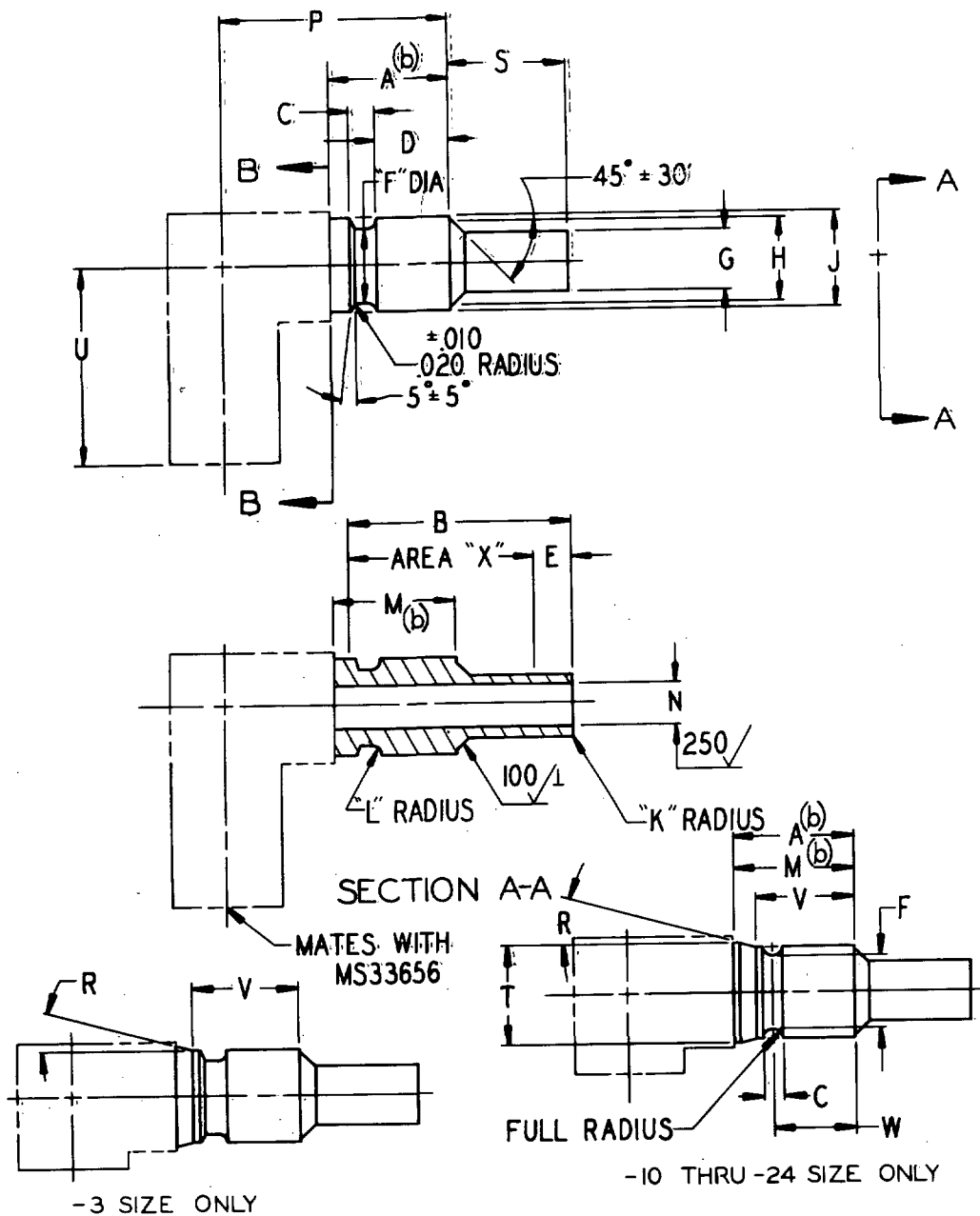


FED. SUP. CLASS
4730User Activities:
Army-WC, ME, MIReview Activities:
Army-AV
Navy-AS
Air Force-82

This military standard is approved by the Department of Defense and is mandatory on all activities. Selection for all new engineering and design applications and for repetitive use shall be made from this document.



(B) FOR CHANGES SEE SHEETS 1, 2, AND 3.

P.A. Air Force-11 Other Cust Army-AV Navy-AS Procurement Specification MIL-F-27272	TITLE ELBOW, NIPPLE END, FLARED, TUBE TO HOSE-90° SWIVEL NUT SUPERSEDES:	MILITARY STANDARD MS27086 SHEET 1 OF 3
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DD FORM 672 (SEP 57) Coordinated) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

APPROVED 1 Sep 61 REVISED (A) 2 May 66 (B) 30 Jun 72

NOTE: The Government has a royalty free license under the following listed patents for the benefit of Manufacturers of the item either for the Government or for use in equipment to be delivered to the Government. (U.S. Patent Nos. 2,833,567; 3,044,163; 3,055,082)

This military standard is approved by the Department of Defense and is mandatory on all activities. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

DD FORM 672
1 SEP 64

Coordinated: PRE, DLS EC, DNS, D, M, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UU, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.

