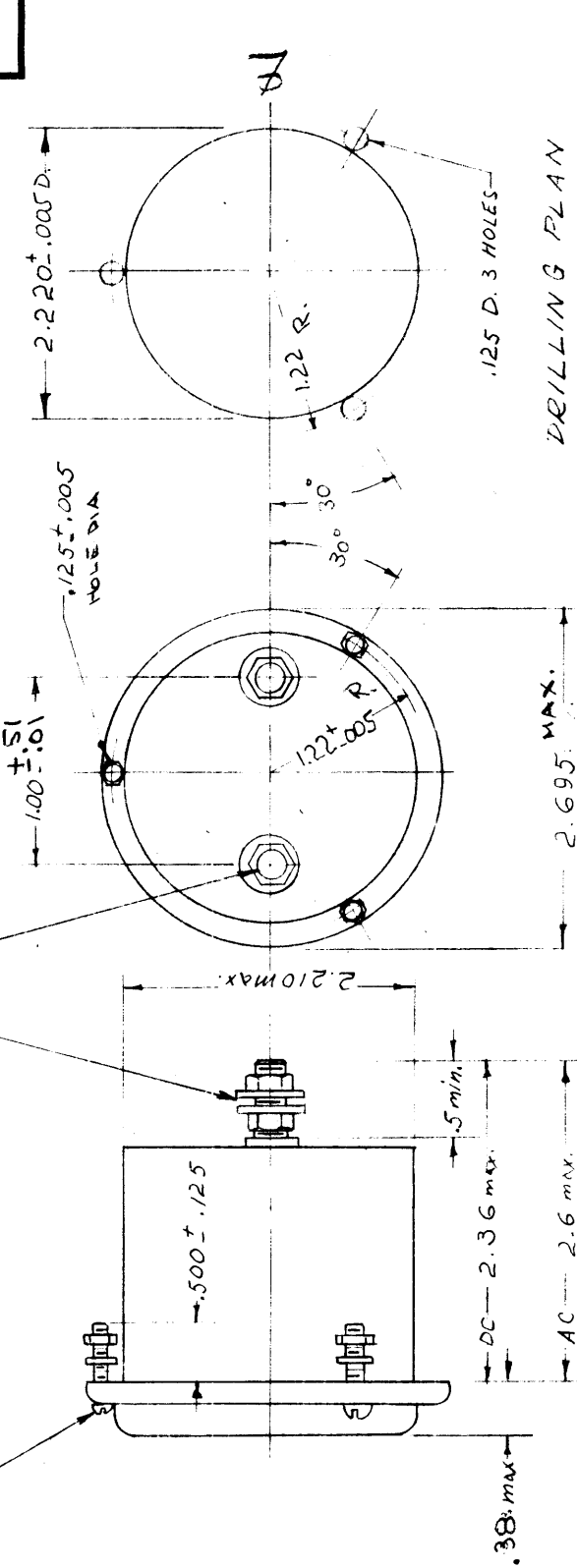


STANDARD DRAWING

IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

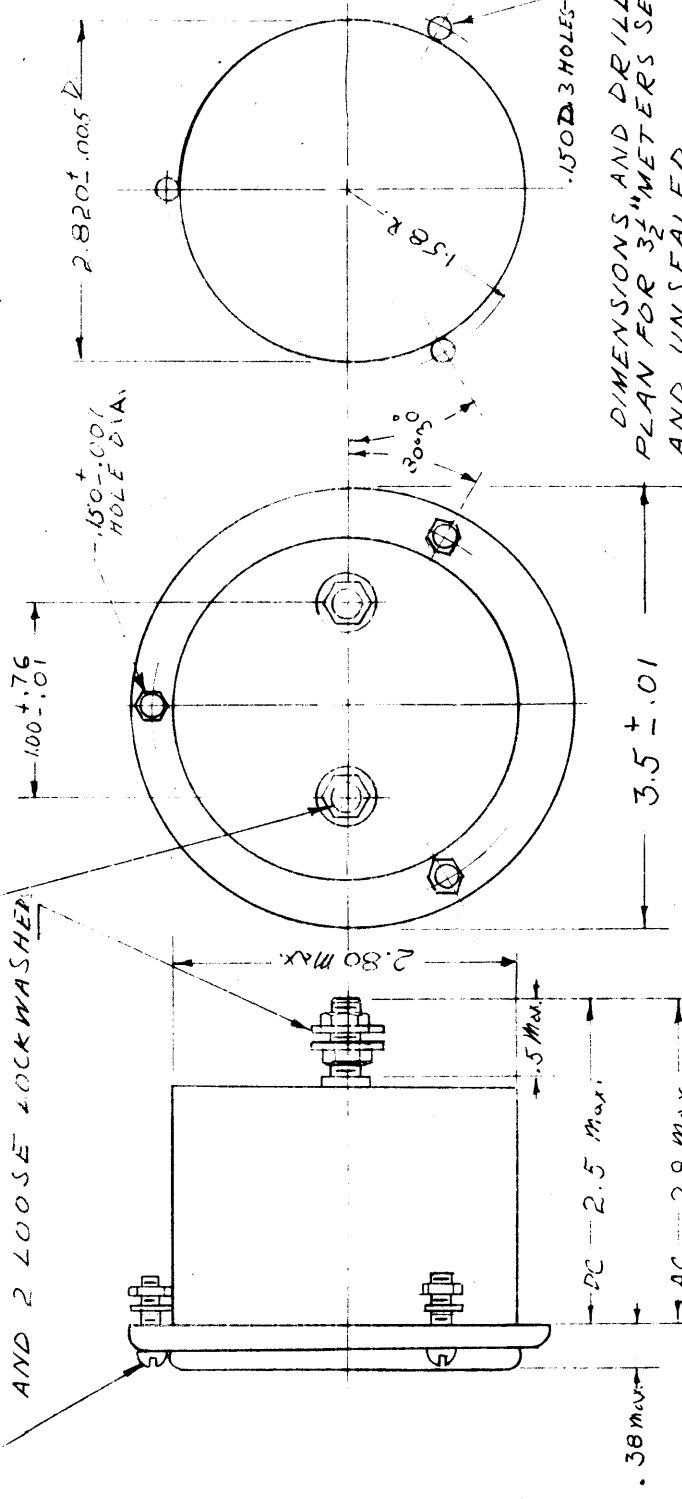
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

4-40 NC-2 ROUND HEAD BLACK SCREWS WITH NUT AND LOCKWASHER FROM .51 ABOVE TO .26 BELOW ϕ WITH 2 LOOSE NUTS & 2 LOOSE WASHERS



DIMENSIONS AND DRILLING PLAN FOR 2 1/2 METERS, SEALED AND UNSEALED

6-32 NC-2 ROUND HEAD BLACK SCREWS WITH NUTS AND LOCKWASHER FROM .51 ABOVE TO .01 BELOW ϕ WITH 2 LOOSE NUTS AND 2 LOOSE LOCKWASHER



DIMENSIONS AND DRILLING PLAN FOR 3 1/2 METERS SEALED AND UNSEALED

NOTE: TMC INSIGNIA TO BE PRINTED ON FACE OF METERS (REF. NP-117)

ISSUE ITEM	NO. CHANGES	READDRAWN	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
			9-21-54				
TOLERANCES							
DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.							

