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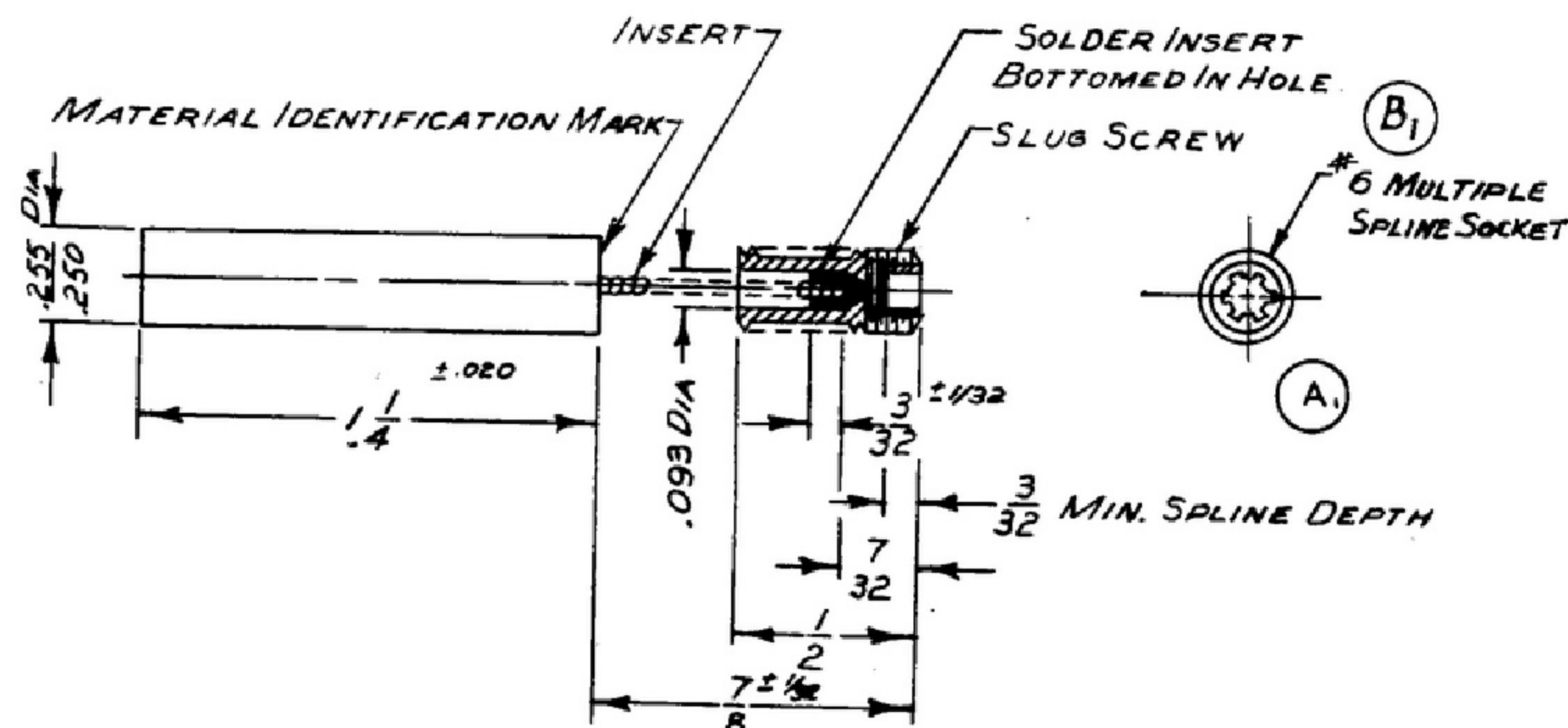
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\*FOR INFORMATION ONLY. CONTRACTOR MAY AT HIS OPTION DEVIATE FROM THESE PROCESS DETAILS.

\*SME APPROVAL  
SYM PRI0048-16

## REVISIONS

SYM	DESCRIPTION	DATE	APPROVAL
A <sub>2</sub>	A, CLARIFIED VIEW OF SLUG SCREW A <sub>2</sub> ADDED APPL SM-D-343629	11 DEC 59	42428-PC 59-A1-S1 REV'D PME
B	(1) NO. 6 WAS NO. 8	23 MAR 1965	21582-PC-61 REV'D PME



## NOTES:

1. PART MAY BE #27-634, AS SUPPLIED BY STACKPOLE CARBON CO., CHICAGO, ILL., OR EQUAL, PROVIDING IT MEETS THE FOLLOWING REQUIREMENTS AND DIMENSIONS SHOWN.

**DESCRIPTION:** FERRITE CORE FOR PERMEABILITY TUNING.

**MATERIAL:** STACKPOLE CERAMAG 3337 FERRITE, AS SUPPLIED BY STACKPOLE CARBON CO., CHICAGO, ILL., OR EQUAL.

**INSERT:** .020 INCH DIAMETER BERYLLIUM COPPER WIRE COILED UNDER TENSION IN THE RIGHT HAND DIRECTION ON A .022 INCH DIAMETER MANDREL TO AN O.D. OF .043 ± .005 INCH.

