INCH-POUND
MIL-DTL-24308/4P
w/AMENDMENT 2
8 April 2015
SUPERSEDING
MIL-DTL-24308/4P
w/AMENDMENT 1
9 April 2013

DETAIL SPECIFICATION SHEET

CONNECTORS, ELECTRIC, RECTANGULAR, MINIATURE, POLARIZED SHELL, RACK AND PANEL, PIN CONTACTS, GENERAL PURPOSE, CLASS D AND G, CRIMP TYPE

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-24308.

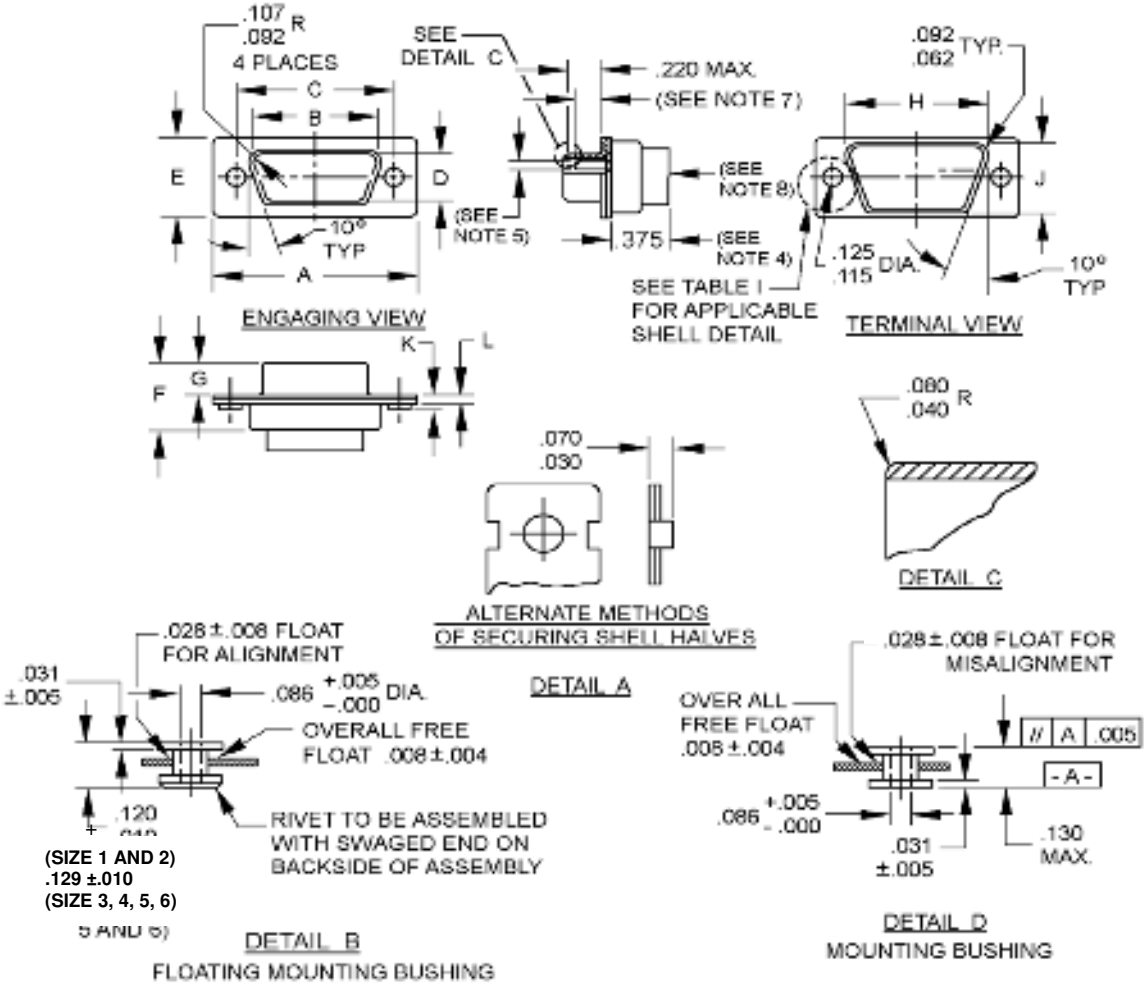


FIGURE 1. Shell, plug, crimp type.