ALL OTHERS	DEC. DIM. ±	FRAC. DIM. ±	ANGULAR DIM. ±
------------	-------------	--------------	----------------

MODEL	PROJECT NO.	ASSY. NO.	DATE

USED ON

COMPONENT	STYLE	COLOR SCHEME	FULL-SCALE	CURRENT	UNITS
MR	35	W	300	DC	VV

TYPE DESIGNATION
 KIND OF CURRENT
 AC-25 TO 125 CPS, 60 CPS NOMINAL
 AF-800 CPS, NOMINAL
 AF-400 CPS, NOMINAL
 DC-DIRECT CURRENT
 RF-R.F., CONVENTIONAL SCALE
 RL-R.F., LINEAR EXPANDED

DC VOLTMETERS 2 1/2" & 3 1/2"		AC AMMETERS & VOLTMETERS	
V. (FULL SCALES) KV. #	ma.	ma.	v.
2	1	10	1.5 **
10	2	20	3 *
20	5	50	5 *
50 *	10	100	8
100 *	20	200	10 *
200 *	50	500	15
500 #	100		30
800 #	200		80

COLOR SCHEME
 B - WHITE MARKINGS AND POINTER, BLACK BACKGROUND.
 F - YELLOW FLOURESCENT MARKINGS AND POINTER, BLACK BACKGROUND.
 S - SELF-LUMINOUS MARKINGS AND POINTER, BLACK BACKGROUND.
 W - BLACK MARKING AND POINTER, WHITE BACKGROUND.

DC AMMETERS 2 1/2" & 3 1/2"
 FULL SCALE
 ma. 1 * 1 #
 20 5 * 2
 100 * 10 * 5 *
 200 50 * 10 * 30 *
 500 * 100 * 20 *
 200 50 #
 500 * 100 #
 800 #

* ALSO WITH ZERO CENTER.
 # REQUIRES EXTERNAL RESISTOR.

FULL-SCALE DEFLECTION.
 USE THREE FIGURE R FOR DECIMAL POINT.
 USE 0 FOR LEFT FIGURE IS LESS THAN THREE FIGURES REQUIRED.
 ZERO-CENTER DEFLECTION USE TWO FIGURES, WITH LETTER IN CENTER TO DESIGNATE VALUE OF NUMBERS.
 D-TENTHS. (EXAMPLE: 272 REPRESENTS 20-0-20)
 U-UNITS.
 T-TENS.
 H-HUNDRED.

2 1/2 METER ONLY. *
 3 1/2 METER ONLY. **
 # REQUIRES EXTERNAL SHUNT OR RESISTOR.

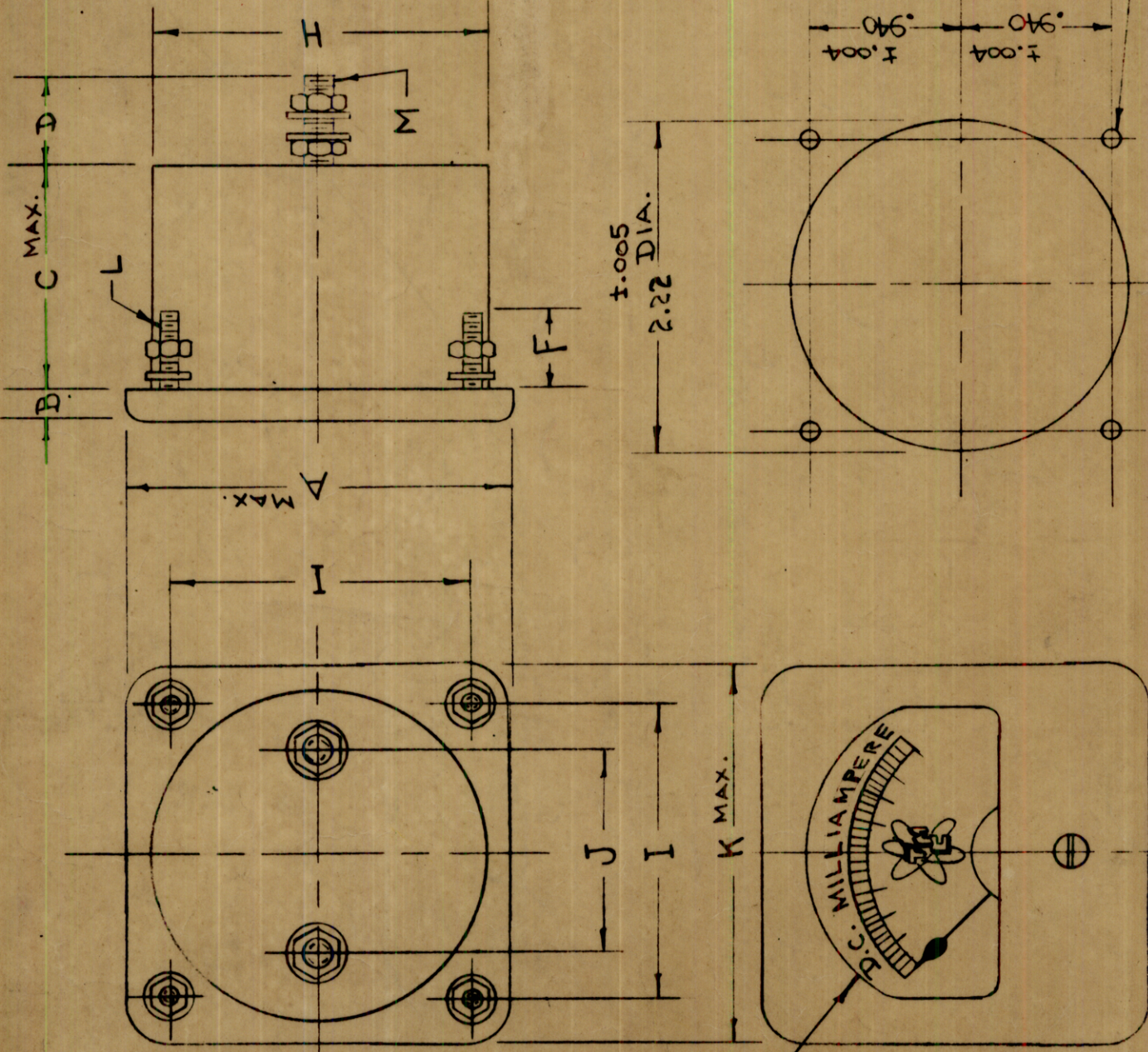
NOTE #1. SOLDER-LUG TERMINALS ARE PERMITTED ON SEALED METERS.
 NOTE #2. FOR OTHER RANGES & SPECIAL METERS, SEE MIL SPEC. METERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SPECIFICATION MIL-M-6A

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
	H	THE TECHNICAL MATERIEL CORP.	
		MAMARONECK, NEW YORK	
		METERS, PANEL TYPE	

STOCK SIZE	TYPE & TEMPER	HEAT TREAT. SPEC.	FINISH & SPEC. NO.
MATERIAL	WEIGHT PER PC.		
DRAWN		ELEC. DES. APP.	MECH. DES. APP.
CHECKED			
DATE		FINAL APPROVAL	
9-19-54		MR. A	

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

STANDARD DRAWING



DRILL PANEL FOR SQUARE CASE

ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
V	1	"J" Dim. Was 1.31	7-3-67	18370	ALL	EH	
U	1	ADDED MR100-9 TO CHART	8-11-66	16746	RME	AD	
T	1	ON CHART, COLUMN "D" DIMS .73 WERE .68	11-4-65	10370		AM/A	
S	2	NOTES (4, 5 & 6) ADDED	7-16-60	9560		NP.	
S	1	MR-100-7, DIM "F" WAS .52	6-3-63				

SCALE: S401-44
 S401-432
 DRILL, PUNCH, COMMERCIAL STOCK
 SIZES AND MANUFACTURERS
 TOLERANCES ARE NOT INCLUDED.

