

INCH-POUND

MS39323B

25 June 2015

SUPERSEDING

MS39323A

9 May 1980

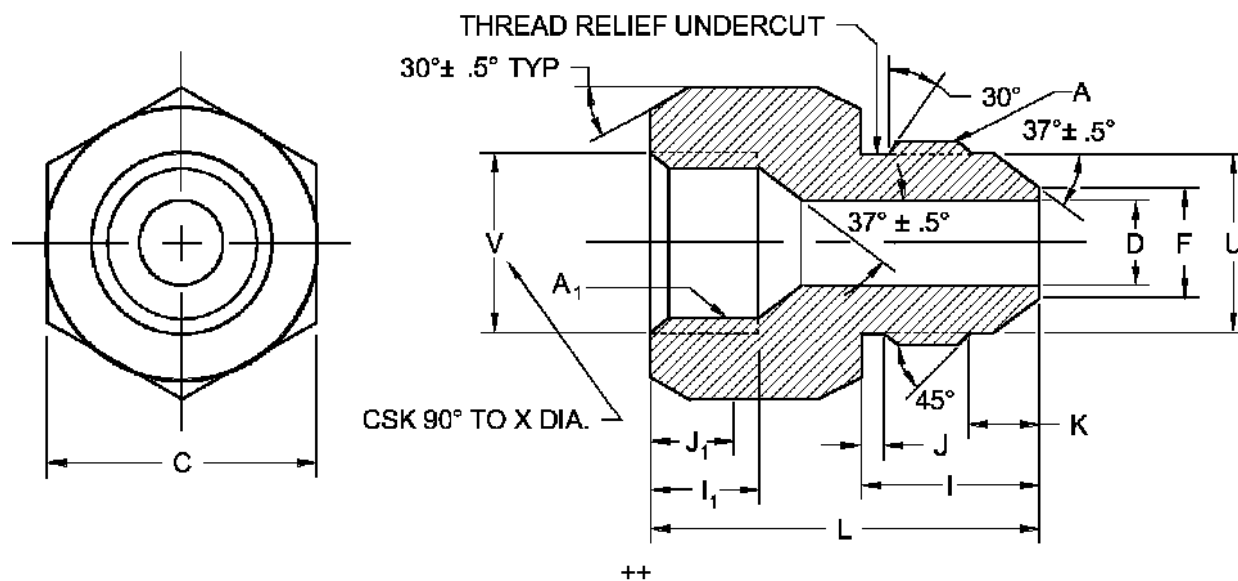
DETAIL SPECIFICATION SHEET

FITTING, TUBE, REDUCER: 37 DEGREE FLARE

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

Inactive for new design after 17 August 1999. For new design, use SAE-J514.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-18666.



Dash number	Tube O.D nom	A straight thread	Minor diameter		A ₁ Straight thread	C Hex Nom	D dia. Drill	
		Nom size class A	Inches +.005 -.000	mm +0.13 -0.00	Nom size class B		Inches ±.003	mm ±0.08
-5-4	5/16 - 1/4	.5000-20 UNF-2A	.451	11.46	7/16 - 20	5/8	.172	4.40
-6-5	3/8 - 5/16	.5625-18 UNF-2A	.508	12.90	1/2 - 20	11/16	.234	5.94
-10-8	5/8 - 1/2	.8750-14 UNF-2A	.804	20.42	3/4 - 16	1	.391	9.93
-12-10	3/4 - 5/8	1.0625-12 UN-2A	.979	24.86	7/8 - 14	1 1/4	.484	12.29

FIGURE 1. Reducing adapter, hex nut, one-piece.

