1	

GROUP ASSEMBLY PARTS LIST

Figure & Index No.	Ref. Des.	Locator	Description	Part Number	Code Ident	Units Per Assy	Usal or Cod
1-	U9	1L	. SAME AS U1			1	
-21	U10	2C	. INTEGRATED CIRCUIT, 8- INPUT POSITIVE -NAND GATE	SN7430N	01295	1	
	U11	2D	. SAME AS U8			1	
-22	U12	2E	. INTEGRATED CIRCUIT, BCD- TO-DECIMAL DECODER	SN7442N	01295	1	
	U13	2F	. SAME AS U1			1	
-23	U14	2H	. INTEGRATED CIRCUIT, TRIPLE 3-INPUT POSITIVE -NAND GATE	SN7410N	01295	1	
	U15	2K	. SAME AS U4			1	
	U16	2L	. SAME AS U4			1	
-24	U17	2M	. INTEGRATED CIRCUIT, SYNCHRONOUS 4-BIT BINARY COUNTER WITH DIRECT CLEAR	SN74161N	01295	1	
-7	U18	3A	. INTEGRATED CIRCUIT, HEX INVERTER	SN74H05N	01295	1	
	U19	3B	. SAME AS U1			1	
	U20	3C	. SAME AS U1			1	
	U21	3D	. SAME AS U1			1	
	U22	3E	. SAME AS U3			1	
	U23	3F	. SAME AS U12			1	
	U24	3H	. SAME AS U4			1	
-26	U25	3K	. INTEGRATED CIRCUIT, 50 MHZ, PRESETTABLE 4-BIT BINARY COUNTERS/LATCHES	SN74197N	33809	1	

GROUP ASSEMBLY PARTS LIST

Ref. Des.	Locator	Description	Part Number	Code Ident	Units Per Assy	Usable on Code
U26	4B	. SAME AS U17			1	
U27	4C	. SAME AS U17			1	
U28	4D	. SAME AS U17			1	
U29	4E	. SAME AS U1			1	
U30	4F	. SAME AS U1			1	
U31	4H	. SAME AS U10			1	
-27 U32	4K	. INTEGRATED CIRCUIT, QUAD 2-INPUT POSITIVE -NAND BUFFER	SN7438N	Ø1295	1	
-28 U33	4L	. SAME AS U6			1	
-29 U34	4M	. NETWORK, HYBRID CIRCUIT, 680 OHMS, PULL-UP	899-1R680	73138	1	
-30 U35	5B	. INTEGRATED CIRCUIT, DUAL D-TYPE, EDGE-TRIGGERED FLIP-FLOP	SN74174N	Ø1295	1	
U36	5C	. SAME AS U35			1	
U37	5D	. SAME AS U35			1	
U38	5E	. SAME AS U17			1	
U39	5F	. SAME AS U1			1	
U40	5H	. SAME AS U1			1	
U41	5K	. SAME AS U4			1	
U42	5L	. SAME AS U4			1	
U43	5M	. SAME AS U6			1	

GROUP ASSEMBLY PARTS LIST

Figure & Index No.	Ref. Des.	Locator	Description	Part Number	Code Ident	Units Per Assy	Use	
1- 31	U44	6B	. INTEGRATED CIRCUIT, QUAD 2-INPUT POSITIVE -NAND GATE	SN74H01N	Ø1295	1		
	U45	6C	. SAME AS U44			1		
	U46	6F	. SAME AS U12			1		
-32	U47	6H	. INTEGRATED CIRCUIT, DUAL 4-INPUT POSITIVE -NAND BUFFER	SN7440N	Ø1295	1		
	U48	6K	. SAME AS U44			1		
	U49	6L	. SAME AS U44			1		
	U50	6M	. SAME AS U3			1		
	U51	7B	. SAME AS U44			1		
	U52	7C	. SAME AS U44			1		
	U53	7E	. SAME AS U12			1		
	U54	7F	. SAME AS U1			1		
	U55	7H	. SAME AS U6			1		
	U56	7K	. SAME AS U47			1		
	U57	7L	. SAME AS U4			1		
	U58	7M	. SAME AS U6			1		
	-33	X1	2A	. SOCKET, PLUG-IN	C931402	738Ø3	1	
		X2	2B	. SAME AS X1			1	
		X3	6D	. SAME AS X1			1	
X4		6E	. SAME AS X1			1		
X5		7D	. SAME AS X1			1		