1	SBE2
1	XFK
Per UNIT	MODEL

5-5-58	DATE
ASBY. NO.	DATE

HEAT TREAT. SPEC.	FINISH & SPEC. NO.
TYPE & TEMPER	
MATERIAL	
WEIGHT PER PC.	
STOCK SIZE	

CDD 3-27-53	DRAWN
AND 3-27-53	CHECKED
G.T.O	FINAL APPROVAL

MR-100	PROJECT NO.
MR-100	USED ON

L- 4 4-40 STUDS - 4 FLAT WASHERS - 4 NUTS
 M- 2 1/4-28 STUDS - 4 FLAT WASHERS - 4 NUTS

PART NO.	RESISTANCE	A	B	C	D MAX.	F MAX.	H	I	J	K	SCALE	FIRST USED
MR-100-1	75Ω ± 50%	2.37	.20	1.45	.73	.53	2.17	1.875	1.00	2.37	0-1 M.A	VOX
MR-100-2	NOT CRITICAL	"	"	"	.73	"	"	"	"	"	0-50 M.A	XFK
MR-100-3	260Ω ± 10%	"	"	"	.73	"	"	"	"	"	0-200 M.A	DCU
MR-100-4	NOT CRITICAL	"	"	"	.45	"	"	"	"	"	0-100 M.A	PSP
MR-100-5	NOT CRITICAL	"	"	"	.73	"	"	"	"	"	0-150 M.A	
MR-100-6	NOT CRITICAL	"	"	"	.73	"	"	"	"	"	0-500 M.A	RFA-1
MR-100-7	200-1200 Ω	2.37	.20	1.45	.73	.53	2.17	1.875	1.00	2.37	TMC DWG USE LD-385	ATS-MCU
MR-100-8	1000Ω ± 15%	2.37	.20	1.45	.375	.53	2.17	1.875	1.00	2.37	TMC DWG USE LD-364	SBE-2
MR-100-9	200Ω ± 20%	2.37	.20	1.45	.375	.53	2.17	1.875	1.00	2.37	0-200 M.A Movement	SBE-3
		2.37	.20	1.45	.375	.53	2.17	1.875	1.00	2.37	BASIC 0-500 M.A LD2124	AMC 102

NOTE:

1. TMC Insignia To Be Printed On Dial Face (Except MR-100-7) (Ref: NP-117)
 2. TMC Part No. Must Be Printed On Dial Face.
 3. MFG. Nomenclature Must Not Be Printed On Dial Face.
 4. ACCURACY AT FULL SCALE ± 2%
 5. SPADE TYPE POINTER.
 6. BLACK PHENOLIC CASE WITH MATTE FINISH ON FRONT
- 1/8(.125) DIA.
 4 HOLES REQ'D.

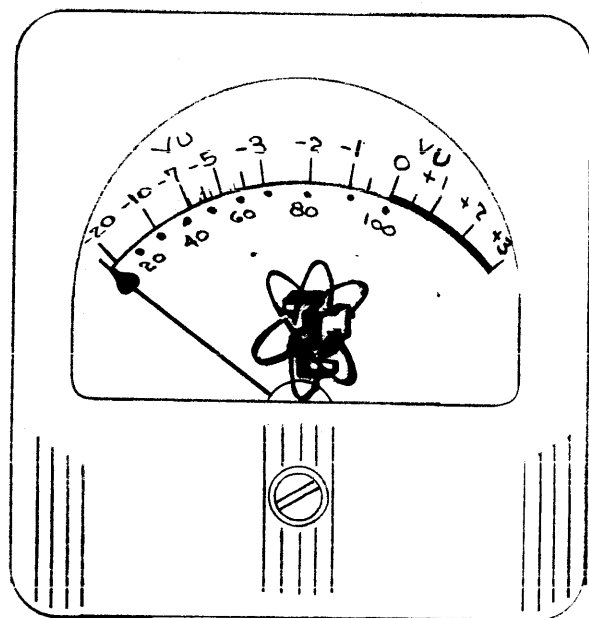
REQ. ITEM	DESCRIPTION	SYMBOL
	THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
	METER, PANEL	
	SQUARE 2 1/2"	
	CDD 3-27-53	
	AND 3-27-53	
	G.T.O	
	FINAL APPROVAL	
	MR-100	

IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

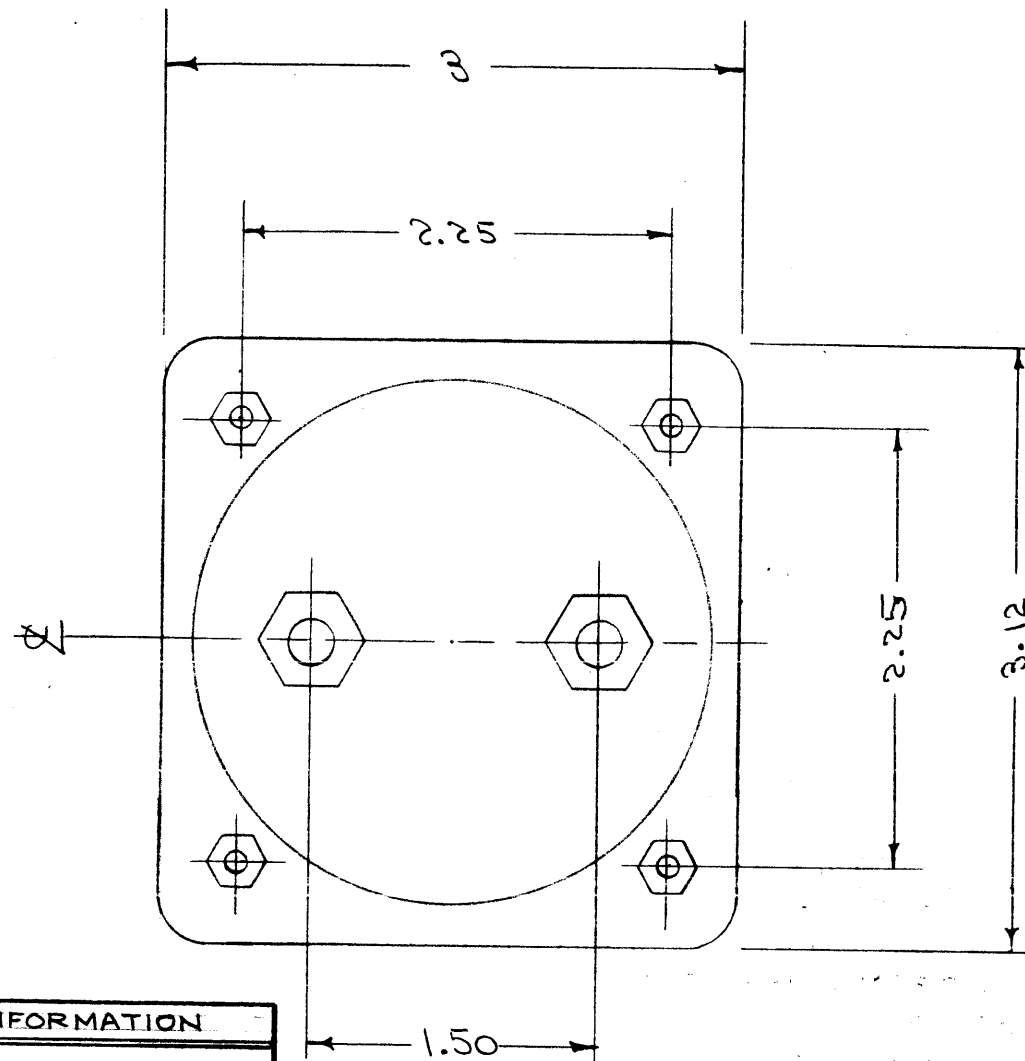
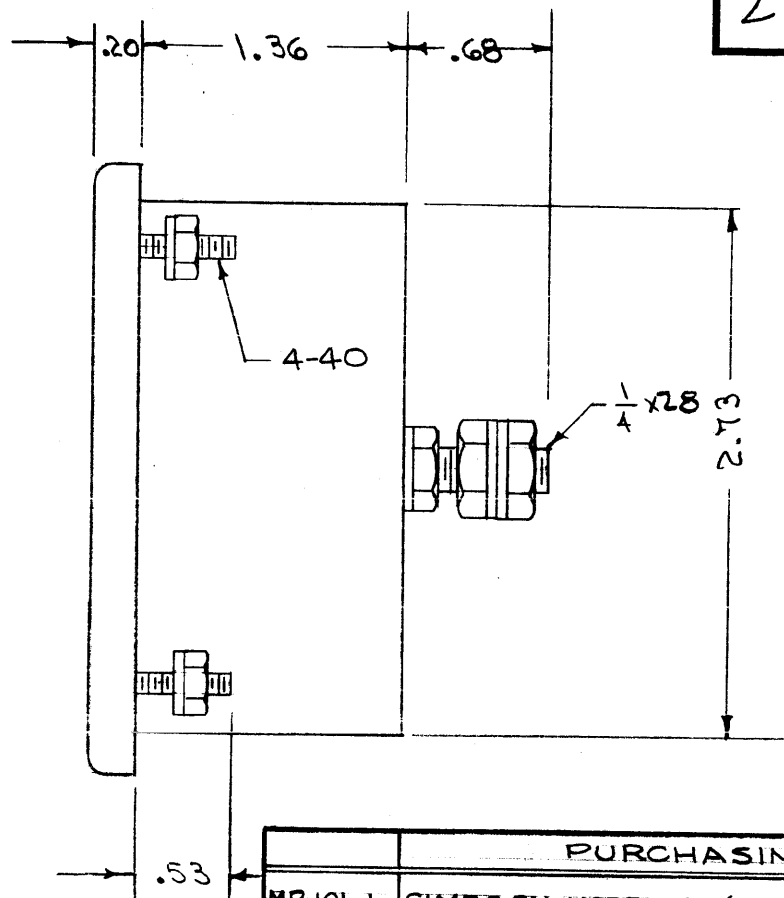
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

STANDARD DRAWING

MR-101 I

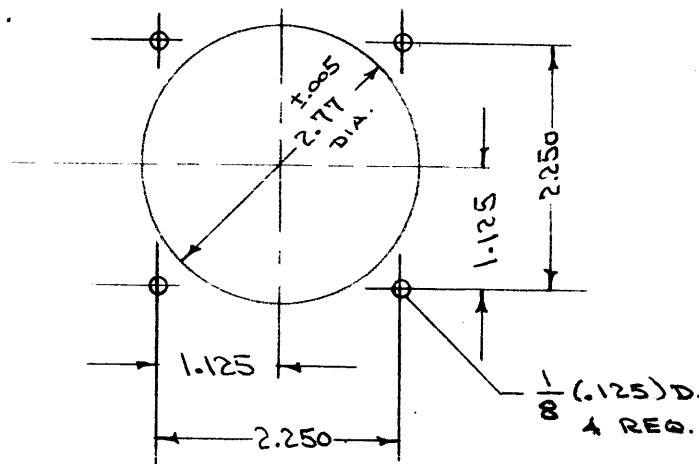


TMC INSIGNIA TO BE PRINTED ON FACE OF METER (REF: NP-117).



PURCHASING INFORMATION	
MR-101-1	SIMPSON MODEL 47, (-20 TO +3VUMETER)
MR-101-2	SAME AS ABOVE BUT SUPPLIED WITH LD-200
MR-101-3	SAME AS ABOVE BUT SUPPLIED WITH LD-199

NOTE: CASE SIZE AS SHOWN. SCALE LENGTH 2.6". INTERNAL IMPEDANCE 3900 Ω. STANDARD DAMPING CHARACTERISTIC. CALIBRATED TO READ .0 dbm WITH 1.228 V. APPLIED TO THE METER WITH 3600 Ω SERIES RESISTANCE.



REF: SIMPSON ELEC. CO. / WESTON ELEC. INST. CO.

T.M.C. No.	SIMPSON No.	WESTON No.	SCALE	REF. DWG.	FIRST USED
MR-101-1	A7 "A" SCALE	301-30A	-20 TO +3 VU	AS SHOWN	DCU
MR-101-2	A7 MODIFIED	301 MODIFIED	-20 TO +3 dbm	LD-200	RSM-2
MR-101-3	A7 MODIFIED	301 MODIFIED	-20 TO +3, -20 TO -7 dbm	LD-199	RSA-2

ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
H	1	MTG STUDS WERE 4-36 THD	6/2/63	9243	✓	JAY	✓
G	2	1/4-28 WAS 1/4-20 THDS	4/3/61	4538	DM	✓	✓
	1	4-36 WAS 4-40 THDS					
F	1	Note added	2/3/59	726	JCB	✓	✓
E	1	REVISION LETTER ADDED MR-101-2 & 3 ADDED	11/18/59	1	JAL	✓	✓

TOLERANCES		SCALE:
ALL OTHERS	DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±	DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.