DATE

DRAWN BY

APPROVED 1 Sep 61 REVISED 8 FOR CHARGES SEE SHEETS 1, 2 AND 3

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FFC SUP CLASS

4730

DASH NO.	A MIN	B MIN	C		D +.005 -.000	E		F		G +.005 -.000	
											STEEL
(B) -3/-4C	—	.515	.870	.106	±.010	.307	.25	±.05	.288	+.005 -.000	.205
-4C	—	.520	.890	.116		.322			.316		.268
-5C	—	.555	.140	±.020	.335	.32	±.12	.391	.330		
-6C	—	.630						1.030	.497		.426
-8C	-8D	.654						1.130	.586		.526
-10C	-10D	.755						1.240	.674		.650
-12C	-12D	.831	1.340	+.005 -.000	.39	±.19	1.001	+.008 -.000	.900		
-16C	-16D	.881	1.570				.48	±.28	1.255	1.151	
-20C	-20D	1.035	1.720				.50	±.30	1.490	+.005 -.000	1.401
-24C	-24D	.475	.680				.106	±.010	.287	.18	±.05
(a) -3C	—										

[illegible]

S		T MAX	U		V		W +.005-.000	
							STEEL	ALUM
.480	± .010	—	.530	± .020	—	—	—	—
		—	.580		—	—	—	—
		—	.655		—	—	—	—
		—	.720		—	—	—	—
.600		—	.830		—	—	—	—
.650	± .015	—	1.126	± .035	—	—	.420	.427
.675	± .025	.900	1.376		.625	± .010	.500	.500
.730		1.190	1.500		.670		.545	.545
.935		1.485	1.782		.695		.565	.571
.980		1.750	2.032		.795		.665	.665
.320	± .010	—	.530	± .020	.425	± .005	—	—

P A Air Force - II Other Cust Army - AV Navy - AS	T E (B) ELBOW, NIPPLE END, FLARED, TUBE TO HOSE - 90° SWIVEL NUT	MILITARY STANDARD
Procurement Specification MIL-F-27272	SUPERSEDES	MS27086 SHEET 2 OF 3

FED. SUP CLASS
4730

MATERIAL : CORROSION RESISTING STEEL : CLASS 304 OR 321 COLD FIN.
CONDITION "A" SPECIFICATION QQ-S-763.
ALUMINUM ALLOY : 6061-T6 OR T651
SPECIFICATION QQ-A-367 OR QQ-A-225/8

FINISH : CORROSION RESISTING STEEL : PASSIVATE PER MIL-F-27272.
ALUMINUM ALLOY : ANODIZE, SPECIFICATION.
MIL-A-8625, TYPE II, DYE BLUE.

DRY-FILM LUBRICATE AREA "X" IN ACCORDANCE WITH MIL-L-8937. NO
OVERSPRAY ALLOWED.

DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED : RADIUS OR BREAK
ALL CORNERS .005 + .005 -.000. REMOVE ALL BURRS AND SLIVERS. SURFACE
ROUGHNESS PER ANSI B45.1-1962 NOT TO EXCEED 125 AA. ALL DIAMETERS
WITHIN LENGTH "A" PLUS "S" MUST BE CONCENTRIC WITHIN .005 TIR.

THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.

THIS IS A DESIGN STANDARD FOR MANUFACTURING PURPOSES. THE ITEM
IS ONLY PROCURED AS AN INTEGRAL PART OF ADAPTER ASSEMBLIES.

- (a) MS27086 -3C INACTIVE FOR DESIGN AFTER 2 MAY 1966. USE ONLY IN
ASSEMBLIES FOR REPLACEMENT OF IDENTICAL ITEMS IN EXISTING
MILITARY EQUIPMENT.
- (b) USE "A" DIM. WHEN THE ADJACENT DIA TO THE LEFT OF PLANE
B-B IS GREATER THAN "J" DIM. WHEN THE ADJACENT DIA IS EQUAL
TO OR LESS THAN "J" DIM. "M" DIM. MAY BE USED IN PLACE OF
"A" DIM.

THE BORE OF THE ELBOW, (-10 THRU -24 SIZE) SHALL NOT BE LESS THAN THE ID
OF THE NIPPLE. OVALITY SHALL NOT EXCEED 7.5 PERCENT OF NOMINAL TUBING OD.

ANY DESIGN OF THE ELBOW TO THE LEFT OF PLANE B-B IS ACCEPTABLE
PROVIDED DIM'S "P" AND "U", THE MATERIALS SPECIFIED AND THE FABRICATION
NOTES OF THIS STANDARD ARE MET.

ANY FORGED DESIGN IS ACCEPTABLE FOR -3 THRU -8 SIZE. ANY BENT TUBE
DESIGN IS ACCEPTABLE FOR -10 THRU -24 SIZE.

NEXT ASSEMBLY MS27068-3 THRU -8 SIZE
AND MS27065-10 THRU -24 SIZE.

User Activities:
Army-WC, ME, MIReview Activities:
Army-AV
Navy-AS
Air Force-82

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activities. Selection for all new engineering and design applications and for repetitive
use shall be made from this document.

APPROVED 1 Sep 61 REVISED (B) FOR CHANGES SEE SHEETS 1, 2 AND 3

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for the Government or for use in equipment to be delivered to the Government. (U.S. Patent Nos. 2,833,567; 3,044,163; 3,055,682)

P.A. Air Force-II Other Cust Army-AV Navy-AS Procurement Specification MIL-F-27272	TITLE (B) ELBOW, NIPPLE END, FLARED, TUBE TO HOSE-90° SWIVEL NUT. SUPERSEDES:	MILITARY STANDARD MS27086 SHEET 3 OF 3
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