Detail (See note 9)	Shell size	Dimensions										
		A	B	C	D	E	F	G	H	J	K	L
A	1	1.228 (31.19) 1.198 (30.43)	.671 (17.04) .661 (16.79)	.989 (25.12) .979 (24.87)	.334 (8.48) .324 (8.23)	.509 (12.93) .479 (12.17)	.432 (10.97) .412 (10.46)	.241 (6.12) .229 (5.82)	.769 (19.53) .749 (19.02)	.432 (10.97) .412 (10.46)	.060 (1.52) .035 (.89)	.040 (1.02) .020 (.51)
	2	1.556 (39.52) 1.526 (38.76)	.999 (25.37) .989 (25.12)	1.317 (33.45) 1.307 (33.20)	.334 (8.48) .324 (8.23)	.509 (12.93) .479 (12.17)	.432 (10.97) .412 (10.46)	.241 (6.12) .229 (5.82)	1.093 (27.76) 1.073 (27.25)	.432 (10.97) .412 (10.46)	.060 (1.52) .035 (.89)	.040 (1.02) .020 (.51)
	3	2.103 (53.42) 2.073 (52.65)	1.539 (39.09) 1.529 (38.84)	1.857 (47.17) 1.847 (46.91)	.334 (8.48) .324 (8.23)	.509 (12.93) .479 (12.17)	.436 (11.07) .416 (10.57)	.236 (5.99) .224 (5.69)	1.635 (41.53) 1.615 (41.02)	.432 (10.97) .412 (10.46)	.070 (1.78) .050 (1.27)	.049 (1.24) .029 (.74)
	4	2.744 (69.70) 2.714 (68.94)	2.187 (55.55) 2.177 (55.30)	2.505 (63.63) 2.495 (63.37)	.334 (8.48) .324 (8.23)	.509 (12.93) .479 (12.17)	.436 (11.07) .416 (10.57)	.236 (5.99) .224 (5.69)	2.282 (57.96) 2.262 (57.45)	.432 (10.97) .412 (10.46)	.070 (1.78) .050 (1.27)	.049 (1.24) .029 (.74)
	5	2.650 (67.31) 2.620 (66.55)	2.084 (52.93) 2.074 (52.68)	2.411 (61.24) 2.401 (60.99)	.446 (11.33) .436 (11.07)	.620 (15.75) .590 (14.99)	.436 (11.07) .416 (10.57)	.236 (5.99) .224 (5.69)	2.188 (55.58) 2.168 (55.07)	.544 (13.82) .524 (13.31)	.070 (1.78) .050 (1.27)	.049 (1.24) .029 (.74)
	6	2.744 (69.70) 2.714 (68.94)	2.217 (56.31) 2.207 (56.06)	2.505 (63.63) 2.495 (63.37)	.508 (12.90) .498 (12.65)	.683 (17.35) .653 (16.59)	.436 (11.07) .416 (10.57)	.236 (5.99) .224 (5.69)	2.312 (58.72) 2.292 (58.22)	.606 (15.39) .586 (14.88)	.070 (1.78) .050 (1.27)	.049 (1.24) .029 (.74)
B (See note 10)	1	Same as detail A, shell size 1 except in accordance with detail B.										
	2	Same as detail A, shell size 2 except in accordance with detail B.										
	3	Same as detail A, shell size 3 except in accordance with detail B.										
	4	Same as detail A, shell size 4 except in accordance with detail B.										
	5	Same as detail A, shell size 5 except in accordance with detail B.										
	6	Same as detail A, shell size 6 except in accordance with detail B.										
D	1	Same as detail A, shell size 1 except in accordance with detail D.										
	2	Same as detail A, shell size 2 except in accordance with detail D.										
	3	Same as detail A, shell size 3 except in accordance with detail D.										
	4	Same as detail A, shell size 4 except in accordance with detail D.										
	5	Same as detail A, shell size 5 except in accordance with detail D.										
	6	Same as detail A, shell size 6 except in accordance with detail D.										