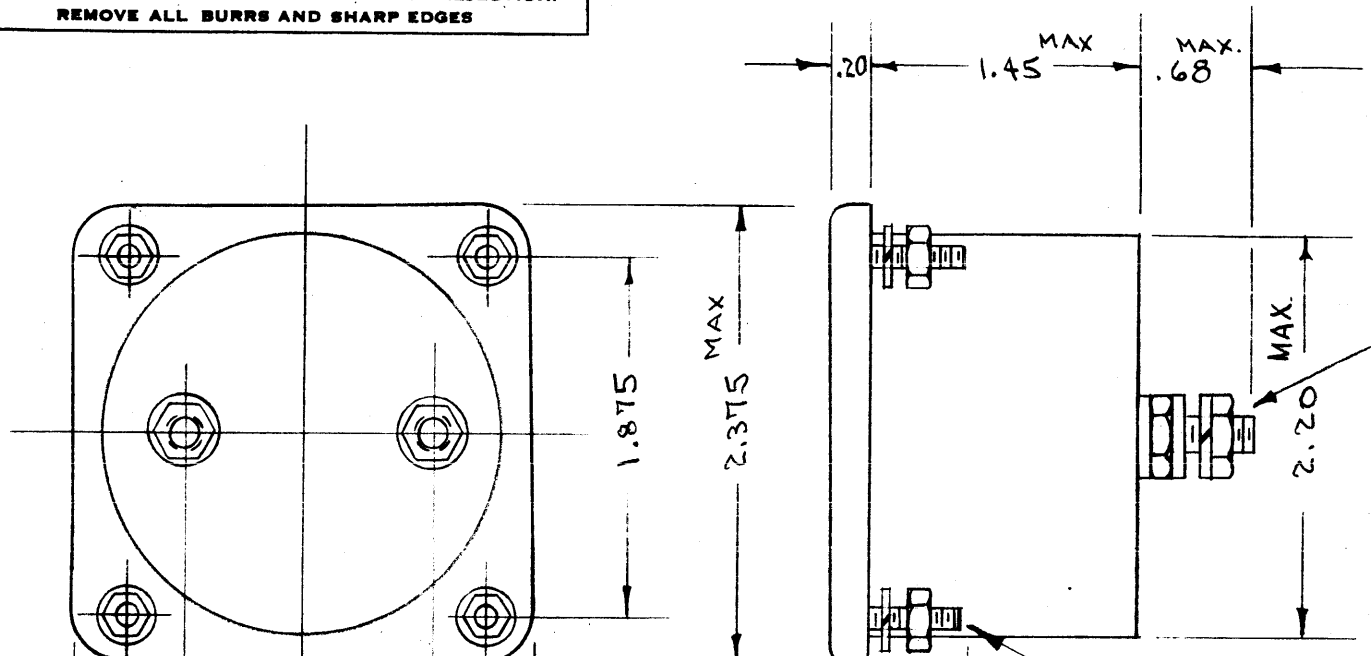
MODEL	PROJECT NO.	ASS'Y. NO.	DATE

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK			
METER, LEVEL INDICATING			
STOCK SIZE			
MATERIAL		WEIGHT PER PC.	
TYPE & TEMPER		C.I.D. 9-29-54	
HEAT TREAT. SPEC.		DRAWN: A.J.J. MECH. DES. APP. WDE	
FINISH & SPEC. NO.		CHECKED: A.J.J. FINAL APPROVAL	
MR-101 I			

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

MR-102 D



- 1/4-28 STUDS 2 REQ.
- 1/4 SPLIT LOCKWASHERS 2 REQ.
- 1/4-28 NUTS 4 REQ.
- 1/4 FLAT WASHERS 2 REQ.

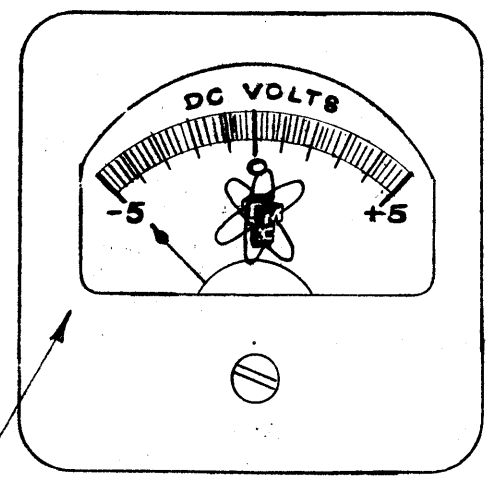
- 4-40 STUDS 4 REQ.
- 4-40 SPLIT LOCKWASHERS 4 REQ.
- 4-40 NUTS 4 REQ.

0-200μA. D.C.
 FULL SCALE DEFLECTION TYPE
 METER TO BE CALIBRATED -5 0 +5
 ZERO CURRENT READING SHALL BE -5
 COIL RESISTANCE 360Ω ± 10%

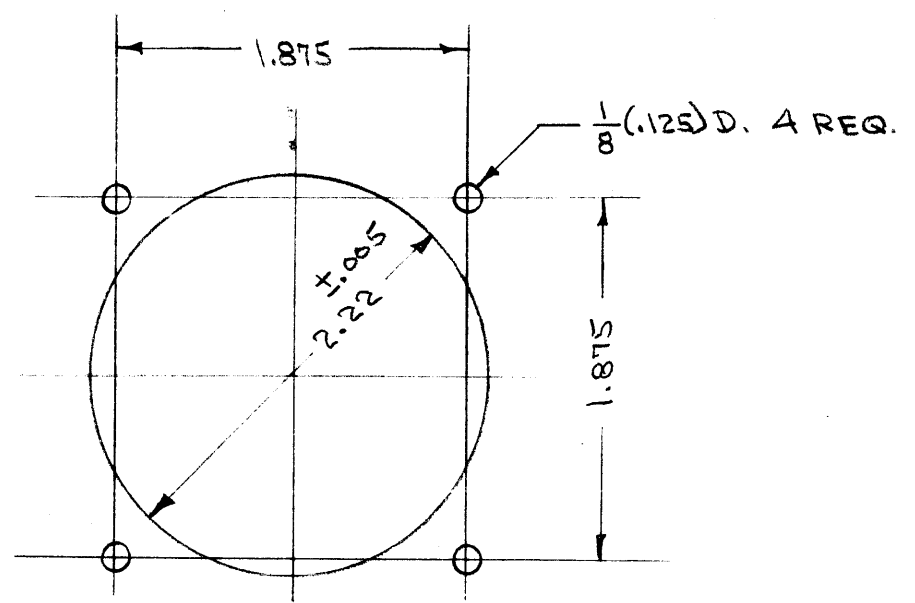
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 MAMARONECK, NEW YORK



WHITE BACKGROUND- BLACK NUMBERS AND POINTER



DRILLING PLAN.

D	CHG'D. 1/4-28 LK. WASH. 4 REQ. ADDED 1/4 FLT. WASH. 2 REQ. & FLT. WASH. TO SIDEVIEW, CHG'D. 4-40 LK. WASH.	7-22-66	16625	RME	<i>[Signature]</i>	<i>[Signature]</i>	
ISSUE	ITEM	CHAN ED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.

TOLERANCES		SCALE: 5/401-44
ALL OTHERS	DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±	DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.

