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AMP* ARINC 600 CONNECTORS
(Rear-Release Contacts)

Instruction Sheet
IS 6762
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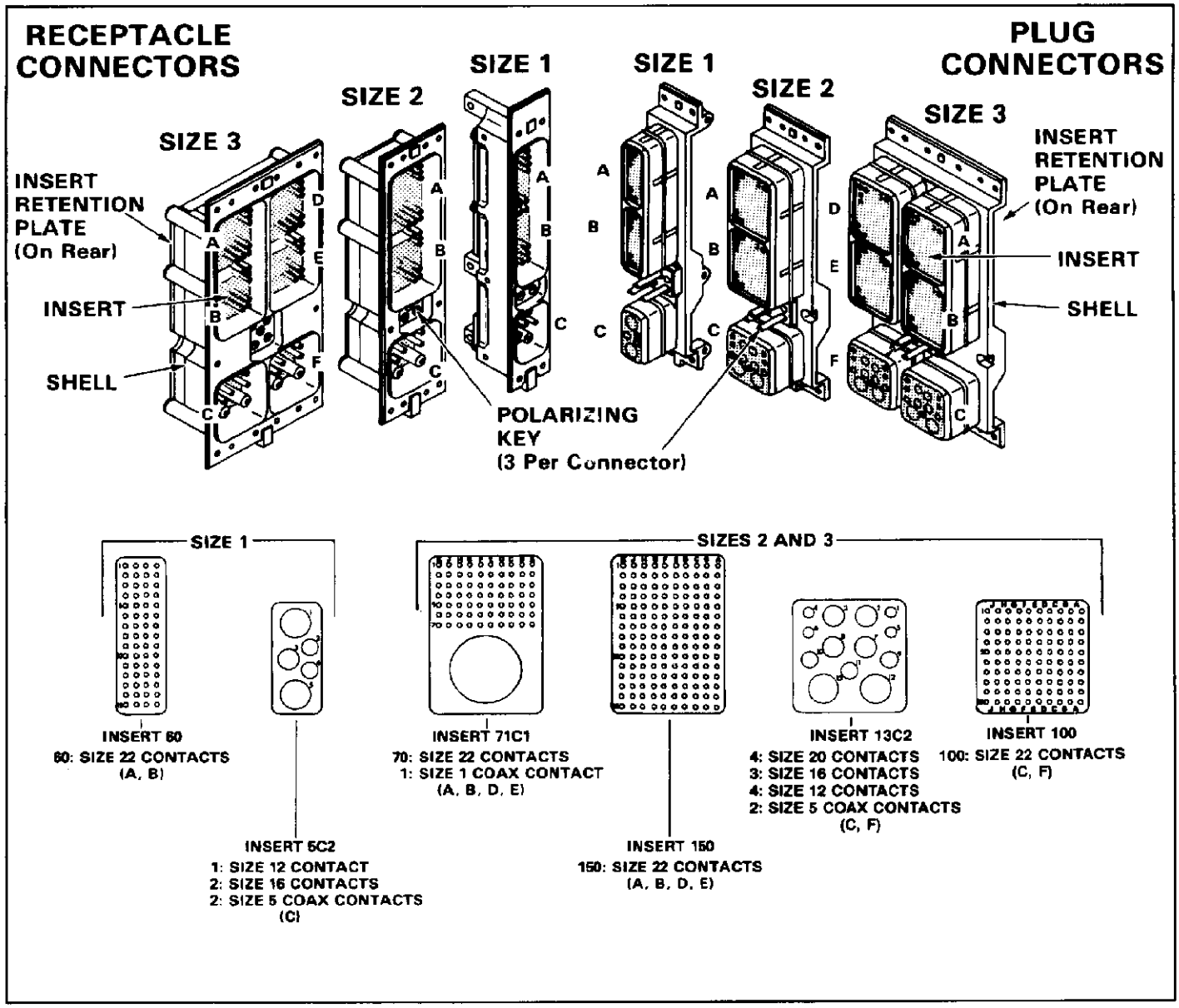

Fig. 1

1. INTRODUCTION

This instruction sheet (IS) covers AMP ARINC 600 connectors, which are rack and panel connectors used in avionic applications. It supplies basic information on the connectors. Further information on crimping connector contacts and on inserting and extracting contacts is found on other AMP instruction sheets referenced throughout this sheet.

