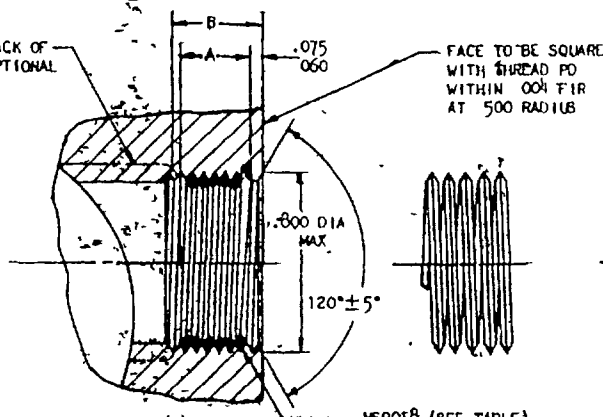


MS9071 (ASG)

RELIEF BACK OF
THREAD OPTIONALMS9018 (SEE TABLE)
ASSEMBLE ACCORDING TO
GENERAL INSTRUCTIONS

(A)

ASSEMBLED INSERT

PART	INSERT PART NUMBER	TAPPED HOLE -						ASSEMBLED INSERT					
		PITCH DIA		MAJOR DIA MIN	MINOR DIA		FULL THD DEPTH B MIN	PITCH DIA		MAJOR DIA MIN	ASSEMBLED LENGTH A (REF ONLY)		
		MIN	MAX		MIN	MAX		MIN	MAX		MIN	MAX	
LONG REACH													
STANDARD	MS9018-01	.7523	.7543	.793									
+ .003	MS9018-02	.7553	.7573	.796									
+ .005	MS9018-03	.7573	.7593	.798									
+ .010	MS9018-04	.7623	.7643	.803	.718	.723	.772	.6712	.6753	.709	.668	.683	
+ .015	MS9018-09	.7673	.7693	.808									
+ .020	MS9018-10	.7723	.7743	.813									
+ .025	MS9018-11	.7773	.7793	.818									
SHORT REACH													
STANDARD	MS9018-05	.7523	.7543	.793									
+ .003	MS9018-06	.7553	.7573	.796									
+ .005	MS9018-07	.7573	.7593	.798									
+ .010	MS9018-08	.7623	.7643	.803	.718	.723	.723	.6712	.6753	.709	.319	.334	
+ .015	MS9018-12	.7673	.7693	.808									
+ .020	MS9018-13	.7723	.7743	.813									
+ .025	MS9018-14	.7773	.7793	.818									

GENERAL INSTRUCTIONS

DESCRIPTION: SPARK PLUG THREAD HELICAL COIL INSERTS ARE SCREW THREAD BUSHINGS COILED FROM DIAMOND-SHAPED CROSS SECTION WIRE. THEY ARE SCREWED INTO TAPPED HOLES TO FORM NOMINAL SIZE 18-1.50 MM THREADS. INSERTS ARE ASSEMBLED BY TORQUING THRU A NOTCHED DIAMETRAL TANG. THE TOP OUTER END COIL IS FLAT AND SERRATED AFTER THE INSERT IS IN POSITION THE SERRATED END IS OFF-SET BY AN OFF-SET AND STAKING TOOL AND STAKED FIRMLY IN PLACE.

THREADS: ASSEMBLED INSERT THREAD SIZE IS DETERMINED BY TOLERANCE RANGE OF TAPPED HOLE INTO WHICH INSERT IS FITTED. IT IS IMPORTANT WHEN USING OVERSIZE INSERTS THAT AMOUNT OF OVERSIZE ON THE INSERT IS THE SAME AS THAT IN THE TAPPED HOLE, SO THAT THE RESULTING INSIDE THREAD IS OF NOMINAL SIZE.

TAPPED HOLE: 60° AMERICAN STANDARD FORM; TAP SIZES AND GAGES ARE STANDARD WITH MANUFACTURER.

THIS IS A DESIGN STANDARD - NOT TO BE USED AS A PART NUMBER.
DIMENSIONS IN INCHES.

DEPTH OF HOLE: THE PROXIMITY OF THREADS IN TAPPED HOLE AND HELICAL THREAD INSERT TO COMBUSTION CHAMBER TEMPERATURES MAKES IT DESIRABLE TO HAVE AS SMALL AN AREA OF UNUSED THREAD AS PRACTICABLE, EXPOSED TO THE HOT GASES. IT IS THEREFORE DESIRABLE TO HOLD TOLERANCE ON TAPPED HOLE DEPTH TO AS CLOSE A TOLERANCE AS POSSIBLE WITHOUT UNDUE HARSHIP IN MACHINING.

ASSEMBLY OF INSERT: IT IS RECOMMENDED THAT INSERT BE ASSEMBLED WITH FLAT TOP OF SERRATED END BELOW THE BORE SURFACE THE DISTANCE SHOWN ON DRAWING. AFTER ASSEMBLY, INSERT SHOULD BE EXPANDED TO ASSURE PROPER SEATING ESPECIALLY WHEN CLOSE CONCENTRICITY LIMITS ARE DESIRED. THE FLAT SERRATED END OF COIL IS THEN OFF-SET .020-.030, DEPTH OF OFF-SET DECREASING UNIFORMLY TO ZERO IN APPROXIMATELY 1/3 TURN, AND STAKED. TANG IS THEN BROKEN OFF AT NOTCH. ASSEMBLY, EXPANDING AND TANG BREAK-OFF TOOLS AND OFF-SET AND STAKING TOOLS ARE STANDARD WITH MANUFACTURER.

THIS STANDARD WAS DEVELOPED COOPERATIVELY WITH THE ENGINE AND PROPELLER UTILITY PARTS COMMITTEE OF THE SAC.

P.A. USAR ASD	TITLE	MILITARY STANDARD
Other Cust Navy-Nepa	BOSSSES, 18-1.50MM SPARK PLUG THREAD HELICAL INSERT, STANDARD DIMENSIONS FOR	MS9071 (ASG)
PROCUREMENT SPECIFICATION None	SUPERSEDES:	SHEET 1 OF 1