AMSC N/A

FSC 4730



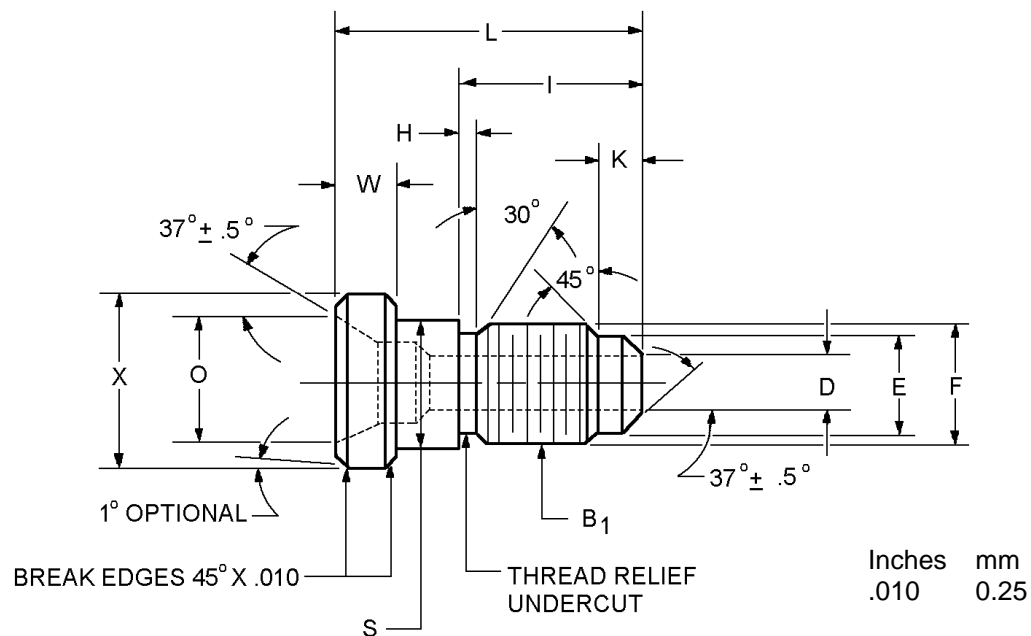
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Dash number	F dia.		I		I ₁		J		J ₁ Full thread	
	Inches ±.003	mm ±0.08	inches ±.015	inches ±.013	inches ±.005	mm ±0.13	inches ±.013	mm ±0.40	inches	mm
-5-4	.193	4.90	.550	.075	.344	8.74	.075	1.90	.261	6.63
-6-5	.255	6.48	.550	.075	.344	8.74	.075	1.90	.261	6.63
-10-8	.426	10.82	.657	.094	.469	11.91	.094	2.40	.354	8.99
-12-10	.539	13.70	.758	.107	.500	12.70	.107	2.72	.370	9.40

Dash number	K		L		U dia.		V dia.	
	inches +.015 -.000	mm +0.40 -.000	inches ±.010	mm ±0.25	inches +.000 -.005	mm +0.00 -0.13	inches +.015 -.000	mm +0.40 -0.00
-5-4	.193	4.90	1.156	29.30	.359	9.12	.505	12.80
-6-5	.193	4.90	1.188	30.20	.421	10.69	.567	14.40
-10-8	.253	6.43	1.437	36.50	.654	16.61	.880	22.35
-12-10	.266	6.80	1.656	42.00	.767	19.48	1.067	27.10

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Break all sharp edges and remove all burrs and slivers.
4. SAE-J514 does not have a configuration or dash sizes covering these sizes.

FIGURE 1. Reducing adapter, hex, one-piece - Continued.FIGURE 2. Reducing adapter without large nut.

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Dash number	Tube O.D nom	B ₁ straight thread	Pitch dia inches		Pitch dia mm		D dia.		E dia.	
		Nom size class 2A	Max	Min	Max	Min	inches ±.030	mm ±0.76	inches ±.003	mm ±0.08
-6-4	3/8 - 1/4	7/16 - 20	.4037	.3999	10.254	10.157	.172	4.37	.193	4.90
-8-4	1/2 - 1/4	7/16 - 20	.4037	.3999	10.254	10.157	.172	4.37	.193	4.90
-10-4	5/8 - 1/4	7/16 - 20	.4037	.3999	10.254	10.157	.172	4.37	.193	4.90
-12-4	3/4 - 1/4	7/16 - 20	.4037	.3999	10.254	10.157	.172	4.37	.193	4.90
-8-5	5/8 - 1/2	1/2 - 20	.4662	.4619	11.841	11.732	.234	5.94	.225	6.48
-10-5	5/8 - 5/16	1/2 - 20	.4662	.4619	11.841	11.732	.234	5.94	.225	6.48
-12-5	3/4 - 5/16	1/2 - 20	.4662	.4619	11.841	11.732	.234	5.94	.225	6.48
-8-6	1/2 - 3/8	9/16 - 18	.5250	.5205	13.335	13.221	.297	7.54	.318	8.08
-10-6	5/8 - 3/8	9/16 - 18	.5250	.5205	13.335	13.221	.297	7.54	.318	8.08
-12-6	3/4 - 3/8	9/16 - 18	.5250	.5205	13.335	13.221	.297	7.54	.318	8.08
-12-8	3/4 - 1/2	3/4 - 16	.7079	.7029	17.980	17.853	.391	9.93	.426	10.82

Dash number	F dia.		H		I		K		L	
	inches +.000 -.005	mm +0.00 -0.13	inches +.015 -.000	mm 0.38 -0.00	inches +.015 -.000	mm 0.38 -0.00	inches +.015 -.000	mm +0.38	inches ±.02	mm ±0.50
-6-4	.359	9.12	.075	1.90	.550	13.97	.193	4.90	.97	24.64
-8-4	.359	9.12	.075	1.90	.550	13.97	.193	4.90	1.00	25.40
-10-4	.359	9.12	.075	1.90	.550	13.97	.193	4.90	1.03	26.16
-12-4	.359	9.12	.075	1.90	.550	13.97	.193	4.90	1.09	27.67
-8-5	.421	10.69	.075	1.90	.550	13.97	.193	4.90	1.00	25.40
-10-5	.421	10.69	.075	1.90	.550	13.97	.193	4.90	1.03	26.16
-12-5	.421	10.69	.075	1.90	.550	13.97	.193	4.90	1.09	27.67
-8-6	.476	12.09	.083	2.10	.556	14.12	.198	5.02	1.00	25.40
-10-6	.476	12.09	.083	2.10	.556	14.12	.198	5.02	1.03	26.16
-12-6	.476	12.09	.083	2.10	.556	14.12	.198	5.02	1.09	27.67
-12-8	.654	16.61	.094	2.40	.657	16.69	.253	6.40	1.19	30.23