2. DESCRIPTION

The connectors are available in Sizes 1, 2, and 3, as shown in Figure 1. Various inserts are available for each series to allow great flexibility in application. Figure 1 shows the inserts which are available from AMP, and the connector size and shell cavities with which each can be used. Because of the many different configurations available, part numbers for each are not given here.

The connectors, depending on configuration, can accept the following contacts:

—Crimp, snap-in pin and socket contacts in Sizes 12, 16, 20, and 22. Figure 2 lists these contacts.

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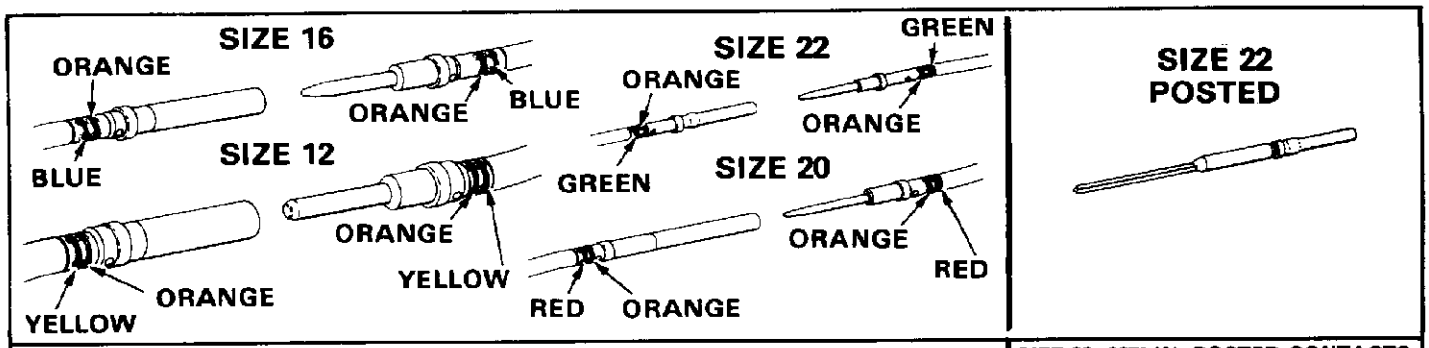
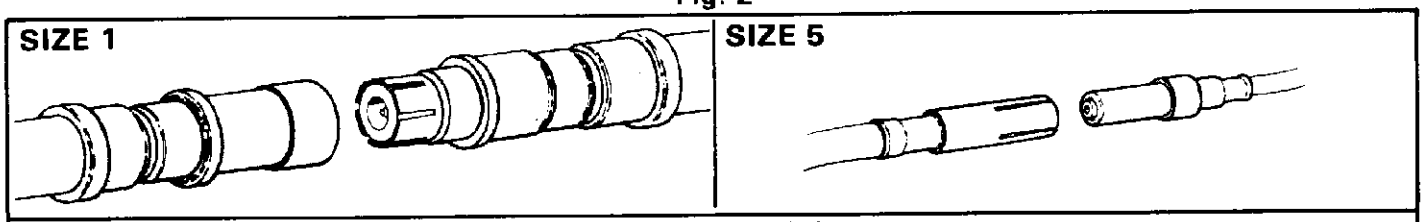


CRIMP, SNAP-IN, REAR-RELEASE CONTACTS								SIZE 22 .025²-IN. POSTED CONTACTS SNAP-IN, REAR RELEASE		
CONT SIZE	WIRE SIZE (AWG)	COLOR CODE	PIN CONT	SKT CONT	PART NUMBERS CRIMP TOOL	PART NUMBERS POSITIONER	INSERTION/ EXTRACTION TOOL	NO. OF WRAPS	POST EXTENSION FROM REAR OF INSERT (In.)	PART NO.
22	26-22	Grn/Org	208262-3	208264-2	M22520/2-01 601966-1	M22520/2-23 601966-8	91066-1	1	.275	208215-1
20	24-20	Red/Org	208265-3	208267-2	M22520/2-01 601966-1	M22520/2-08 601966-5	91066-4	2	.390	208215-2
16	20-16	Blu/Org	208268-3	208270-2	M22520/1-01 601967-1	M22520/1-02 601967-2	91066-3	3	.520	208215-3
12	14-12	Yel/Org	208271-3	208273-2	M22520/1-01 601967-1	M22520/1-11 1-601967-2	91078-1			