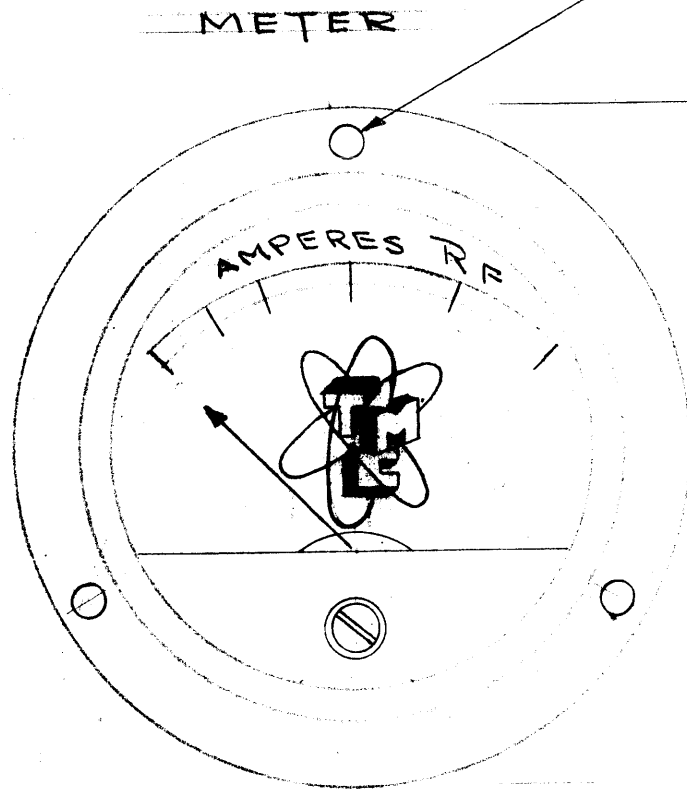
RSD-1	170		8-26-53
MODEL	PROJECT NO.	ASS'Y. NO.	DATE

REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
	#		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
	#	#	METER, PANEL	
	#	#	SQUARE 2 1/2"	
	#	#	C.D.D. 8-26-53	
	#	#	A. J. J.	
	#	#	DRAWN	MECH. DES. APP.
	#	#	ELEC. DES. APP.	
	#	#	CHECKED	FINAL APPROVAL
	#	#	Supersedes	
	#	#	ENG - 1-226	MR-102 D

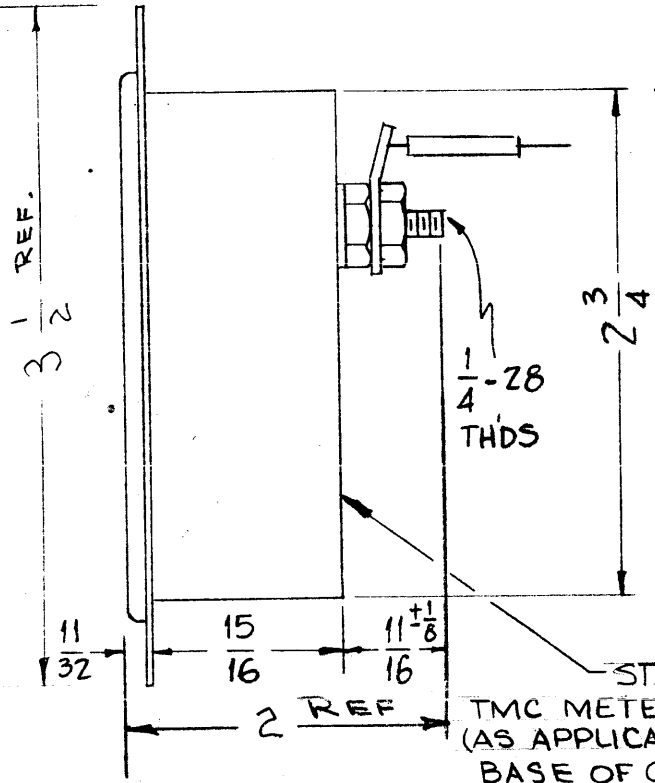
IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

MR-103 F

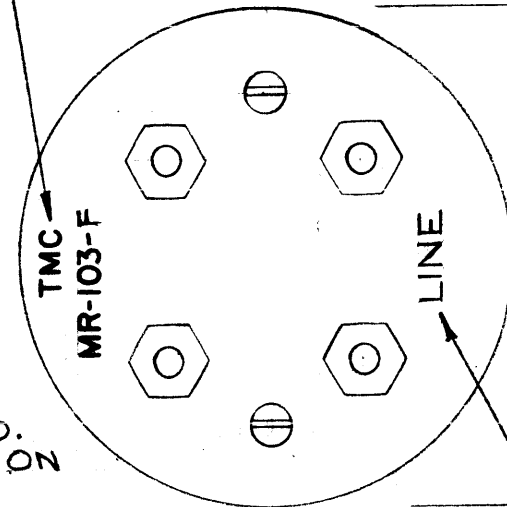


6-32 CLEARANCE
(.150) DIA - 3 Req



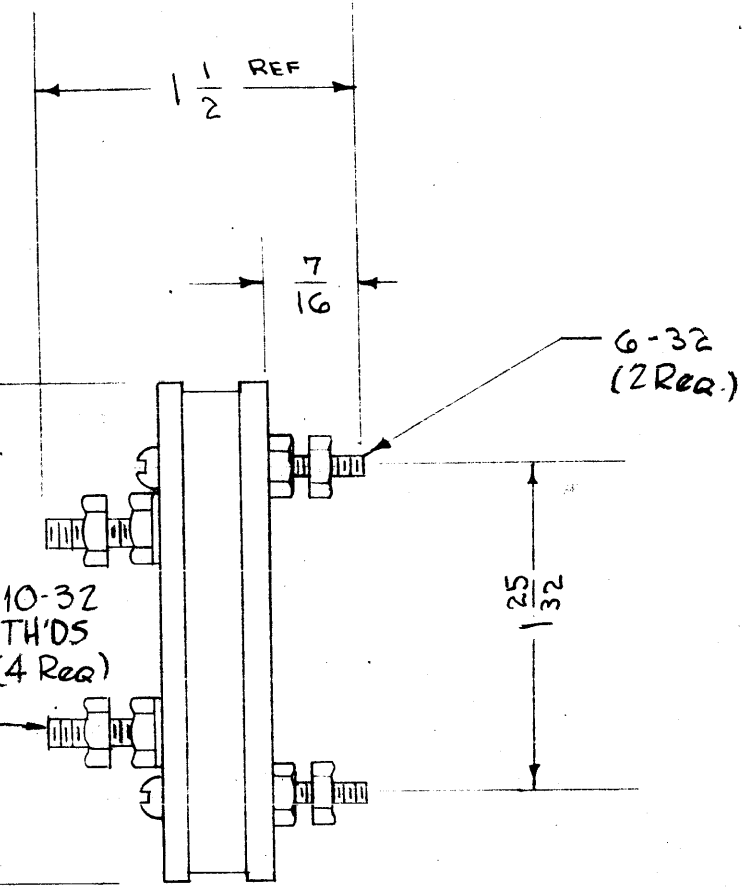
STAMP TMC NO. (AS APPLICABLE)
AS SHOWN (POSITION OPTIONAL)

THERMOCOUPLE



STAMP AS SHOWN 2
1/8 HIGH, WHITE GOTHIC

10-32
THDS
(4 Req)