Dash number	O dia.		S		W		X dia.	
	inches +.005 -.015	mm +0.13 -0.38	inches +.000 -.003	mm +0.00 -0.08	inches ±.02	mm ±0.5	inches +.000 -.003	mm 0.00 -0.08
-6-4	.441	11.20	.432	10.97	.17	4.3	.502	12.75
-8-4	.589	14.96	.562	14.27	.22	5.6	.682	17.32
-10-4	.705	17.91	.690	17.53	.23	5.8	.797	20.24
-12-4	.880	22.35	.826	20.98	.27	6.9	.972	24.69
-8-5	.589	14.96	.562	14.27	.22	5.6	.682	17.32
-10-5	.705	17.91	.690	17.53	.23	5.8	.797	20.24
-12-5	.880	22.35	.826	20.98	.27	6.9	.972	24.69
-8-6	.589	14.96	.562	14.27	.22	5.6	.682	17.32
-10-6	.705	17.91	.690	17.53	.23	5.8	.797	20.24
-12-6	.880	22.35	.826	20.98	.27	6.9	.972	24.69
-12-8	.880	22.35	.826	20.98	.27	6.9	.972	24.69

FIGURE 2. Reducing adapter without large nut - Continued.

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NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Break all sharp edges and remove all burrs and slivers.

FIGURE 2. Reducing adapter without large nut - Continued.

REQUIREMENTS:

Fittings shall be as specified on figure 1 or 2 and in tables I and II.

Materials shall be in accordance with MIL-DTL-18866 and table I.

TABLE I. Materials.

Material	Form	Specification	Alloy
Carbon steel	Bar	SAE-J403	1110, 1120, 1140, 1213, 1215, or 12L14
	Forgings		
Chrome-molybdenum steel	Bars	SAE-AMS6370	4130
	Forgings	SAE-AMS6382	
		SAE-AMS6370	
Corrosion resistant steel	Bars and forgings	ASTM A276/A276M	304, 304L, 316, or 321
		ASTM A564/A564M	XM-12 (15-5 PH) UNS S15500 or 603 (17-4 PH) UNS S17400
		SAE-AMS5639	UNS S30400
		SAE-AMS5645	UNS S32100
		SAE-AMS5647	UNS S30403
		SAE-AMS5743	UNS S35500
	Bar	ASTM A582/A582M	UNS S30300
Nickel-copper alloy	Bar	ASTM B164 QQ-N-281	UNS N04400
High-chromium nickel alloy	Bar	ASTM B166	UNS N06690
	Forgings	ASTM B564	
Titanium ^{1/}	Bars	SAE-AMS4928	6Al-4V annealed
	Forgings		

^{1/} Titanium shall not be used in oxygen or potable water systems.

Finish. Finishes shall be in accordance with table II. All platings shall be capable of meeting 96 hour salt spray test in accordance with ASTM B117. The fittings shall show no evidence of corrosion after 96 hours of salt spray. Fluid passages, other openings, and internal threads shall not be subject to the plating thickness requirement and may have bare areas provided they are protected with a light film of oil.

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TABLE II. Material and finish identification codes.

PIN code material/plating finish	Material	Plating finish
Blank	Steel	Cadmium plating in accordance with SAE-AMS-C-81562, type II, class 3 or SAE-AMS-QQ-P-416, type II, class 2. <u>1/</u>
CN		Cadmium plating in accordance with SAE-AMS-C-81562, type II, class 3 or SAE-AMS-QQ-P-416, type II, class 2 with NAVAIR trivalent chromium pretreatment (TCP) in accordance with MIL-DTL-81706, type II, class 1A.
E		NAVAIR TCP in accordance with MIL-DTL-81706, type II, class 1A.
F	Steel	Zinc plate (finish J, P, or R) with NAVAIR TCP in accordance with MIL-DTL-81706, type II, class 1A.
H	Steel	Aluminum-nickel in accordance with ASTM F1136/F1136M, grade 3, NC.
J	Steel	Zinc-nickel in accordance with SAE-AMS2417, type 2, grade B.
M	Nickel-copper alloy UNS N04400	No additional finish.
N	High-chromium nickel alloy UNS N06690	No additional finish.
P	Steel	Zinc phosphate finish in accordance MIL-DTL-16232 type Z, class1.
R	Steel	Zinc plating in accordance with ASTM B633; type VI, Fe/Zn 5. <u>2/</u>
S	Corrosion resistant steel	No additional finish. Passivation in accordance with SAE-AMS2700, method, type 6 or 7.
T	Titanium	Anodize in accordance with SAE-AMS2488 type 2. <u>3/</u>
TF	Titanium	Fluoride phosphate in accordance with SAE-AMS2486. <u>3/</u>
Z	Steel	Zinc plating in accordance with ASTM B633; type II or III, Fe/Zn 5, or ASTM B695, type II, class 5. <u>4/</u>
ZN	Steel	Zinc plating in accordance with ASTM B633; type II or III, Fe/Zn 5, or ASTM B695, type II, class 5 with NAVAIR TCP in accordance with MIL-DTL-81706, type II, class 1A. <u>4/</u>