FOR TOOLING INFORMATION, SEE AMP INSTRUCTION SHEET IS 7516.

Fig. 2



COAXIAL CONTACTS						
CONTACT SIZE	RG/U CABLE	PART NUMBER PIN	PART NUMBER SOCKET	CENTER CONT CRIMPING TOOL TOOL	CENTER CONT CRIMPING TOOL POSITIONER	FERRULE CRIMPING TOOL
1 Straight Exit	.141 Semi-Rigid	225837-1	--	M22520/2-01 601966-1	1-601966-9	22066-1 or -2
	214	226741-1	225831-1	220015-1	--	220015-1
	213	--	225831-2	220015-1	--	220015-1
	142, 142A, 142B	--	225831-3	220045-2	--	220045-2
	225	--	225831-4	220015-1	--	220015-1
5 Straight Exit	58C	225790-1	225791-1	M22520/2-01 601966-1	1-601966-1	220066-1 or -2
	141A	225790-1	225791-1	220066-2	--	220066-1 or -2
	223	225790-2	225791-2	M22520/2-01 601966-1	1-601966-1	220066-1 or -2
	142A, 142B	225790-2	225791-2	220066-2	--	220066-1 or -2
	.141 Semi-Rigid	225790-3	225791-6	220066-2	--	220066-1 or -2
	188, 316	225790-5	225791-3	M22520/2-01 601966-1	1-601966-1	220066-1 or -2 or 220009-1
	180, 195	225790-4	225791-8	M22520/2-01 601966-2	1-601966-1	220066-1 or -2
	179, 187	225790-6	225791-4	M22520/2-01 601966-1	1-601966-1	220066-1 or -2 or 220009-1
	178, 196	225790-7	225791-5	M22520/2-01 601966-1	1-601966-1	220020-1

FOR TOOLING INFORMATION, SEE AMP INSTRUCTION SHEETS IS 2348 (For Size 5) AND 2348-2 (For Size 1).

Fig. 3

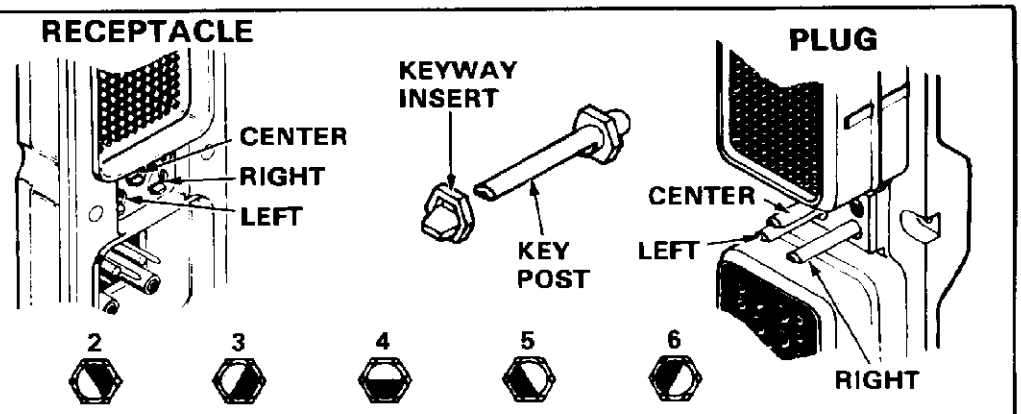
- Posted Size 22 .025²-in. posted contacts for wire wrapping or pc board mounting. Figure 2 also lists the posted contacts.
- Crimp, snap-in coaxial contacts in Size 5.
- Captivated coaxial contacts in Size 1.