FIGURE 1. Shell, plug, crimp type – Continued.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Insulator may project .375 (9.53mm) maximum.
4. Wire insulation .072 (1.83mm) maximum for arrangements, (see MIL-DTL-24308, Appendix A), A-1-1, A-2-1, A-3-1, A-4-1, and A-5-1. Wire insulation .054 (1.37mm) maximum for arrangements, (see MIL-DTL-24308, Appendix A), A-1-2, A-2-2, A-3-2, A-4-2, A-5-2, and A-6-1.
5. Pin diameter .041/.039 (1.04/.99mm) for arrangements, (see MIL-DTL-24308, Appendix A), A-1.1, A-2.1, A-3.1, A-4.1, and A-5.1. Use .0305/.0295 (.77/.75mm) diameter pin for arrangements, (see MIL-DTL-24308, Appendix A), A-1-2, A-2-2, A-3-2, A-4-2, A-5-2, and A-6-1.
6. Copyright notice. All information disclosed in this military specification sheet which is or may be copyrighted by ITT Cannon Electric is reproduced herein with the express permission of the copyright owner.
7. Dimensions are .155 (3.94mm) minimum full pin diameter extension (sizes 3 through 6) and .164 (4.17mm) minimum full pin diameter extension (sizes 1 and 2).
8. Indentation on the ends of the termination side of the shell, for the purpose of securing the insulator in the shell, is permitted. This may result in the “F” dimension being undersized in these areas. However the “F” dimension shall be maintained for the remainder of the connector.
9. See table II for supersession data.
10. Detail B is inactive for new design, use detail D.

Inches	mm	Inches	mm	Inches	mm
.004	0.10	.062	1.57	.115	2.92
.005	0.13	.065	1.65	.120	3.05
.008	0.20	.070	1.78	.125	3.18
.010	0.25	.086	2.18	.129	3.28
.030	0.76	.092	2.34	.130	3.30
.031	0.79	.102	2.59	.220	5.59
.040	1.02	.106	2.69	.375	9.53

FIGURE 1. Shell, plug, crimp type – Continued.

REQUIREMENTS:

The connectors shall conform to figure 1 and the specification Part or Identifying Number (PIN) indicated in table I.

TABLE I. Design standards. 1/

PIN class G	PIN class D	Shell size	Shell detail (see figure 1)	Insert arrangement reference number 5/	Contact PIN	PIN marked on connector class G	PIN marked on connector class D
M24308/4-1	M24308/4-335	1	A	A-1-1	M39029/64-369	M24308/4-1	M24308/4-335
M24308/4-2	M24308/4-336	2	A	A-2-1	M39029/64-369	M24308/4-2	M24308/4-336
M24308/4-3	M24308/4-337	3	A	A-3-1	M39029/64-369	M24308/4-3	M24308/4-337
M24308/4-4	M24308/4-338	4	A	A-4-1	M39029/64-369	M24308/4-4	M24308/4-338
M24308/4-5	M24308/4-339	5	A	A-5-1	M39029/64-369	M24308/4-5	M24308/4-339
M24308/4-6	M24308/4-340	Connector kit: M24308/4-1 connector with applicable tool 2/				M24308/4-1	M24308/4-335
M24308/4-7	M24308/4-341	Connector kit: M24308/4-2 connector with applicable tool 2/				M24308/4-2	M24308/4-336
M24308/4-8	M24308/4-342	Connector kit: M24308/4-3 connector with applicable tool 2/				M24308/4-3	M24308/4-337
M24308/4-9	M24308/4-343	Connector kit: M24308/4-4 connector with applicable tool 2/				M24308/4-4	M24308/4-338
M24308/4-10	M24308/4-344	Connector kit: M24308/4-5 connector with applicable tool 2/				M24308/4-5	M24308/4-339
M24308/4-11	M24308/4-345	1	A	A-1-2	M39029/58-360	M24308/4-11	M24308/4-345
M24308/4-12	M24308/4-346	2	A	A-2-2	M39029/58-360	M24308/4-12	M24308/4-346
M24308/4-13	M24308/4-347	3	A	A-3-2	M39029/58-360	M24308/4-13	M24308/4-347
M24308/4-14	M24308/4-348	4	A	A-4-2	M39029/58-360	M24308/4-14	M24308/4-348
M24308/4-15	M24308/4-349	5	A	A-5-2	M39029/58-360	M24308/4-15	M24308/4-349
M24308/4-16	M24308/4-350	6	A	A-6-1	M39029/58-360	M24308/4-16	M24308/4-350

See footnotes at end of table.