1/ Embrittlement test need not be run. Cadmium shall not be used in oxygen or potable water systems.

2/ Hexavalent chromium free.

3/ A pretreatment, a modification of the fluoride treatment, or a post treatment shall be applied so the final color of the fittings shall be similar to FED-STD-595 colors 36076 through 36293.

4/ Not for use in aircraft.

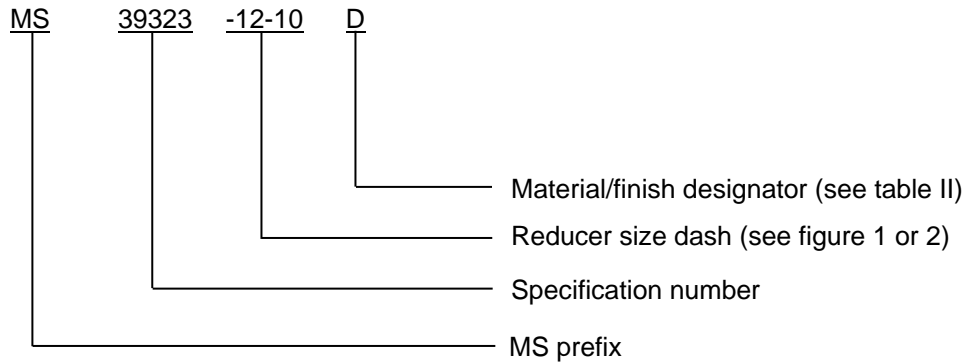
Trivalent wrenchability. When the finish has been damaged due to poor wrenchability, the surface of the connector shall be touched up using the brush plating process below. The term "trivalent wrenchability" is used to evaluate the ability of the finish to withstand abrasion from an excessive amount of wrenching.

- a. Brush plating of hard chromium by electrodeposition shall be in accordance with SAE-AMS-2451/5.
- b. Brush plating of medium-hardness, low stress nickel by electrodeposition shall be in accordance with SAE-AMS-2451/9.
- c. Brush plating of NAVAIR TCP shall be in accordance with MIL-DTL-81706, type II, class 1A, material form 1 through 6, application method B. Example of a PIN: M817062A6B.

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Maximum operating pressure. Maximum operating pressure shall be in accordance with SAE-J514.

PIN: The PIN consists of the letters "MS", the specification number, a dash, number for reducer size, and a letter for material finish designator.



PIN example: MS39323-12-10D indicates a tube reducer, 3/4 inch OD tube to 5/8 inch OD tube, steel with NAVAIR TCP.

Cadmium is not recommended. To the users of this document, it is recommended that the use of carbon steel material with cadmium plating be used only when other materials and finishes specified in this document cannot meet performance requirements.

Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

Referenced documents shall be of the issue in effect on date of invitations for bid.

The listing below provides a detailed cross-reference of inactive MS39323 PIN's and for new design SAE J514 PIN's.

MS39323 parts have threads in accordance with ASME B1.1 the SAE parts have straight threads in accordance with SAE-J425.

The part substitutions specified in table III (hex) and table IV (no hex) are intended for most ground vehicle applications and are not intended for use in aerospace applications. Users are cautioned to evaluate replacement parts for their particular application.

CAUTION: The superseding information is valid as of the date of this specification and may be superseded by subsequent revisions of the superseding document.

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TABLE III. MS39323 (hex) to SAE-J514 cross reference.