Figure 3 lists the coaxial contacts.

Each connector is keyed by three keying posts in the plug connector and three keyways in the receptacle connector. The hexagonal shape of the keys allows each key to be installed in one of six positions.

There are 100 standard keying configurations (including no keying). Figure 4 shows the keying

ITEM	PART NUMBER	QTY/ CONN
Post	208018-1	3
Keyway	208019-1	3
Plate	208020-1	1
Screw	208021-1	2



DARK PORTION INDICATES POSITION OF POST; LIGHT PORTION INDICATES POSITION OF INSERT.

KEY CODE	PLUG KEYING POST †			KEY CODE	RECEPTACLE KEYWAY INSERT			KEY CODE	PLUG KEYING POST †			KEY CODE	RECEPTACLE KEYWAY INSERT		
	L	C	R		L	C	R		L	C	R		L	C	R
00	--	--	--	00	--	--	--	50	2	2	5	50	6	3	3
01	1	1	1	01	4	4	4	51	3	2	5	51	6	3	2
02	2	1	1	02	4	4	3	52	4	2	5	52	6	3	1
03	3	1	1	03	4	4	2	53	5	2	5	53	6	3	6
04	4	1	1	04	4	4	1	54	6	2	5	54	6	3	5
05	5	1	1	05	4	4	6	55	1	2	4	55	1	3	4
06	6	1	1	06	4	4	5	56	2	2	4	56	1	3	3
07	1	1	6	07	5	4	4	57	3	2	4	57	1	3	2
08	2	1	6	08	5	4	3	58	4	2	4	58	1	3	1
09	3	1	6	09	5	4	2	59	5	2	4	59	1	3	6
10	4	1	6	10	5	4	1	60	6	2	4	60	1	3	5
11	5	1	6	11	5	4	6	61	1	2	3	61	2	3	4
12	6	1	6	12	5	4	5	62	2	2	3	62	2	3	3
13	1	1	5	13	6	4	4	63	3	2	3	63	2	3	2
14	2	1	5	14	6	4	3	64	4	2	3	64	2	3	1
15	3	1	5	15	6	4	2	65	5	2	3	65	2	3	6
16	4	1	5	16	6	4	1	66	6	2	3	66	2	3	5
17	5	1	5	17	6	4	6	67	1	2	2	67	3	3	4
18	6	1	5	18	6	4	5	68	2	2	2	68	3	3	3
19	1	1	4	19	1	4	4	69	3	2	2	69	3	3	2
20	2	1	4	20	1	4	3	70	4	2	2	70	3	3	1
21	3	1	4	21	1	4	2	71	5	2	2	71	3	3	6
22	4	1	4	22	1	4	1	72	6	2	2	72	3	3	5
23	5	1	4	23	1	4	6	73	1	3	1	73	4	2	4
24	6	1	4	24	1	4	5	74	2	3	1	74	4	2	3
25	1	1	3	25	2	4	4	75	3	3	1	75	4	2	2
26	2	1	3	26	2	4	3	76	4	3	1	76	4	2	1
27	3	1	3	27	2	4	2	77	5	3	1	77	4	2	6
28	4	1	3	28	2	4	1	78	6	3	1	78	4	2	5
29	5	1	3	29	2	4	6	79	1	3	6	79	5	2	4
30	6	1	3	30	2	4	5	80	2	3	6	80	5	2	3
31	1	1	2	31	3	4	4	81	3	3	6	81	5	2	2
32	2	1	2	32	3	4	3	82	4	3	6	82	5	2	1
33	3	1	2	33	3	4	2	83	5	3	6	83	5	2	6
34	4	1	2	34	3	4	1	84	6	3	6	84	5	2	5
35	5	1	2	35	3	4	6	85	1	3	5	85	6	2	4
36	6	1	2	36	3	4	5	86	2	3	5	86	6	2	3
37	1	2	1	37	4	3	4	87	3	3	5	87	6	2	2
38	2	2	1	38	4	3	3	88	4	3	5	88	6	2	1
39	3	2	1	39	4	3	2	89	5	3	5	89	6	2	6
40	4	2	1	40	4	3	1	90	6	3	5	90	6	2	5
41	5	2	1	41	4	3	6	91	1	3	4	91	1	2	4
42	6	2	1	42	4	3	5	92	2	3	4	92	1	2	3
43	1	2	6	43	5	3	4	93	3	3	4	93	1	2	2
44	2	2	6	44	5	3	3	94	4	3	4	94	1	2	1
45	3	2	6	45	5	3	2	95	5	3	4	95	1	2	6
46	4	2	6	46	5	3	1	96	6	3	4	96	1	2	5
47	5	2	6	47	5	3	6	97	1	3	3	97	2	2	4
48	6	2	6	48	5	3	5	98	2	3	3	98	2	2	3
49	1	2	5	49	6	3	4	99	3	3	3	99	2	2	2