STAMP
TMC METER NO.
(AS APPLICABLE) ON
BASE OF CASE

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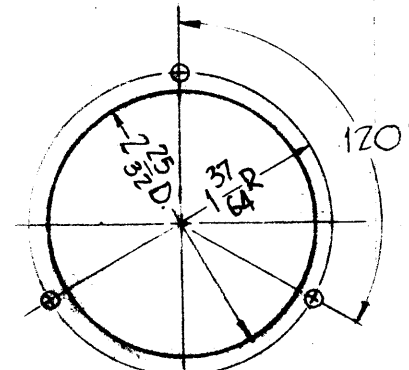
Property of:

THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, NEW YORK

METER	USE THEROCOUPLE (SEE NOTE)	METER SCALE RF AMPERE	METER MOVEMENT
MR-103-1	MR-103-2	0-3	14 MILLIVOLTS 5.5 MILLIAMPS
MR-103-3	MR-103-4	0-5	" " "

NOTE:

MOUNTING HARDWARE & 2 LEADS (ONE BLACK, ONE RED/BLACK) FURNISHED BY MANUFACTURER.
LENGTH OF LEADS (END OF LUG TO END OF LUG) IN INCHES INDICATED BY NUMBER AFFIXED TO PART NUMBER OF THERMOCOUPLE E.G. MR-103-4-30.00 = 30" LEADS
MR-103-4-7.75 = 7 3/4" LEADS



METER
DRILLING
PLAN

③ (.150) DIA. HOLES, EQUALLY SPACED 120°
APART ON A 1-37/64 R.

ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
F	1	MTG. NOTE DELETED, TMC PART NO ADDED, NOTE REVISED	8-20-63	9816	AK	YAB	WJB
E	2	10-32 thd not added to thermocouple	3-31-61	4543	RU	QCB	9RY
D	2	150 DIA added to meter holes	10/1/59	1356	DM	JL	...
C	1	added line stamping on couple	7/23/61	3	JAB
B	1	CHART ADDED	11/11/56	2	JAB
A	1	LEAD LENGTH = 30" added	1-29-54	1	G.D.D.	JAB	...

TOLERANCES		SCALE: 5:401-68 (341-T)	
ALL OTHERS	DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±	DRILL PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.	

2	TAC-1	132	A-715	1-20-54
REQ PER UNIT	MODEL	PROJECT NO.	ASSY. NO.	DATE

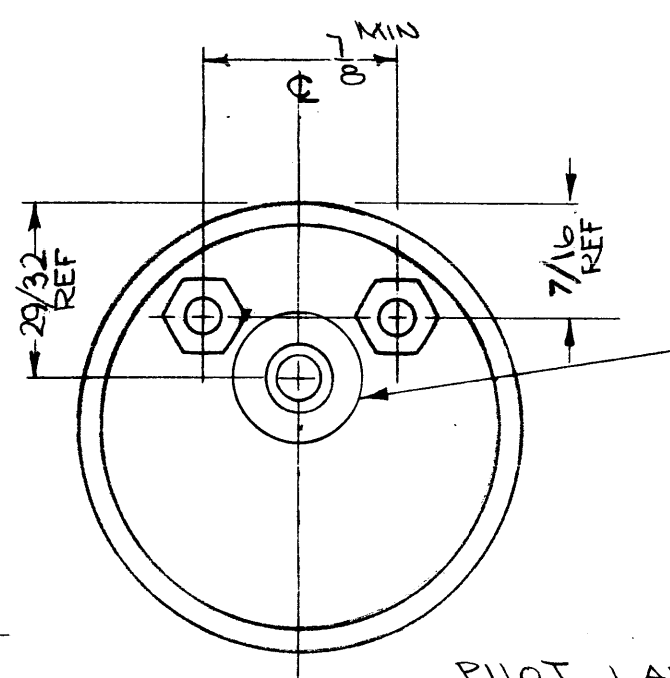
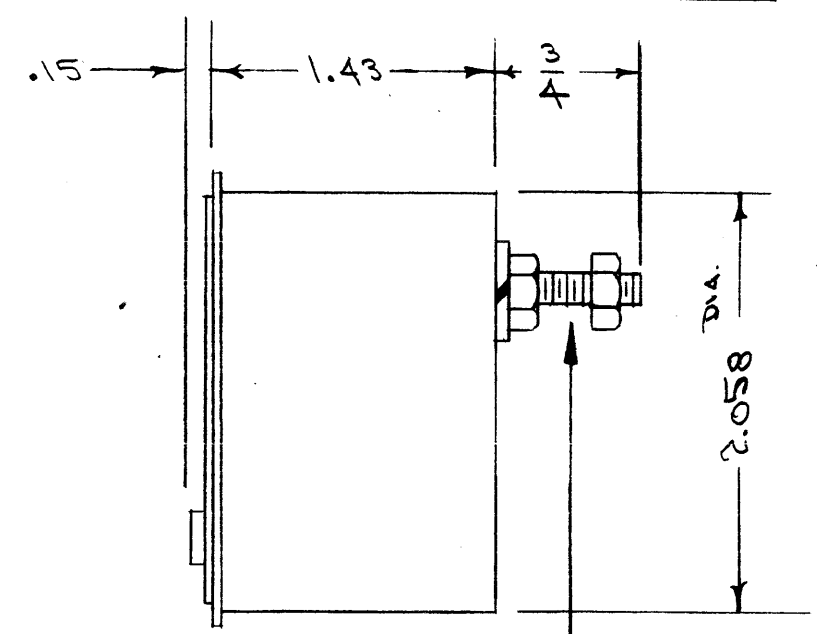
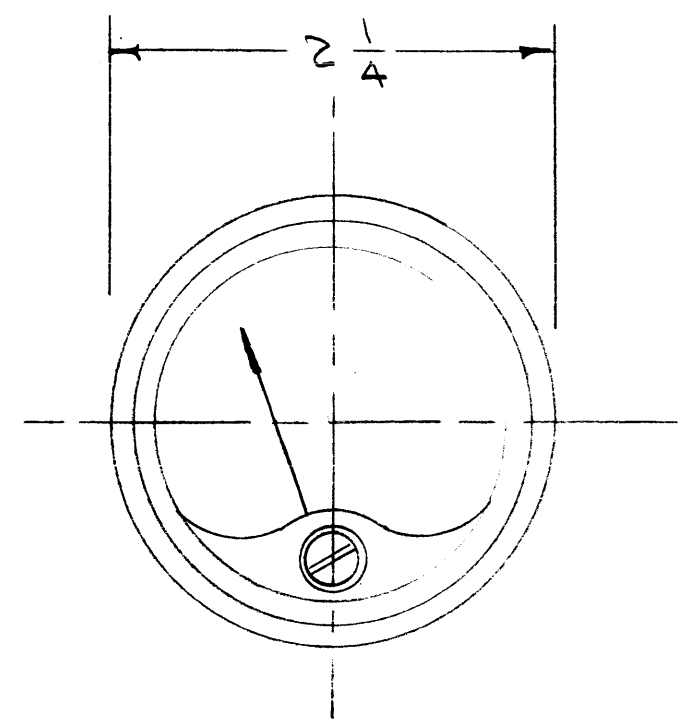
REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
			THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
			METER, R.F.	
			W/EXTERNAL THERMOCOUPLE	
			C.D.D. 10-29-53	...
			DRAWN	...
			CHECKED	...
			FINAL APPROVAL	MR-103 F