Style	Inactive for new design MS39323 PIN	Tube O.D nom	For new design SAE-J514 PIN
Hex	MS39323-5-4	5/16 - 1/4	Not available
Hex	MS39323-5-4 CN	5/16 - 1/4	Not available
Hex	MS39323-5-4 D	5/16 - 1/4	Not available
Hex	MS39323-5-4 F	5/16 - 1/4	Not available
Hex	MS39323-5-4 H	5/16 - 1/4	Not available
Hex	MS39323-5-4 J	5/16 - 1/4	Not available
Hex	MS39323-5-4M	5/16 - 1/4	Not available
Hex	MS39323-5-4N	5/16 - 1/4	Not available
Hex	MS39323-5-4P	5/16 - 1/4	Not available
Hex	MS39323-5-4R	5/16 - 1/4	Not available
Hex	MS39323-5-4S	5/16 - 1/4	Not available
Hex	MS39323-5-4T	5/16 - 1/4	Not available
Hex	MS39323-5-4TF	5/16 - 1/4	Not available
Hex	MS39323-5-4Z	5/16 - 1/4	Not available
Hex	MS39323-5-4ZN	5/16 - 1/4	Not available
Hex	MS39323-6-5	3/8 - 5/16	Not available
Hex	MS39323-6-5CN	3/8 - 5/16	Not available
Hex	MS39323-6-5D	3/8 - 5/16	Not available
Hex	MS39323-6-5F	3/8 - 5/16	Not available
Hex	MS39323-6-5H	3/8 - 5/16	Not available
Hex	MS39323-6-5J	3/8 - 5/16	Not available
Hex	MS39323-6-5M	3/8 - 5/16	Not available
Hex	MS39323-6-5N	3/8 - 5/16	Not available
Hex	MS39323-6-5P	3/8 - 5/16	Not available
Hex	MS39323-6-5R	3/8 - 5/16	Not available
Hex	MS39323-6-5S	3/8 - 5/16	Not available
Hex	MS39323-6-5TF	3/8 - 5/16	Not available
Hex	MS39323-6-5T	3/8 - 5/16	Not available
Hex	MS39323-6-5Z	3/8 - 5/16	Not available
Hex	MS39323-6-5ZN	3/8 - 5/16	Not available
Hex	MS39323-10-8	5/8 - 1/2	Not available
Hex	MS39323-10-8CN	5/8 - 1/2	Not available
Hex	MS39323-10-8D	5/8 - 1/2	Not available
Hex	MS39323-10-8F	5/8 - 1/2	Not available
Hex	MS39323-10-8H	5/8 - 1/2	Not available
Hex	MS39323-10-8J	5/8 - 1/2	Not available
Hex	MS39323-10-8M	5/8 - 1/2	Not available
Hex	MS39323-10-8N	5/8 - 1/2	Not available
Hex	MS39323-10-8P	5/8 - 1/2	Not available
Hex	MS39323-10-8R	5/8 - 1/2	Not available
Hex	MS39323-10-8S	5/8 - 1/2	Not available
Hex	MS39323-10-8TF	5/8 - 1/2	Not available
Hex	MS39323-10-8T	5/8 - 1/2	Not available
Hex	MS39323-10-8Z	5/8 - 1/2	Not available
Hex	MS39323-10-8ZN	5/8 - 1/2	Not available

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TABLE III. MS39323 (hex)to SAE-J514 cross reference - Continued.

Style	Inactive for new design MS39323 PIN	Tube O.D nom	For new design SAE-J514 PIN
Hex	MS39323-12-10	5/16 - 1/4	Not available
Hex	MS39323-12-10CN	5/16 - 1/4	Not available
Hex	MS39323-12-10D	5/16 - 1/4	Not available
Hex	MS39323-12-10F	5/16 - 1/4	Not available
Hex	MS39323-12-10H	5/16 - 1/4	Not available
Hex	MS39323-12-10J	5/16 - 1/4	Not available
Hex	MS39323-12-10M	5/16 - 1/4	Not available
Hex	MS39323-12-10N	5/16 - 1/4	Not available
Hex	MS39323-12-10P	5/16 - 1/4	Not available
Hex	MS39323-12-10R	5/16 - 1/4	Not available
Hex	MS39323-12-10S	5/16 - 1/4	Not available
Hex	MS39323-12-10T	5/16 - 1/4	Not available
Hex	MS39323-12-10TF	5/16 - 1/4	Not available
Hex	MS39323-12-10Z	5/16 - 1/4	Not available
Hex	MS39323-12-10ZN	5/16 - 1/4	Not available

TABLE IV. MS39323 (no hex)to SAE-J514 cross reference.

Style	Inactive for new design MS39323 PIN	Tube O.D nom	For new design SAE-J514 PIN
No-hex	MS39323-6-4	3/8 - 1/4	Not available
No-hex	MS39323-6-4CN	3/8 - 1/4	Not available
No-hex	MS39323-6-4D	3/8 - 1/4	Not available
No-hex	MS39323-6-4F	3/8 - 1/4	Not available
No-hex	MS39323-6-4H	3/8 - 1/4	Not available
No-hex	MS39323-6-4J	3/8 - 1/4	Not available
No-hex	MS39323-6-4M	3/8 - 1/4	J514-6-4-070123M
No-hex	MS39323-6-4N	3/8 - 1/4	J514-6-4-070123N
No-hex	MS39323-6-4P	3/8 - 1/4	J514-6-4-070123P
No-hex	MS39323-6-4R	3/8 - 1/4	Not available
No-hex	MS39323-6-4S	3/8 - 1/4	J514-6-4-070123S
No-hex	MS39323-6-4T	3/8 - 1/4	J514-6-4-070123T
No-hex	MS39323-6-4TF	3/8 - 1/4	Not available
No-hex	MS39323-6-4Z	3/8 - 1/4	J514-6-4-070123Z
No-hex	MS39323-6-4ZN	3/8 - 1/4	Not available

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TABLE IV. MS39323 (no hex)to SAE-J514 cross reference - Continued.