TABLE I. Design standards - Continued. 1/

PIN class G	PIN class D	Shell size	Shell detail (see figure 1)	Insert arrangement reference number 5/	Contact PIN	PIN marked on connector class G	PIN marked on connector class D
M24308/4-17	M24308/4-351	Connector kit: M24308/4-11 connector with applicable tool 3/				M24308/4-11	M24308/4-345
M24308/4-18	M24308/4-352	Connector kit: M24308/4-12 connector with applicable tool 3/				M24308/4-12	M24308/4-346
M24308/4-19	M24308/4-353	Connector kit: M24308/4-13 connector with applicable tool 3/				M24308/4-13	M24308/4-347
M24308/4-20	M24308/4-354	Connector kit: M24308/4-14 connector with applicable tool 3/				M24308/4-14	M24308/4-348
M24308/4-21	M24308/4-355	Connector kit: M24308/4-15 connector with applicable tool 3/				M24308/4-15	M24308/4-349
M24308/4-22	M24308/4-356	Connector kit: M24308/4-16 connector with applicable tool 3/				M24308/4-16	M24308/4-350
M24308/4-259	M24308/4-357	1	A	A-1-1	Contacts not included	M24308/4-1	M24308/4-357
M24308/4-260	M24308/4-358	2	A	A-2-1	"	M24308/4-2	M24308/4-358
M24308/4-261	M24308/4-359	3	A	A-3-1	"	M24308/4-3	M24308/4-359
M24308/4-262	M24308/4-360	4	A	A-4-1	"	M24308/4-4	M24308/4-360
M24308/4-263	M24308/4-361	5	A	A-5-1	"	M24308/4-5	M24308/4-361
M24308/4-264	M24308/4-362	1	A	A-1-2	"	M24308/4-11	M24308/4-362
M24308/4-265	M24308/4-363	2	A	A-2-2	"	M24308/4-12	M24308/4-363
M24308/4-266	M24308/4-364	3	A	A-3-2	"	M24308/4-13	M24308/4-364
M24308/4-267	M24308/4-365	4	A	A-4-2	"	M24308/4-14	M24308/4-365
M24308/4-268	M24308/4-366	5	A	A-5-2	"	M24308/4-15	M24308/4-366
M24308/4-269	M24308/4-367	6	A	A-6-1	"	M24308/4-16	M24308/4-367
4/ M24308/4-302	M24308/4-368	1	B	A-1-1	M39029/64-369	M24308/4-302	M24308/4-368
M24308/4-303	M24308/4-369	2	B	A-2-1	M39029/64-369	M24308/4-303	M24308/4-369
M24308/4-304	M24308/4-370	3	B	A-3-1	M39029/64-369	M24308/4-304	M24308/4-370
M24308/4-305	M24308/4-371	4	B	A-4-1	M39029/64-369	M24308/4-305	M24308/4-371
M24308/4-306	M24308/4-372	5	B	A-5-1	M39029/64-369	M24308/4-306	M24308/4-372
M24308/4-307	M24308/4-373	1	B	A-1-2	M39029/58-360	M24308/4-307	M24308/4-373
M24308/4-308	M24308/4-374	2	B	A-2-2	M39029/58-360	M24308/4-308	M24308/4-374
M24308/4-309	M24308/4-375	3	B	A-3-2	M39029/58-360	M24308/4-309	M24308/4-375
M24308/4-310	M24308/4-376	4	B	A-4-2	M39029/58-360	M24308/4-310	M24308/4-376
M24308/4-311	M24308/4-377	5	B	A-5-2	M39029/58-360	M24308/4-311	M24308/4-377
M24308/4-312	M24308/4-378	6	B	A-6-1	M39029/58-360	M24308/4-312	M24308/4-378

See footnotes at end of table.