† L = LEFT
C = CENTER
R = RIGHT

Fig. 4

combinations and the keying code used for each combination. (When a connector is ordered with keying parts, but no keying code, the connector is shipped keyed to the 01 code. The keying code is not marked on the connector or on the package.) The keying posts and keyways are held in place by a plate on the front of the connector.

The inserts are held in the shell by a retaining plate on the back of the connector.

Connectors are available in both environmentally sealed and unsealed versions.

3. KEYING

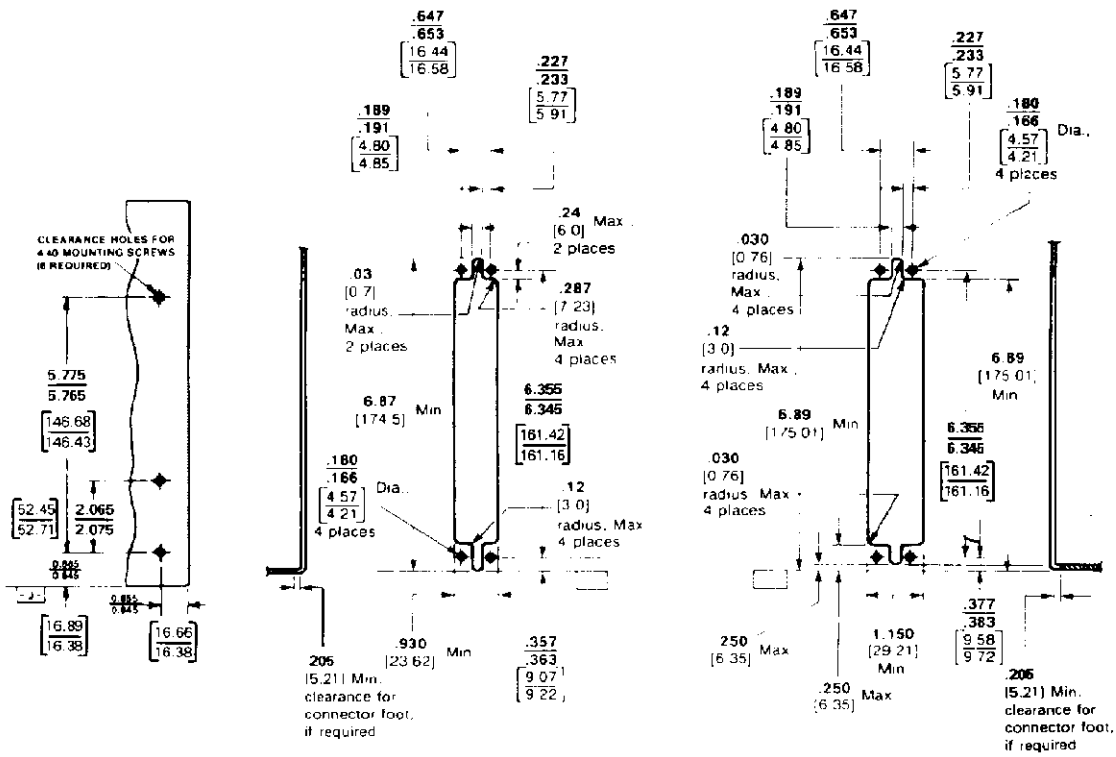
The following is the procedure for installing the keying posts and keyways. Use Figure 4 to select the keying code required.