GROUP ASSEMBLY PARTS LIST

Pre Index No.	Ref. Des.	Locator	Description	Part Number	Code Ident	Units Per Assy	Usable on Code
-34	XTP1	2A	. HEADER, 14-PIN	614DG5	91506	1	
	XTP2	2B	. SAME AS XTP1			1	
	XTP3	6D	. SAME AS XTP1			1	
	XTP4	6E	. SAME AS XTP1			1	
	XTP5	7D	. SAME AS XTP1			1	
-35	Y1	3L	. CRYSTAL, 1.6 MHZ	870081		1	
-36			. BRACKET, CONNECTOR MOUNTING	101625		2	
			(ATTACHING PART)				
-37			. RIVET, BLIND	AD42ABS	07707	2	
			----*----				
-38			. STIFFENER, REAR.	101823		1	
			(ATTACHING PARTS)				
-39			. SCREW, MACHINE	MS51957-17	96906	3	
-40			. WASHER, FLAT	MS15795-804	96906	3	
-41			. WASHER, LOCK	MS35338-135	96906	3	
			----*----				
-42			. STIFFENER, FRONT	101897			
			(ATTACHING PARTS)				
			. SCREW, MACHINE	MS51957-17	96906	3	
			. WASHER, FLAT	MS15795-804	96906	3	
			. WASHER, LOCK	MS35338-135	96906	3	
			----*----				
-43			. PRINTED WIRING BOARD	103499		1	

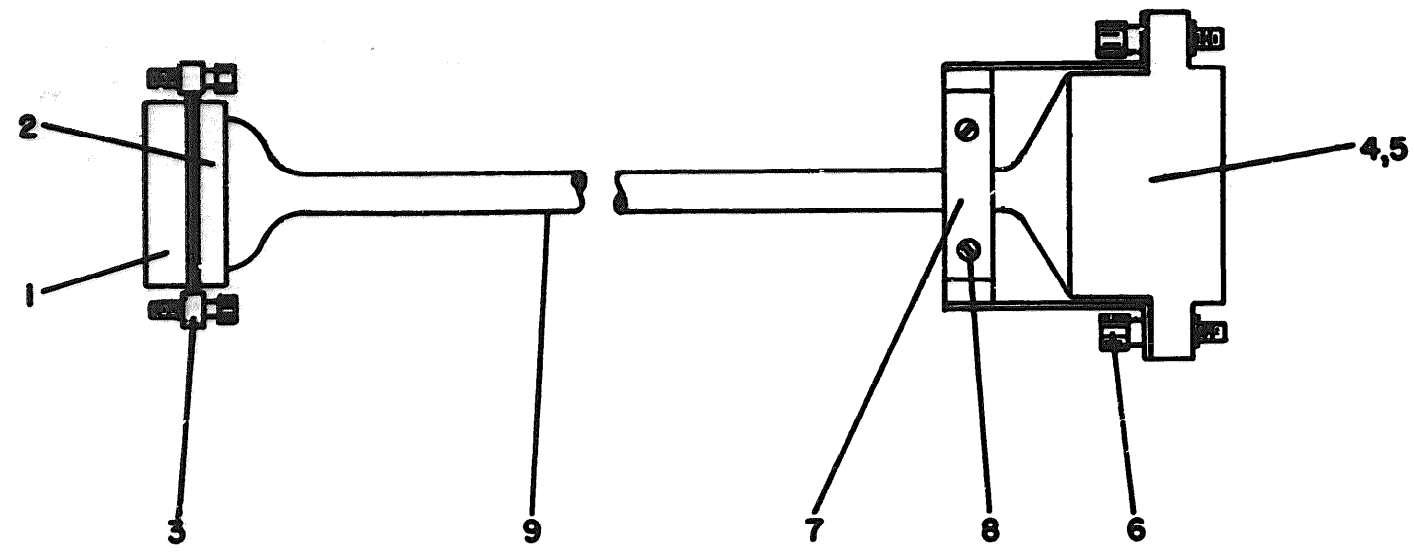


Figure 2. Cable Assembly, Interval Timer

GROUP ASSEMBLY PARTS LIST

ure dex .	Ref. Des.	Locator	Description	Part Number	Code Ident	Units Per Assy	Usable on Code
	W1		. CABLE ASSEMBLY, INTERVAL TIMER	104053		1	
-1	P1		.. CONNECTOR, PLUG, 9 PIN .	DE9P	71785	1	
-2			.. SHELL, CONNECTOR, CADMIUM PLATED STEEL . .	DE24657	71785	1	
			(ATTACHING PART)				
-3			.. SCREW, LOCK ASSEMBLY, CADMIUM PLATED STEEL . .	D20419-16	71785	2	
			----*----				
-4	P13		.. CONNECTOR, ASSEMBLY, 30 PIN	102414		1	
-5			... CONNECTOR, RECEPTACLE, ELECTRICAL	PB4D2D15-1	09922	1	
-6			... SCREW, CAPTIVE	SJN7900-4E3	08524	2	
-7			... STRAIN RELIEF	102377		1	
			(ATTACHING PART)				
-8			... SCREW, MACHINE	MS51957-15	96906	2	
			----*----				
-9			.. CABLE, 7 PAIR TWISTED, 24 AWG PVC	5231-7	92194	AR	