**SLUG SCREW:** BRASS, COMP 22, 1/2 HARD, PER SPEC QQ-B-626; 8-32 NC-2A THREAD FULL LENGTH.

**MARKING:** MATERIAL IDENTIFICATION SHALL BE WITH TWO DOTS, WHITE AND RED, PLACED ON THE CORE AS SHOWN IN THE DRAWING.

**FREQUENCY RANGE:** 5 TO 32 MC.

**PERMEABILITY TOLERANCE:** WITHIN +1% -2% OF THE PERMEABILITY OF THE STANDARD CORE TO BE SUPPLIED BY THE CONTRACTOR, WITH SIGNAL CORPS APPROVAL.

**Q TOLERANCE:** WITHIN 10% OF THE Q OF THE STANDARD CORE.

**CONCENTRICITY:** CONCENTRICITY OF CORE AND INSERT SHALL BE MEASURED BY CHUCKING THE CORE. TOTAL INDICATOR READING SHALL BE .015 INCHES MAXIMUM AT THE JUNCTION OF THE CORE AND INSERT.

**PULL TEST:** THE INSERT SHALL BE CAPABLE OF WITHSTANDING AN AXIAL PULL TEST AT THE JUNCTION OF CORE AND INSERT OF 5 POUNDS FOR A TIME DURATION OF ONE MINUTE AT ROOM TEMPERATURE. UPON COMPLETION OF THE TEST THERE SHALL BE NO SIGN OF DAMAGE TO OR APPROACHING FAILURE OF THE BOND BETWEEN THE CORE AND INSERT.

**ELECTRICAL TESTS:** PERMEABILITY AND Q SHALL BE TESTED BY COMPARISON WITH A STANDARD CORE ON A BOONTON MODEL 160A Q-METER, AS SUPPLIED BY BOONTON RADIO CORP., BOONTON, N.J., OR EQUAL.

**TEMPERATURE RANGE:** -55°C TO +90°C OPERATING, TO -62°C STORAGE.

**\*SAMPLE APPROVAL:** SAMPLE APPROVAL SHALL BE OBTAINED FROM CONTRACTOR'S ENGINEERING DEPARTMENT BEFORE PRODUCING WITH PRODUCTION. A MINIMUM OF 20 UNITS SHALL BE REQUIRED FOR TESTING. ALL MECHANICAL AND ELECTRICAL REQUIREMENTS OF THIS SPECIFICATION SHALL BE TESTED BEFORE SAMPLE APPROVAL IS GRANTED. THERE SHALL BE NO CHANGE IN MATERIALS OR DESIGN WITHOUT THE SUBMISSION OF NEW SAMPLES FOR CONTRACTOR'S APPROVAL.

**\*PRODUCTION INSPECTION TESTING:** A NUMBER OF UNITS TO BE DETERMINED BY CONTRACTOR'S QUALITY CONTROL DEPARTMENT, BASED ON A STANDARD SAMPLING PLAN SUCH AS MIL-STD-105, MAY BE TESTED AS FOLLOWS:

A-PHYSICAL INSPECTION FOR CONFORMANCE TO MECHANICAL REQUIREMENTS.

B-CONCENTRICITY

C-PERMEABILITY TOLERANCE.

D-Q TOLERANCE.

**\*PRODUCTION TYPE TESTING:** IN ADDITION TO THE TESTS CONDUCTION UNDER PRODUCTION INSPECTION TESTING, A SMALL PERCENTAGE OF UNITS, TO BE DETERMINED BY PRIME CONTRACTOR, MAY BE FURTHER TESTED AS FOLLOWS TO EVALUATE THE QUALITY OF THE UNITS.

COLLINS PART NO.	ITEM	QTY	PART NO.	DESCRIPTION	MAPL	DATE SPEC
LIST OF MATERIAL						
COLLINS PART NO. 559-0195-003						
DRAWN ECS				CHECKED [Signature]	APPROVED	
UNLESS OTHERWISE SPECIFIED: DECIMAL DIMENSIONS INCLUDING HOLE SIZES MAY VARY ±.005 FRACTIONAL DIMENSIONS INCLUDING HOLE SIZES MAY VARY ±1/64 MACHINED ANGLES MAY VARY ±1° BREADED ANGLES MAY VARY ±.25° BROKEN ANGLES MAY VARY ±1° ECCENTRICITY BETWEEN ANY DIAMETERS ON THE SAME CENTERLINE SHALL NOT EXCEED .010 TOTAL INDICATOR READING ALL DIMENSIONS ARE FINISH DIMENSIONS INCLUDING APPLIED FINISH AND ARE GIVEN IN INCHES.				-COLLINS-RADIO-CO.- -SEAR-RAPIDS-IOWA- 14214-PH- 51-93 SIGNAL CORPS REVIEWED PME APPROVED HLY PME DATE 12 JAN 56		DEPARTMENT OF THE ARMY SIGNAL CORPS ENGINEERING LABORATORIES FORT MONMOUTH NEW JERSEY SM-C-249245
APPLICATION				SCALE 2/1		