1. Remove the plate retaining the keying posts and keyways. Remove the posts and keyways.
2. Place the plug connector on a suitable work surface with the center keying position at the top.
3. Install the three keying posts according to the required keying code in Figure 4.
4. Place the plate over the posts and secure it with the two screws. Make sure the plate seats properly.
5. Place the receptacle connector on the work surface with the center keying position at the top.
6. Install the three keyways, using the same keying code used for the plug connector.
7. Place the plate over the keyways and secure it with the two screws. Make sure the plate seats properly.

4. PANEL CUTOUTS

The connectors are designed for rack-and-panel mounting. Normally, the receptacle connector is front-mounted to the movable rack and the plug connector is back-mounted to the panel. Figures 5 and 6 show the cutout dimensions for the panel.

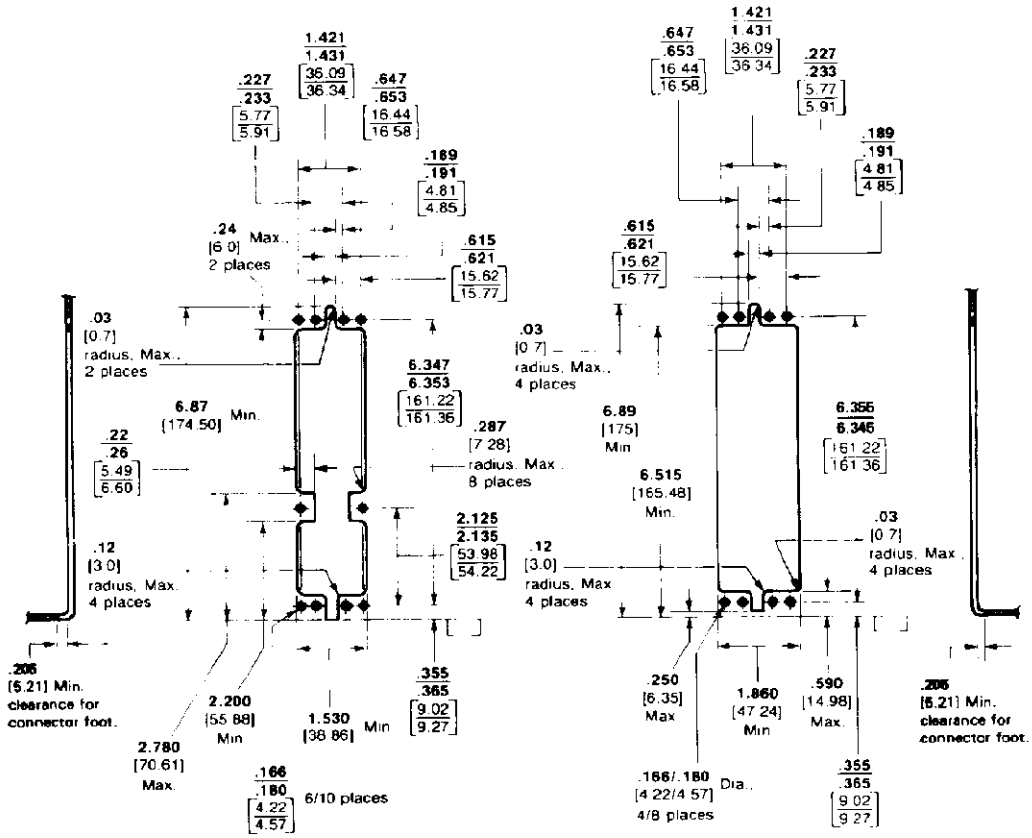
SIZE 1



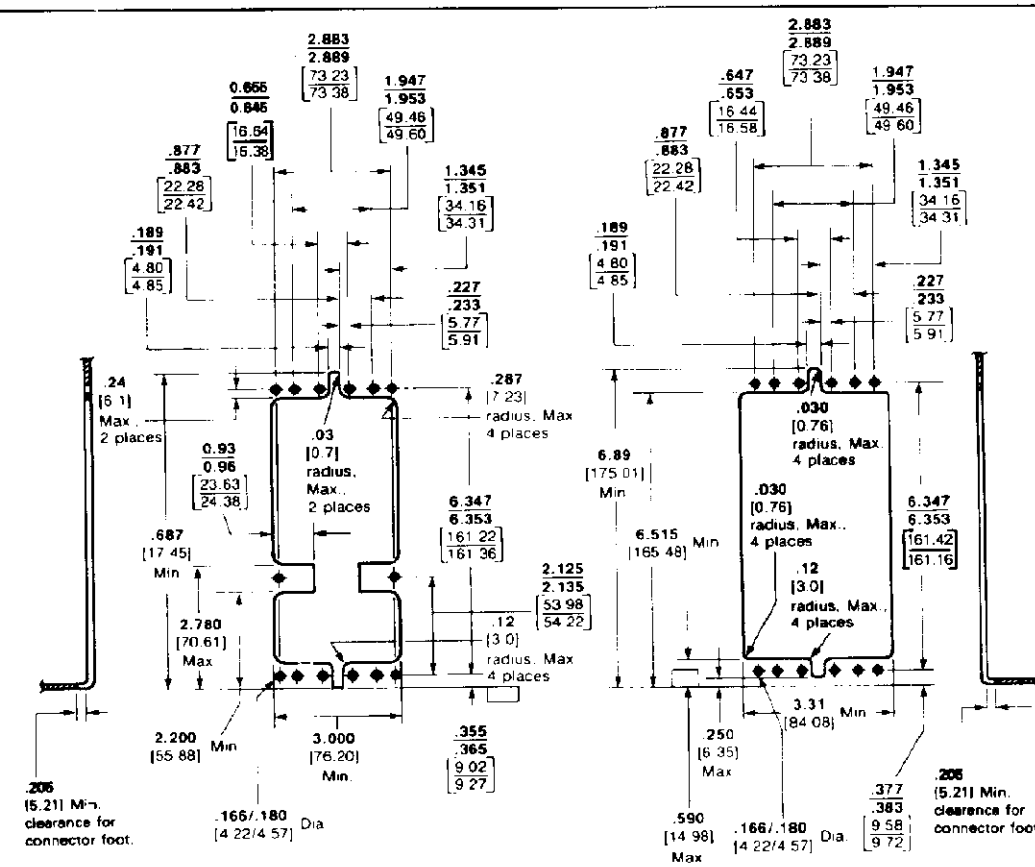
NOTE: ALL DIMENSIONS SHOWN ARE IN INCHES. WITH MILLIMETER EQUIVALENTS IN BRACKETS.

Fig. 5

SIZE 2



SIZE 3



NOTE: ALL DIMENSIONS SHOWN ARE IN INCHES WITH MILLIMETER EQUIVALENTS IN BRACKETS.

Fig. 6

5. CONTACT CRIMPING

Pin and socket contacts are available in loose-piece form for hand crimping and in tape-mounted form for machine crimping. Figure 2 lists the recommended hand tools for crimping the contacts.

Coaxial contacts are available in loose-piece form only. See Figure 3 for recommended hand tools for crimping the center contact and ferrule. For information on preparing the cable and crimping the contacts, see IS 2348 for Size 5 contacts and IS 2348-2 for Size 1 contacts.

6. CONTACT INSERTION AND EXTRACTION

Several tools, shown in Figure 7, are available to aid in extracting contacts from the connectors. Because of the small wires and dense pattern of the inserts, an insertion tool is also available to aid in inserting Size 16, 20, and 22 contacts into the connector. Other types of contacts are easily inserted by hand.

All contacts can be released and extracted from the rear of the connector.

Insertion Tool 91066-[ ] is available to aid in inserting Size 16, 20, and 22 contacts into the connector and in extracting them from the connector. See IS 7491 for information on the use of these tools.

WARNING *Whether using this tool for insertion or extraction, it is important that the operator hold the tool between the thumb and finger tips to prevent the possibility of injury. The tool should NOT be held with the unused tip (end) toward or against the palm of the hand.*

Size 5 coaxial contacts are removed from the connector with Extraction Tool 91074-1. See IS 7542 for information on the use of this tool.