SECTION III
NUMERICAL INDEX

Part Number	Stock Number	Figure & Index Number	Qty Per Art	Source Code	Repair Code
AD42ABS	5320 9564067	1-37	2	PAFZZN	
CSR13F226KM	5910 9986949	1-3	2	PAFZZN	
C931402	5935 4814140	1-33	5	PAFZZN	
DE24657	5340 1056817	2-2	1	PAFZZN	
DE9F	5935 7101717	2-1	1	PAFZZN	
DM15-561J	5910 0719255	1-4	1	PAFZZN	
D20419-16	5935 0937805	2-3	2	PAFZZN	
MS15795-804	5310 6876664	1-40	3	PAFZZN	
		1-	3		
MS35338-135	5310 9338118	1-41	3	PAFZZN	
		1-	3		
MS51957-15	5305 0545649	2-8	2	PAFZZN	
MS51957-17	5305 0545651	1-39	3	PAFZZN	
		1-	3		
PB4D2D15-1	5935 9259059	2-5	1	PAFZZN	
RL07S103J	5905 9133073	1-10	3	PAFZZN	
RL07S182J	5905 7275352	1-13	1	PAFZZN	
RL07S183J	5905 7301500	1-11	1	PAFZZN	
RL07S201J	5905 9904530	1-14	1	PAFZZN	
RL07S301J	5905 7275319	1-15	1	PAFZZN	
RL07S471J	5905 7275324	1-8	2	PAFZZN	
RL07S472J	5905 7301489	1-12	1	PAFZZN	
RL07S682J	5905 7301493	1-9	3	PAFZZN	
SJN7900-4E3		2-6	2	PAFZZN	
SN74H01N	5962 1465043	1-31	6	PAFZZN	
SN74H05N	5962 1465044	1-25	1	PAFZZN	
SN7400N	5962 8654625	1-19	4	PAFZZN	
SN7404N	5962 4042559	1-16	12	PAFZZN	
SN7408N	5962 175567	1-17	4	PAFZZN	
SN7410N	5962 8654626	1-23	1	PAFZZN	
SN74107N	5962 2769932	1-18	8	PAFZZN	
SN74161N	5962 3271155	1-24	5	PAFZZN	
SN74174N	5962 2769935	1-30	3	PAFZZN	
SN74197N	5962 9363559	1-26	1	PAFZZN	
SN7430N	5962 2560343	1-21	2	PAFZZN	
SN7438N	5962 9363416	1-27	1	PAFZZN	
SN7440N	5962 1853806	1-32	2	PAFZZN	
SN7442N	5962 1930329	1-22	4	PAFZZN	
SN7474N	5962 1064287	1-20	2	PAFZZN	

NUMERICAL INDEX

Part Number	Stock Number	Figure & Index Number	Qty Per Art	Source Code	Repair Code	
1N4608	5961 1858195	1-5	1	PAFZZN		
101625		1-36	2	XBFZZ-		
101823		1-38	1	XBFZZ-		
101897		1-42	1	XBFZZ-		
102377	7035010096572	2-7	1	XBFZZ-		
102404		2-4	1	AFFFF-		
103498		1	1	PAFDDT		
103499		1-43	1	XAFZZ-		
104053		2	1	AFFFF-		
2N2369A		5961 4692735	1-7	3	PAFZZN	
215B1B104M			1-1	4	PAFZZN	
5231-7			2-9	AR	XBFZZ-	
61067-1		5999 1398777	1-6	2	PAFZZN	
614DG5		5935 5289003	1-34	5	PAFZZN	
805-000Z5V0-103Z	5910 2333339	1-2	20	PAFZZN		
870081	5905 2171187	1-35	1	PAFZZN		
899-1R680		1-29	1	PAFZZN		