Style	Inactive for new design MS39323 PIN	Tube O.D nom.	For new design SAE-J514 PIN
No-hex	MS39323-8-4	1/2 - 1/4	Not available
No-hex	MS39323-8-4CN	1/2 - 1/4	Not available
No-hex	MS39323-8-4D	1/2 - 1/4	Not available
No-hex	MS39323-8-4F	1/2 - 1/4	Not available
No-hex	MS39323-8-4H	1/2 - 1/4	Not available
No-hex	MS39323-8-4J	1/2 - 1/4	Not available
No-hex	MS39323-8-4M	1/2 - 1/4	J514-8-4-070123M
No-hex	MS39323-8-4N	1/2 - 1/4	J514-8-4-070123N
No-hex	MS39323-8-4P	1/2 - 1/4	J514-8-4-070123P
No-hex	MS39323-8-4R	1/2 - 1/4	Not available
No-hex	MS39323-8-4S	1/2 - 1/4	J514-8-4-070123S
No-hex	MS39323-8-4T	1/2 - 1/4	J514-8-4-070123T
No-hex	MS39323-8-4TF	1/2 - 1/4	Not available
No-hex	MS39323-8-4Z	1/2 - 1/4	J514-8-4-070123Z
No-hex	MS39323-8-4ZN	1/2 - 1/4	Not available
No-hex	MS39323-8-5	5/8 - 1/2	Not available
No-hex	MS39323-8-5CN	5/8 - 1/2	Not available
No-hex	MS39323-8-5D	5/8 - 1/2	Not available
No-hex	MS39323-8-5F	5/8 - 1/2	Not available
No-hex	MS39323-8-5H	5/8 - 1/2	Not available
No-hex	MS39323-8-5J	5/8 - 1/2	Not available
No-hex	MS39323-8-5M	5/8 - 1/2	Not available
No-hex	MS39323-8-5N	5/8 - 1/2	Not available
No-hex	MS39323-8-5P	5/8 - 1/2	Not available
No-hex	MS39323-8-5R	5/8 - 1/2	Not available
No-hex	MS39323-8-5S	5/8 - 1/2	Not available
No-hex	MS39323-8-5T	5/8 - 1/2	Not available
No-hex	MS39323-8-5TF	5/8 - 1/2	Not available
No-hex	MS39323-8-5Z	5/8 - 1/2	Not available
No-hex	MS39323-8-5ZN	5/8 - 1/2	Not available
No-hex	MS39323-8-6	1/2 - 3/8	J514-8-6-070123Q
No-hex	MS39323-8-6CN	1/2 - 3/8	Not available
No-hex	MS39323-8-6D	1/2 - 3/8	Not available
No-hex	MS39323-8-6F	1/2 - 3/8	Not available
No-hex	MS39323-8-6H	1/2 - 3/8	Not available
No-hex	MS39323-8-6J	1/2 - 3/8	Not available
No-hex	MS39323-8-6M	1/2 - 3/8	J514-8-6-070123M
No-hex	MS39323-8-6N	1/2 - 3/8	J514-8-6-070123N
No-hex	MS39323-8-6P	1/2 - 3/8	J514-8-6-070123P
No-hex	MS39323-8-6R	1/2 - 3/8	Not available
No-hex	MS39323-8-6S	1/2 - 3/8	J514-8-6-070123S
No-hex	MS39323-8-6T	1/2 - 3/8	J514-8-6-070123T
No-hex	MS39323-8-6TF	1/2 - 3/8	Not available
No-hex	MS39323-8-6Z	1/2 - 3/8	J514-8-6-070123Z
No-hex	MS39323-8-6ZN	1/2 - 3/8	Not available

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TABLE IV. MS39323 to SAE-J514 cross reference - Continued.