Size 12 contacts are removed from the connector with Extraction Tool 91078-1. See IS 7612 for information on the use of this tool. No tooling is needed to insert or extract Size 1 coaxial contacts.

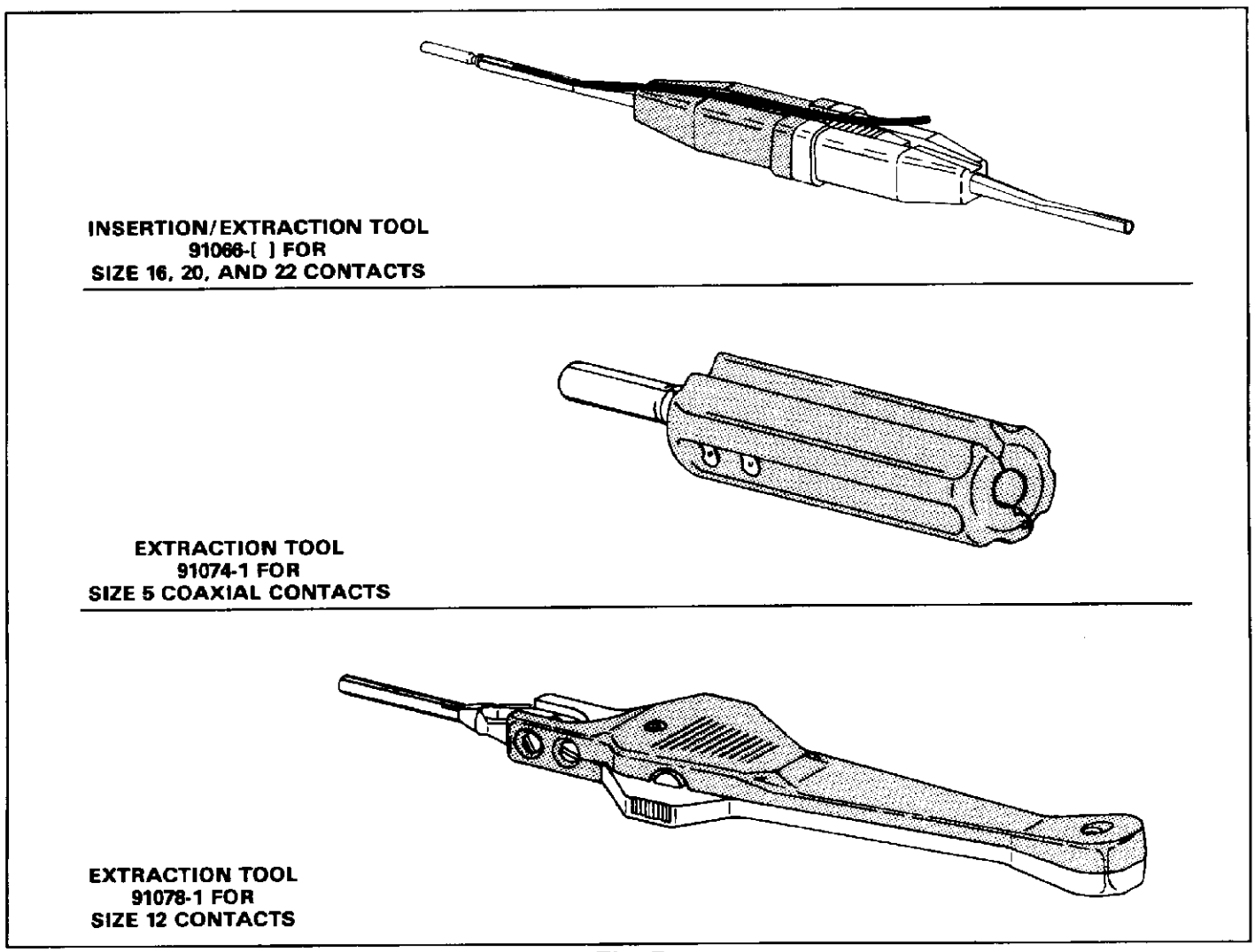


Fig. 7