S E C T I O N I V
REFERENCE DESIGNATION INDEX

Reference Designation	Figure and Index Number	Part Number
1	1	103498
1	1-36	101625
1	1-37	AD42ABS
1	1-38	101823
1	1-39	MS51957-17
1	1-40	MS15795-804
1	1-41	MS35338-135
1	1-42	101897
1	1-39	MS51957-17
1	1-40	MS15795-804
1	1-41	MS35338-135
1	1-43	103499
1C1	1-1	215B1B104M
1C2	1-1	215B1B104M
1C3	1-1	215B1B104M
1C4	1-1	215B1B104M
1C5	1-2	805-000Z5V0-103Z
1C6	1-2	805-000Z5V0-103Z
1C7	1-2	805-000Z5V0-103Z
1C8	1-2	805-000Z5V0-103Z
1C9	1-2	805-000Z5V0-103Z
1C10	1-2	805-000Z5V0-103Z
1C11	1-2	805-000Z5V0-103Z
1C12	1-2	805-000Z5V0-103Z
1C13	1-2	805-000Z5V0-103Z
1C14	1-2	805-000Z5V0-103Z
1C15	1-2	805-000Z5V0-103Z
1C16	1-2	805-000Z5V0-103Z
1C17	1-2	805-000Z5V0-103Z
1C18	1-2	805-000Z5V0-103Z
1C19	1-2	805-000Z5V0-103Z
1C20	1-2	805-000Z5V0-103Z
1C21	1-2	805-000Z5V0-103Z
1C22	1-2	805-000Z5V0-103Z
1C23	1-2	805-000Z5V0-103Z
1C24	1-3	CSR13F226KM
1C25	1-2	805-000Z5V0-103Z
1C26	1-3	CSR13F226KM
1C27	1-4	DM15-561J
1CR1	1-5	1N4608
1E1	1-6	61067-1

REFERENCE DESIGNATION INDEX

Reference Designation	Figure and Index Number	Part Number
1E2	1-6	61067-1
1Q1	1-7	2N2369A
1Q2	1-7	2N2369A
1Q3	1-7	2N2369A
1R1	1-8	RL07S471J
1R2	1-8	RL07S471J
1R3	1-9	RL07S682J
1R4	1-9	RL07S682J
1R5	1-9	RL07S682J
1R6	1-10	RL07S103J
1R7	1-10	RL07S103J
1R8	1-11	RL07S183J
1R9	1-12	RL07S472J
1R10	1-13	RL07S182J
1R11	1-10	RL07S103J
1R12	1-14	RL07S201J
1R13	1-15	RL07S301J
1U1	1-16	SN7404N
1U2	1-16	SN7404N
1U3	1-17	SN7408N
1U4	1-18	SN74107N
1U5	1-18	SN74107N
1U6	1-19	SN7400N
1U7	1-17	SN7408N
1U8	1-20	SN7474N
1U9	1-16	SN7404N
1U10	1-21	SN7430N
1U11	1-20	SN7474N
1U12	1-22	SN7442N
1U13	1-16	SN7404N
1U14	1-23	SN7410N
1U15	1-18	SN74107N
1U16	1-18	SN74107N
1U17	1-24	SN74161N
1U18	1-25	SN74H05N
1U19	1-16	SN7404N
1U20	1-16	SN7404N
1U21	1-16	SN7404N
1U22	1-17	SN7408N
1U23	1-22	SN7442N
1U24	1-18	SN74107N
1U25	1-26	SN74197N

REFERENCE DESIGNATION INDEX

Reference Designation	Figure and Index Number	Part Number
1U26	1-24	SN74161N
1U27	1-24	SN74161N
1U28	1-24	SN74161N
1U29	1-16	SN7404N
1U30	1-16	SN7404N
1U31	1-21	SN7430N
1U32	1-27	SN7438N
1U33	1-28	SN7400N
1U34	1-29	899-1R680
1U35	1-30	SN74174N
1U36	1-30	SN74174N
1U37	1-30	SN74174N
1U38	1-24	SN74161N
1U39	1-16	SN7404N
1U40	1-16	SN7404N
1U41	1-18	SN74107N
1U42	1-18	SN74107N
1U43	1-19	SN7400N
1U44	1-31	SN74H01N
1U45	1-31	SN74H01N
1U46	1-22	SN7442N
1U47	1-32	SN7440N
1U48	1-31	SN74H01N
1U49	1-31	SN74H01N
1U50	1-17	SN7408N
1U51	1-31	SN74H01N
1U52	1-31	SN74H01N
1U53	1-22	SN7442N
1U54	1-16	SN7404N
1U55	1-19	SN7400N
1U56	1-32	SN7440N
1U57	1-18	SN74107N
1U58	1-19	SN7400N
1X1	1-33	C931402
1X2	1-33	C931402
1X3	1-33	C931402
1X4	1-33	C931402
1X5	1-33	C931402
1XTP1	1-34	614DG5
1XTP2	1-34	614DG5
1XTP3	1-34	614DG5