Style	Inactive for new design MS39323 PIN	Tube O.D nom.	For new design SAE-J514 PIN
No-hex	MS39323-10-4	5/8 - 1/4	Not available
No-hex	MS39323-10-4CN	5/8 - 1/4	Not available
No-hex	MS39323-10-4D	5/8 - 1/4	Not available
No-hex	MS39323-10-4F	5/8 - 1/4	Not available
No-hex	MS39323-10-4H	5/8 - 1/4	Not available
No-hex	MS39323-10-4J	5/8 - 1/4	Not available
No-hex	MS39323-10-4M	5/8 - 1/4	J514-10-4-070123M
No-hex	MS39323-10-4N	5/8 - 1/4	J514-10-4-070123N
No-hex	MS39323-10-4P	5/8 - 1/4	J514-10-4-070123P
No-hex	MS39323-10-4R	5/8 - 1/4	Not available
No-hex	MS39323-10-4S	5/8 - 1/4	J514-10-4-070123S
No-hex	MS39323-10-4T	5/8 - 1/4	J514-10-4-070123T
No-hex	MS39323-10-4TF	5/8 - 1/4	Not available
No-hex	MS39323-10-4Z	5/8 - 1/4	J514-10-4-070123Z
No-hex	MS39323-10-4ZN	5/8 - 1/4	Not available
No-hex	MS39323-10-5	5/8 - 5/16	Not available
No-hex	MS39323-10-5CN	5/8 - 5/16	Not available
No-hex	MS39323-10-5D	5/8 - 5/16	Not available
No-hex	MS39323-10-5F	5/8 - 5/16	Not available
No-hex	MS39323-10-5H	5/8 - 5/16	Not available
No-hex	MS39323-10-5J	5/8 - 5/16	Not available
No-hex	MS39323-10-5M	5/8 - 5/16	Not available
No-hex	MS39323-10-5N	5/8 - 5/16	Not available
No-hex	MS39323-10-5P	5/8 - 5/16	Not available
No-hex	MS39323-10-5R	5/8 - 5/16	Not available
No-hex	MS39323-10-5S	5/8 - 5/16	Not available
No-hex	MS39323-10-5T	5/8 - 5/16	Not available
No-hex	MS39323-10-5TF	5/8 - 5/16	Not available
No-hex	MS39323-10-5Z	5/8 - 5/16	Not available
No-hex	MS39323-10-5ZN	5/8 - 5/16	Not available
No-hex	MS39323-10-6	5/8 - 3/8	Not available
No-hex	MS39323-10-6CN	5/8 - 3/8	Not available
No-hex	MS39323-10-6D	5/8 - 3/8	Not available
No-hex	MS39323-10-6F	5/8 - 3/8	Not available
No-hex	MS39323-10-6H	5/8 - 3/8	Not available
No-hex	MS39323-10-6J	5/8 - 3/8	Not available
No-hex	MS39323-10-6M	5/8 - 3/8	J514-10-6-070123M
No-hex	MS39323-10-6N	5/8 - 3/8	J514-10-6-070123N
No-hex	MS39323-10-6P	5/8 - 3/8	J514-10-6-070123P
No-hex	MS39323-10-6R	5/8 - 3/8	Not available
No-hex	MS39323-10-6S	5/8 - 3/8	J514-10-6-070123S
No-hex	MS39323-10-6T	5/8 - 3/8	J514-10-6-070123T
No-hex	MS39323-10-6TF	5/8 - 3/8	Not available
No-hex	MS39323-10-6Z	5/8 - 3/8	J514-10-6-070123Z
No-hex	MS39323-10-6ZN	5/8 - 3/8	Not available

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TABLE IV. MS39323 (no hex)to SAE-J514 cross reference - Continued.

