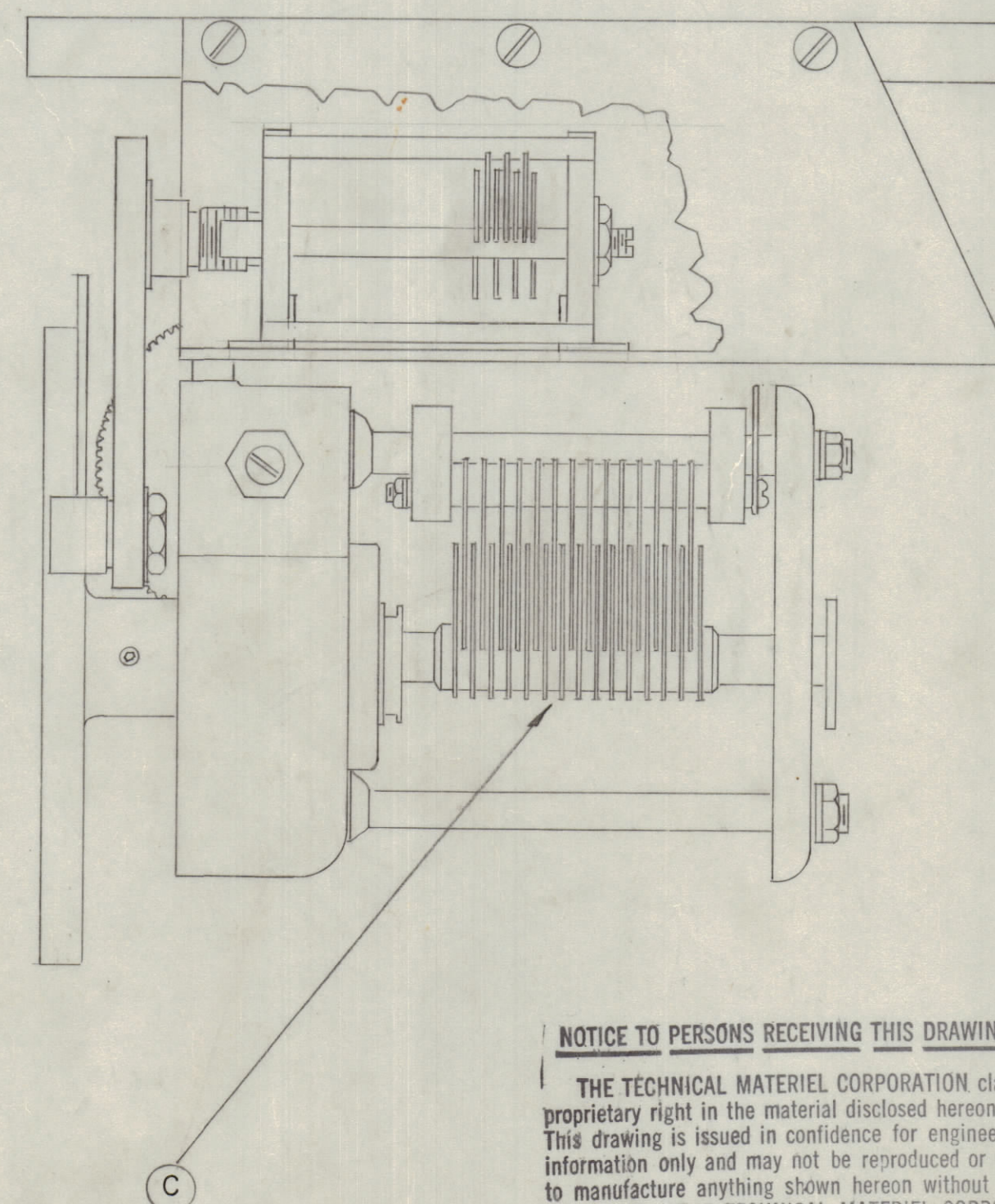
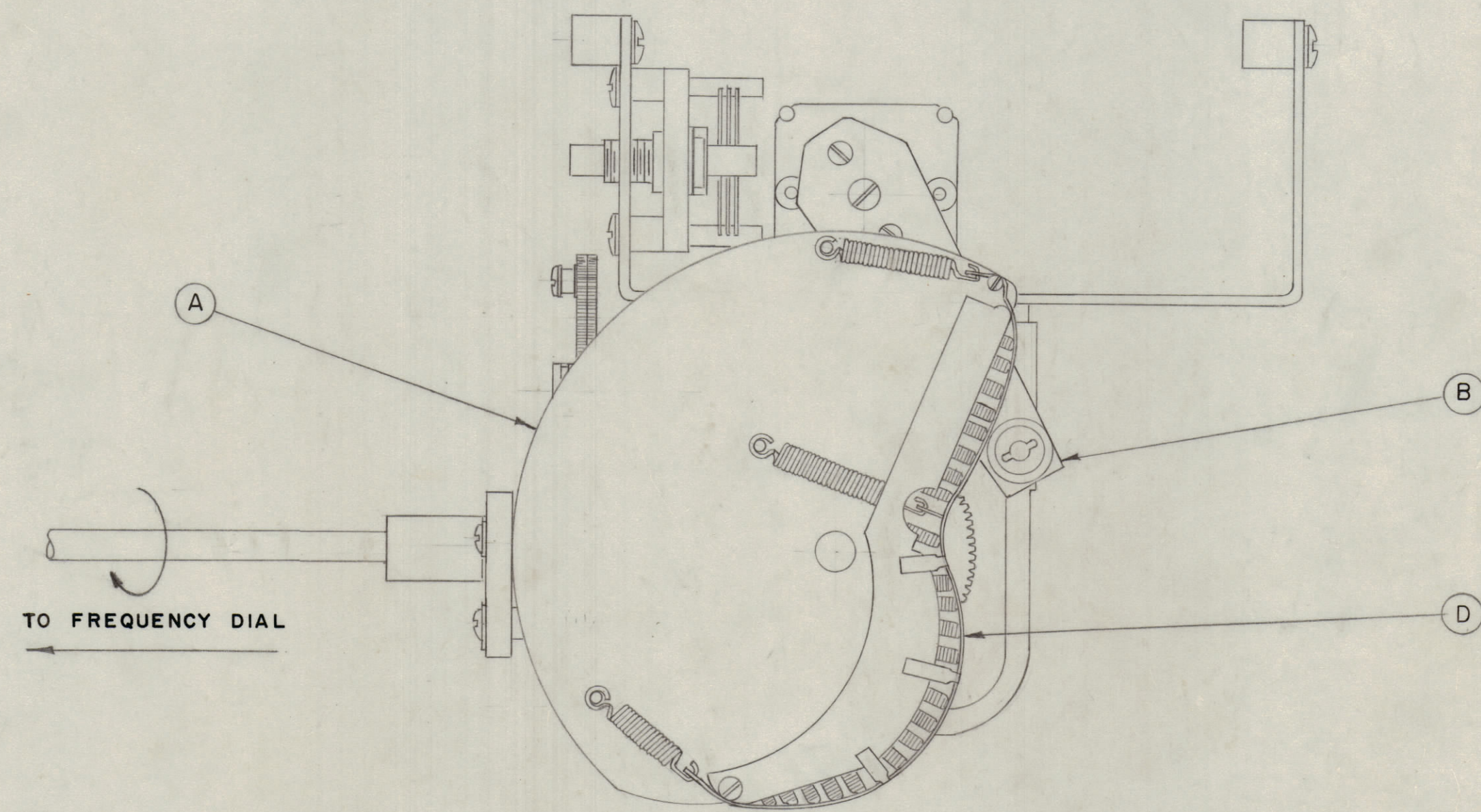