TABLE I. Design standards - Continued. 1/

PIN class G	PIN class D	Shell size	Shell detail (see figure 1)	Insert arrangement reference number 5/	Contact PIN	PIN marked on connector class G	PIN marked on connector class D
4/ M24308/4-313	M24308/4-379	Connector kit: M24308/4-302 connector with applicable tool 2/				M24308/4-302	M24308/4-368
M24308/4-314	M24308/4-380	Connector kit: M24308/4-303 connector with applicable tool 2/				M24308/4-303	M24308/4-369
M24308/4-315	M24308/4-381	Connector kit: M24308/4-304 connector with applicable tool 2/				M24308/4-304	M24308/4-370
M24308/4-316	M24308/4-382	Connector kit: M24308/4-305 connector with applicable tool 2/				M24308/4-305	M24308/4-371
M24308/4-317	M24308/4-383	Connector kit: M24308/4-306 connector with applicable tool 2/				M24308/4-306	M24308/4-372
M24308/4-318	M24308/4-384	Connector kit: M24308/4-307 connector with applicable tool 2/				M24308/4-307	M24308/4-373
4/ M24308/4-319	4/ M24308/4-385	Connector kit: M24308/4-308 connector with applicable tool 2/				M24308/4-308	M24308/4-374
M24308/4-320	M24308/4-386	Connector kit: M24308/4-309 connector with applicable tool 2/				M24308/4-309	M24308/4-375
M24308/4-321	M24308/4-387	Connector kit: M24308/4-310 connector with applicable tool 2/				M24308/4-310	M24308/4-376
M24308/4-322	M24308/4-388	Connector kit: M24308/4-311 connector with applicable tool 2/				M24308/4-311	M24308/4-377
M24308/4-323	M24308/4-389	Connector kit: M24308/4-312 connector with applicable tool 2/				M24308/4-312	M24308/4-378
4/ M24308/4-324	4/ M24308/4-390	1	B	A-1-1	Contacts not included	M24308/4-302	M24308/4-368
M24308/4-325	M24308/4-391	2	B	A-2-1	"	M24308/4-303	M24308/4-369
M24308/4-326	M24308/4-392	3	B	A-3-1	"	M24308/4-304	M24308/4-370
M24308/4-327	M24308/4-393	4	B	A-4-1	"	M24308/4-305	M24308/4-371
M24308/4-328	M24308/4-394	5	B	A-5-1	"	M24308/4-306	M24308/4-372
M24308/4-329	M24308/4-395	1	B	A-1-2	"	M24308/4-307	M24308/4-373
M24308/4-330	M24308/4-396	2	B	A-2-2	"	M24308/4-308	M24308/4-374
M24308/4-331	M24308/4-397	3	B	A3-2	"	M24308/4-309	M24308/4-375
M24308/4-332	M24308/4-398	4	B	A-4-2	"	M24308/4-310	M24308/4-376
M24308/4-333	M24308/4-399	5	B	A-5-2	"	M24308/4-311	M24308/4-377
M24308/4-334	M24308/4-400	6	B	A-6-1	"	M24308/4-312	M24308/4-378
M24308/4-435	M24308/4-401	1	D	A-1-1	M39029/64-369	M24308/4-435	M24308/4-401
M24308/4-436	M24308/4-402	2	D	A-2-1	M39029/64-369	M24308/4-436	M24308/4-402
M24308/4-437	M24308/4-403	3	D	A-3-1	M39029/64-369	M24308/4-437	M24308/4-403
M24308/4-438	M24308/4-404	4	D	A-4-1	M39029/64-369	M24308/4-438	M24308/4-404
M24308/4-439	M24308/4-405	5	D	A-5-1	M39029/64-369	M24308/4-439	M24308/4-405
M24308/4-440	M24308/4-406	1	D	A-1-2	M39029/58-360	M24308/4-440	M24308/4-406
M24308/4-441	M24308/4-407	2	D	A-2-2	M39029/58-360	M24308/4-441	M24308/4-407
M24308/4-442	M24308/4-408	3	D	A-3-2	M39029/58-360	M24308/4-442	M24308/4-408
M24308/4-443	M24308/4-409	4	D	A-4-2	M39029/58-360	M24308/4-443	M24308/4-409
M24308/4-444	M24308/4-410	5	D	A-5-2	M39029/58-360	M24308/4-444	M24308/4-410
M24308/4-445	M24308/4-411	6	D	A-6-1	M39029/58-360	M24308/4-445	M24308/4-411

See footnotes at end of table.