Style	Inactive for new design MS39323 PIN	Tube O.D nom.	For new design SAE-J514 PIN
No-hex	MS39323-12-4	3/4 - 1/4	Not available
No-hex	MS39323-12-4CN	3/4 - 1/4	Not available
No-hex	MS39323-12-4D	3/4 - 1/4	Not available
No-hex	MS39323-12-4F	3/4 - 1/4	Not available
No-hex	MS39323-12-4H	3/4 - 1/4	Not available
No-hex	MS39323-12-4J	3/4 - 1/4	Not available
No-hex	MS39323-12-4M	3/4 - 1/4	J514-12-4-070123M
No-hex	MS39323-12-4N	3/4 - 1/4	J514-12-4-070123N
No-hex	MS39323-12-4P	3/4 - 1/4	J514-12-4-070123P
No-hex	MS39323-12-4R	3/4 - 1/4	Not available
No-hex	MS39323-12-4S	3/4 - 1/4	J514-12-4-070123S
No-hex	MS39323-12-4T	3/4 - 1/4	J514-12-4-070123T
No-hex	MS39323-12-4TF	3/4 - 1/4	Not available
No-hex	MS39323-12-4Z	3/4 - 1/4	J514-12-4-070123Z
No-hex	MS39323-12-4ZN	3/4 - 1/4	Not available
No-hex	MS39323-12-5	3/4 - 5/16	Not available
No-hex	MS39323-12-5CN	3/4 - 5/16	Not available
No-hex	MS39323-12-5D	3/4 - 5/16	Not available
No-hex	MS39323-12-5F	3/4 - 5/16	Not available
No-hex	MS39323-12-5H	3/4 - 5/16	Not available
No-hex	MS39323-12-5J	3/4 - 5/16	Not available
No-hex	MS39323-12-5M	3/4 - 5/16	Not available
No-hex	MS39323-12-5N	3/4 - 5/16	Not available
No-hex	MS39323-12-5P	3/4 - 5/16	Not available
No-hex	MS39323-12-5R	3/4 - 5/16	Not available
No-hex	MS39323-12-5S	3/4 - 5/16	Not available
No-hex	MS39323-12-5T	3/4 - 5/16	Not available
No-hex	MS39323-12-5TF	3/4 - 5/16	Not available
No-hex	MS39323-12-5Z	3/4 - 5/16	Not available
No-hex	MS39323-12-5ZN	3/4 - 5/16	Not available
No-hex	MS39323-12-6	3/4 - 3/8	Not available
No-hex	MS39323-12-6CN	3/4 - 3/8	Not available
No-hex	MS39323-12-6D	3/4 - 3/8	Not available
No-hex	MS39323-12-6F	3/4 - 3/8	Not available
No-hex	MS39323-12-6H	3/4 - 3/8	Not available
No-hex	MS39323-12-6J	3/4 - 3/8	Not available
No-hex	MS39323-12-6M	3/4 - 3/8	J514-12-6-070123M
No-hex	MS39323-12-6N	3/4 - 3/8	J514-12-6-070123N
No-hex	MS39323-12-6P	3/4 - 3/8	J514-12-6-070123P
No-hex	MS39323-12-6R	3/4 - 3/8	Not available
No-hex	MS39323-12-6S	3/4 - 3/8	J514-12-6-070123S
No-hex	MS39323-12-6T	3/4 - 3/8	J514-12-6-070123T
No-hex	MS39323-12-6TF	3/4 - 3/8	Not available
No-hex	MS39323-12-6Z	3/4 - 3/8	J514-12-6-070123Z
No-hex	MS39323-12-6ZN	3/4 - 3/8	Not available

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TABLE IV. MS39323 (no hex) to SAE-J514 cross reference - Continued.

Style	Inactive for new design MS39323 PIN	Tube O.D nom.	For new design SAE-J514 PIN
No-hex	MS39323-12-8	3/4 - 1/2	Not available
No-hex	MS39323-12-8CN	3/4 - 1/2	Not available
No-hex	MS39323-12-8D	3/4 - 1/2	Not available
No-hex	MS39323-12-8F	3/4 - 1/2	Not available
No-hex	MS39323-12-8H	3/4 - 1/2	Not available
No-hex	MS39323-12-8J	3/4 - 1/2	Not available
No-hex	MS39323-12-8M	3/4 - 1/2	J514-12-8-070123M
No-hex	MS39323-12-8N	3/4 - 1/2	J514-12-8-070123N
No-hex	MS39323-12-8P	3/4 - 1/2	J514-12-8-070123P
No-hex	MS39323-12-8R	3/4 - 1/2	Not available
No-hex	MS39323-12-8S	3/4 - 1/2	J514-12-8-070123S
No-hex	MS39323-12-8T	3/4 - 1/2	J514-12-8-070123T
No-hex	MS39323-12-8TF	3/4 - 1/2	Not available
No-hex	MS39323-12-8Z	3/4 - 1/2	J514-12-8-070123Z
No-hex	MS39323-12-8ZN	3/4 - 1/2	Not available

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue, due to the extent of the changes.

Referenced documents. In addition to MIL-DTL-18666, this document references the following:

FED-STD-595/36076	FED-STD-595/36280	ASTM B633	SAE-AMS4928
FED-STD-595/36081	FED-STD-595/36293	ASTM B564	SAE-AMS5639
FED-STD-595/36099	MIL-DTL-16232	ASTM B695	SAE-AMS5645
FED-STD-595/36118	MIL-DTL-81706	ASTM F1136/F1136M	SAE-AMS5647
FED-STD-595/36134	QQ-N-281	SAE-AMS-C-81562	SAE-AMS5743
FED-STD-595/36152	ASME B1.1	SAE-AMS-QQ-P-416	SAE-AMS6370
FED-STD-595/36170	ASTM A276/A276M	SAE-AMS2417	SAE-AMS6382
FED-STD-595/36173	ASTM A564/A564M	SAE-AMS2451/5	SAE-J403
FED-STD-595/36176	ASTM A582/A582M	SAE-AMS2451/9	SAE-J425
FED-STD-595/36231	ASTM B117	SAE-AMS2486	SAE-J514
FED-STD-595/36251	ASTM B164	SAE-AMS2488	
FED-STD-595/36270	ASTM B166	SAE-AMS2700	

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CONCLUDING MATERIAL

Custodians:

Army - AT
Navy - SH
Air Force - 99
DLA - CC

Preparing activity:

DLA - CC

(Project 4730-2015-040)

Review activities:

Army - AR
Navy - CG, MC, SA
Air Force - 71

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>.