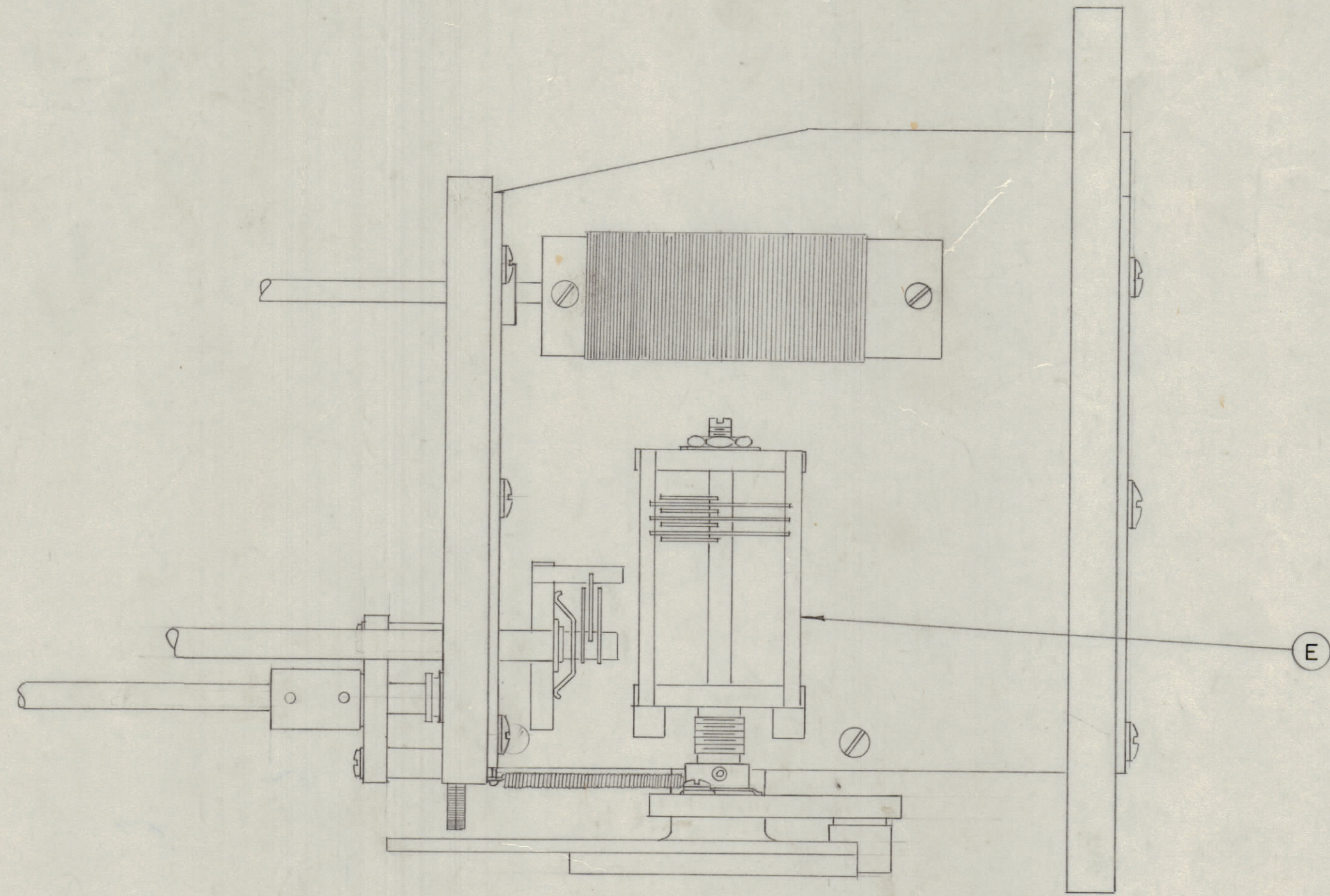


IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.
 MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES.



THE FUNCTION OF THE CAM IN THE VOX

THE DIRECT READING CALIBRATION IN CYCLES PER SECOND OF THE TMO VARIABLE FREQUENCY OSCILLATOR, MODEL VOX IS MADE POSSIBLE BY A MECHANICAL ARRANGEMENT UTILIZING A FLEXIBLE CAM (A) AND A CAM FOLLOWER (B). THE CAM IS DIRECTLY COUPLED TO THE MAIN V.M.O. TUNING CAPACITOR (C) OF THE UNIT, WHOSE VALUE OF CAPACITANCE EFFECTS RESONANCE IN THE V.M.O. TANK CIRCUIT AND THUS DETERMINES THE FREQUENCY OF THE MASTER OSCILLATOR TUBE.

MOTION IS IMPARTED TO THE CAM FOLLOWER BY THE SLIDING OF THE FOLLOWER OVER A FLEXIBLE BERYLLIUM-COPPER STRIP (D), WHICH IS THE ADJUSTABLE PORTION OF THE CAM. THE CAM FOLLOWER IS DIRECTLY COUPLED TO THE SHAFT OF A VARIABLE CAPACITOR (E), WHICH IS ELECTRICALLY CONNECTED TO "TRIM" THE MAIN TUNING CAPACITOR. EACH POSITION ALONG THE PATH OF THE CAM THUS EFFECTIVELY REPRESENTS A DIFFERENT AND CORRECT VALUE OF "TRIMMER" CAPACITANCE, WHICH "TRIMS" THE MAIN TUNING CAPACITOR WITH THE PROPER ADJUSTMENT NECESSARY TO PROVIDE LINEAR TUNING. THUS, CORRECT "TRACKING" IS PROVIDED FOR AT ANY POSITION OF THE FREQUENCY DIAL SO THAT A DIRECT READING IS ALWAYS AVAILABLE ON THE DIAL.

NOTICE TO PERSONS RECEIVING THIS DRAWING

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 THE TECHNICAL MATERIEL CORPORATION
 MAMARONECK, NEW YORK

1	VOX-1			6-7-53
1	PMD-1	Z85		8-18-54
1	VOX	101		4-3-53
QTY	MODEL	PROJECT NO.	ASS'Y. NO.	DATE
USED ON				

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
#	#	THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
STOCK SIZE		FUNCTION OF VOX	
MATERIAL	WEIGHT PER PC.	FLEXIBLE CAM	
TYPE & TEMPER			
HEAT TREAT. SPEC.			
FINISH & SPEC. NO.			

ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES		SCALE: FULL SIZE					
ALL OTHERS	DEC. DIM. ±	DRILL, PUNCH, COMMERCIAL STOCK					
	FRAC. DIM. ±	SIZES AND MANUFACTURERS					
	ANGULAR DIM. ±	TOLERANCES ARE NOT INCLUDED.					