TABLE I. Design standards - Continued. 1/

PIN class G	PIN class D	Shell size	Shell detail (see figure 1)	Insert arrangement reference number 5/	Contact PIN	PIN marked on connector class G	PIN marked on connector class D
M24308/4-446	M24308/4-412	Connector kit: M24308/4-435 connector applicable tool 2/				M24308/4-435	M24308/4-401
M24308/4-447	M24308/4-413	Connector kit: M24308/4-436 connector applicable tool 2/				M24308/4-436	M24308/4-402
M24308/4-448	M24308/4-414	Connector kit: M24308/4-437 connector applicable tool 2/				M24308/4-437	M24308/4-403
M24308/4-449	M24308/4-415	Connector kit: M24308/4-438 connector applicable tool 2/				M24308/4-438	M24308/4-404
M24308/4-450	M24308/4-416	Connector kit: M24308/4-439 connector applicable tool 2/				M24308/4-439	M24308/4-405
M24308/4-451	M24308/4-417	Connector kit: M24308/4-440 connector applicable tool 2/				M24308/4-440	M24308/4-406
M24308/4-452	M24308/4-418	Connector kit: M24308/4-441 connector applicable tool 3/				M24308/4-441	M24308/4-407
M24308/4-453	M24308/4-419	Connector kit: M24308/4-442 connector applicable tool 3/				M24308/4-442	M24308/4-408
M24308/4-454	M24308/4-420	Connector kit: M24308/4-443 connector applicable tool 3/				M24308/4-443	M24308/4-409
M24308/4-455	M24308/4-421	Connector kit: M24308/4-444 connector applicable tool 3/				M24308/4-444	M24308/4-410
M24308/4-456	M24308/4-422	Connector kit: M24308/4-445 connector applicable tool 3/				M24308/4-445	M24308/4-411
M24308/4-457	M24308/4-423	1	D	A-1-1	Contacts not included	M24308/4-435	M24308/4-401
M24308/4-458	M24308/4-424	2	D	A-2-1	"	M24308/4-436	M24308/4-402
M24308/4-459	M24308/4-425	3	D	A-3-1	"	M24308/4-437	M24308/4-403
M24308/4-460	M24308/4-426	4	D	A-4-1	"	M24308/4-438	M24308/4-404
M24308/4-461	M24308/4-427	5	D	A-5-1	"	M24308/4-439	M24308/4-405
M24308/4-462	M24308/4-428	1	D	A-1-2	"	M24308/4-440	M24308/4-406
M24308/4-463	M24308/4-429	2	D	A-2-2	"	M24308/4-441	M24308/4-407
M24308/4-464	M24308/4-430	3	D	A-3-2	"	M24308/4-442	M24308/4-408
M24308/4-465	M24308/4-431	4	D	A-4-2	"	M24308/4-443	M24308/4-409
M24308/4-466	M24308/4-432	5	D	A-5-2	"	M24308/4-444	M24308/4-410
M24308/4-467	M24308/4-433	6	D	A-6-1	"	M24308/4-445	M24308/4-411

1/ These connectors mate with connectors specified in MIL-DTL- 24308/1, MIL-DTL-24308/2, and MIL-DTL-24308/23.
2/ Installation and removal tool: M81969/39-01 with plastic tips or M81969/1-02 with metal tips. For size 20 contacts, either tool shall be supplied with each individual connector.
3/ Installation and removal tool: M81969/14-01 with plastic tips or M81969/1-04 with metal tips. For size 22 contacts, either tool shall be supplied with each individual connector.
4/ PINs are inactive for new design. Use M24308/4-435 through M24308/4-467, and M24308/4-401 through M24308/4-433.
5/ For insert arrangements see MIL-DTL-24308, Appendix A.

PIN: Consists of the letter M, the basic number of the specification sheet, and a dash number compiled from the code.

PIN example: M24308/4 -361 F

Specification sheet number

Data sheet number from table I

Finish: For class G:
A = Pure electrodeposited aluminum
F = Cadmium
K = Zinc nickel
T = Nickel Fluorocarbon Polymer
Z = Zinc

For class D:
Class D connectors have a nickel finish, no suffix is required.

Supersession data: See table II.

TABLE II. Shell supersession data.

Shell detail (see figure 1)	Superseded MS sheet
Detail A	MS18271-1 through - 6
Detail B	MS18271-7 through - 12
Detail D	MS18271-13 through -18

Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations.

Referenced documents. In addition to MIL-DTL-24308, this document references the following:

MIL-DTL-24308/1
MIL-DTL-24308/2
MIL-DTL-24308/23

CONCLUDING MATERIAL

Custodians:
Army - CR
Navy - EC
Air Force - 85
NASA - NA
DLA - CC

Preparing activity:
DLA - CC

(Project: 5935-2015-082)

Review activities:
Army - AT, CR4, MI
Navy - AS, CG, MC, SH
Air Force - 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at https://assist.dla.mil .