REFERENCE DESIGNATION INDEX

Reference Designation	Figure and Index Number	Part Number
1XTP4	1-34	614DG5
1XTP5	1-34	614DG5
1Y1	1-35	870081
2W1	2	104053
2W1	2-2	DE24657
2W1	2-3	D20419-16
2W1	2-5	PB4D2D15-1
2W1	2-6	SJN7900-4E3
2W1	2-7	102377
2W1	2-8	MS51957-15
2W1	2-9	5231-7
2W1P1	2-1	DE9P
2W1P13	2-4	102414

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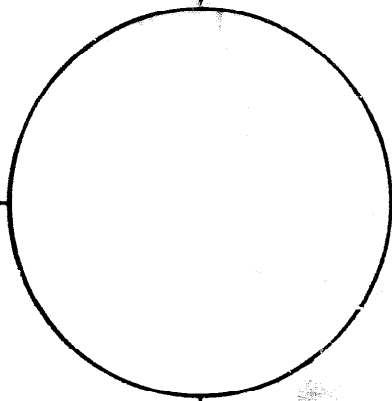
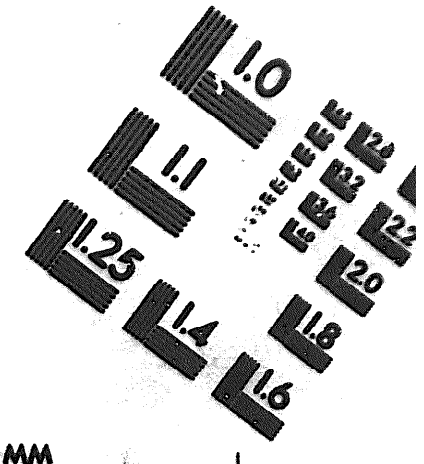
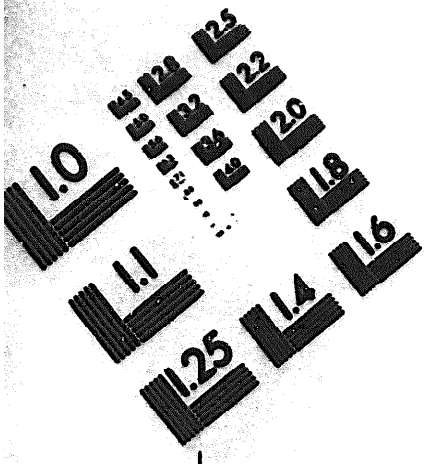
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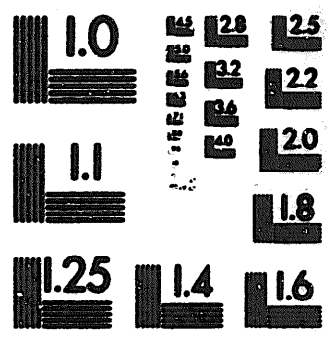
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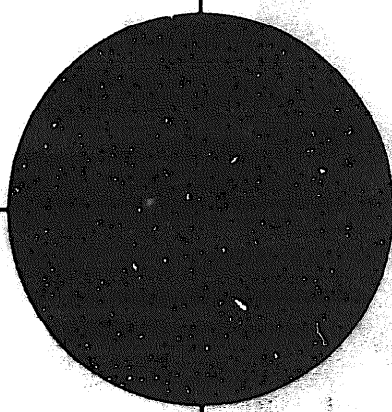
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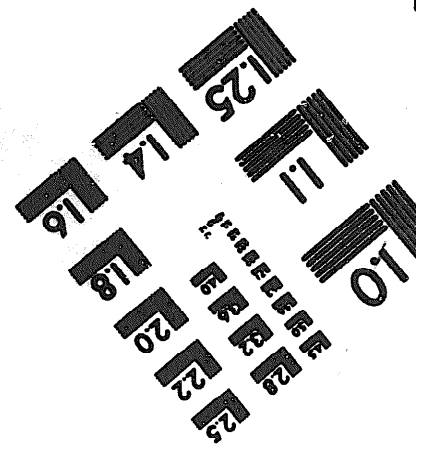
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200 MM



250 MM