



J2 TECHNICAL ARTICLE

Number 9

March 5, 1980

Revised July 4, 1981

From Octagon Heaven

comments by Mike Hawke

DRILL AND TAP CHART AS CALCULATED AND PUBLISHED IN 1979

METRIC HARDWARE USED IN M.G.									
Bolt size		Minor Dia. (mm)	Recommended Drill Size			Closes Recommended inch drill			other metric (pitch) common hardware
Major Dia.	PITCH		size (mm)	inch Equiv.	% thread	drill size	inch equiv.	% thread	
5mm	.75mm	4.00	4.20	0.1634	32%	#19	0.1660	80%	.90mm & .80mm
6mm	1.0 mm	4.70	5.00	0.1968	76%	# 9	0.1960	71%	
7mm not used									7mm x 1 mm
8mm	1.0 mm	6.70	7.00	0.2756	69%	# J	0.2770	66%	1.25mm
10mm	1.50mm	8.05	8.50	0.3346	71%	# O	0.3320	75%	1.25mm
12mm	1.50mm	10.05	10.50	0.4133	77%	# Z	0.4130	77%	1.75mm

B.S.F. (Whitworth) USED IN M.G.											
Bolt size		Minor Dia. inch.	Drill size Closest to minor			Recommended * Drill size			Other Bolts T.P.I.		
Major Dia.	T.P.I.		size	inch Equiv.	Thread %	size	inch Equiv.	Thread %	NC	NF	Whitworth
1/4	26	.2008	#7	.2010	99%	#3	.2130	75%	20	28	20
5/16	22	.2543	#F	.2570	95%	#H	.2660	79%	18	24	18
3/8	20	.3110	5/16	.3125	99%	21/64	.3281	73%	16	24	16
7/16	18	.3663	#U	.3680	98%	#W	.3860	72%	14	20	14
1/2	16	.4200	27/64	.4219	97%	7/16	.4375	78%	13	20	12
9/16	16	.4825	31/64	.4843	97%	1/2	.5000	78%	12	18	12
5/8	14	.5336	35/64	.5469	85%	9/16	.5625	68%	11	18	11
3/4	12	.6423	21/32	.6562	87%	43/64	.6719	73%	10	16	10
7/8	11	.7586	49/64	.7656	94%	25/32	.7812	81%	9	14	9
1	10	.8720	7/8	.8750	98%	29/32	.9062	73%	8	14	8

* Most American threads (NC & NF), drill sizes recommended results in 60% to 80% of the threads. Those drills selected closest to minor diameter may very well be too tight and so it is suggested to use the recommended size above or something in between.

Although this material was done for T-Series work, there is no metric hardware used on the J2.