STANDARD DRAWING

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

MR-107 H



POINTER - WHITE

ELECTRICAL SPECS
 CURRENT - 1 MA. ± 2% FULL SCALE
 RESISTANCE - 125 Ω ± 10%
 RESPONSE TIME - 2 SEC.
 DAMPING FACTOR - 2.5

PLUG BUTTON

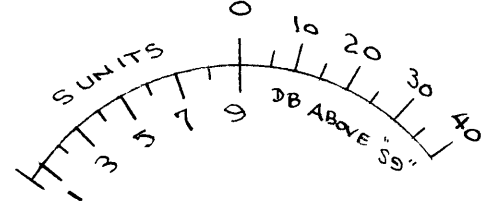
PILOT LAMP SOCKET ASSEMBLY
 NOT TO BE SUPPLIED BY METER MANUFACTURER
 (USE TMC SOCKET TS-127).

- 10-32 THD STUD - 2 REQ
- 10-32 HEX NUT, 5/16 x 1/8 - 4 REQ
- SPLIT LOCKWASHER - 2 REQ

TMC No's
 NTH1032BN10 - NUT, HEX
 LWS10MRN - LOCKWASHER, SPLIT

THIS SECTION
 WHITE
 ILLUMINATED

THIS SECTION
 ILLUMINATED



BLACK BACKGROUND

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Property of:
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 MAMARONECK, NEW YORK

REF: 5401-54
 TYPE 52 RM - (DIAL FACE 52 RMS)

ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
H		ELEC. SPECS ADDED DIA. SPECIFIED. ELEC SPEC ADDED. DIAL ADDED 2401-54 WAS MARKED ELEC INST	4-12-66	16078	WMO	[Signature]	[Signature]
G	2	STUDS & HDWR CLARIFIED DIMS. 437 E. 903 ADDED	5-22-63	9063	[Signature]	[Signature]	[Signature]

TOLERANCES		SCALE:
ALL OTHERS	DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±	DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.

REQ. PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE
1	GPR	297		4-7-55

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
#		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
#		METER, "S" TYPE	
#		G.P.R.	
#		CDS. 4-7-55	[Signature]
#		DRAWN	ELEC. DES. APP. MECH. DES. APP.
#		CHECKED	FINAL APPROVAL
#			MR-107 H.

IF IT IS FOUND DESIRABLE TO CHANGE ANY TOLERANCE OR OTHER DETAIL SPECIFIED ON THIS DRAWING NOTIFY THE PURCHASER PROMPTLY.

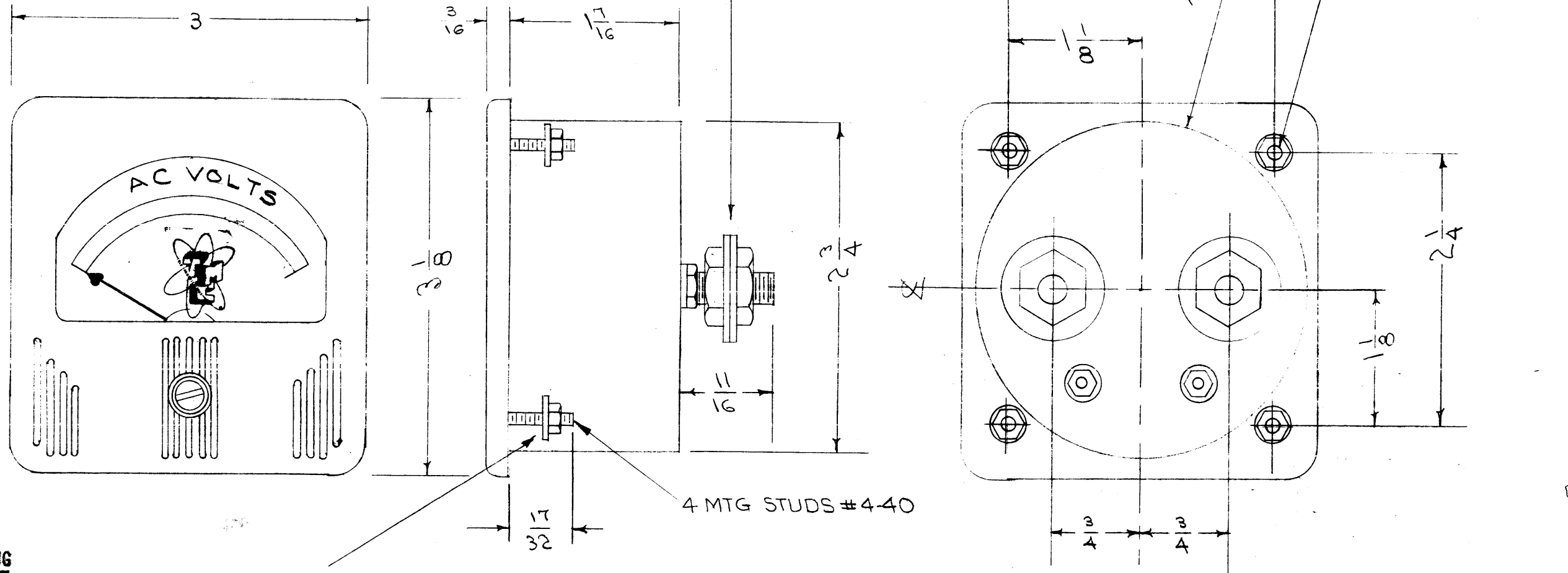
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

RANGE
0 - 1.5
0 - 3
0 - 5
0 - 8
0 - 10
0 - 15
0 - 25
0 - 50

RANGE
0 - 100
0 - 150
0 - 200
0 - 250
0 - 300
0 - 500
0 - 150

MR-108 B

STANDARD DRAWING



NOTICE TO PERSONS RECEIVING THIS DRAWING

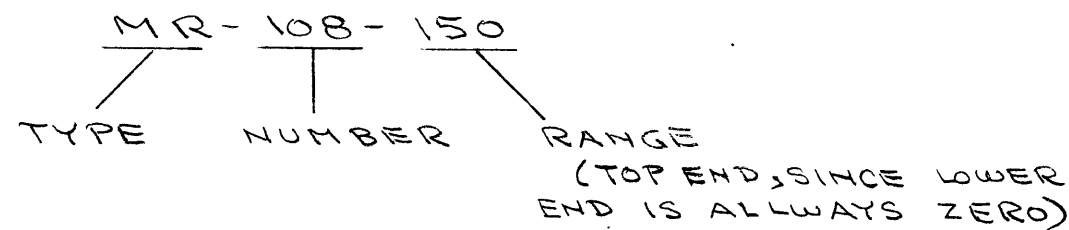
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MAMARONECK, NEW YORK

LOCKWASHERS & NUTS FURNISHED BY MFR.

TYPE DESIGNATION TO BE IN FOLLOWING FORM



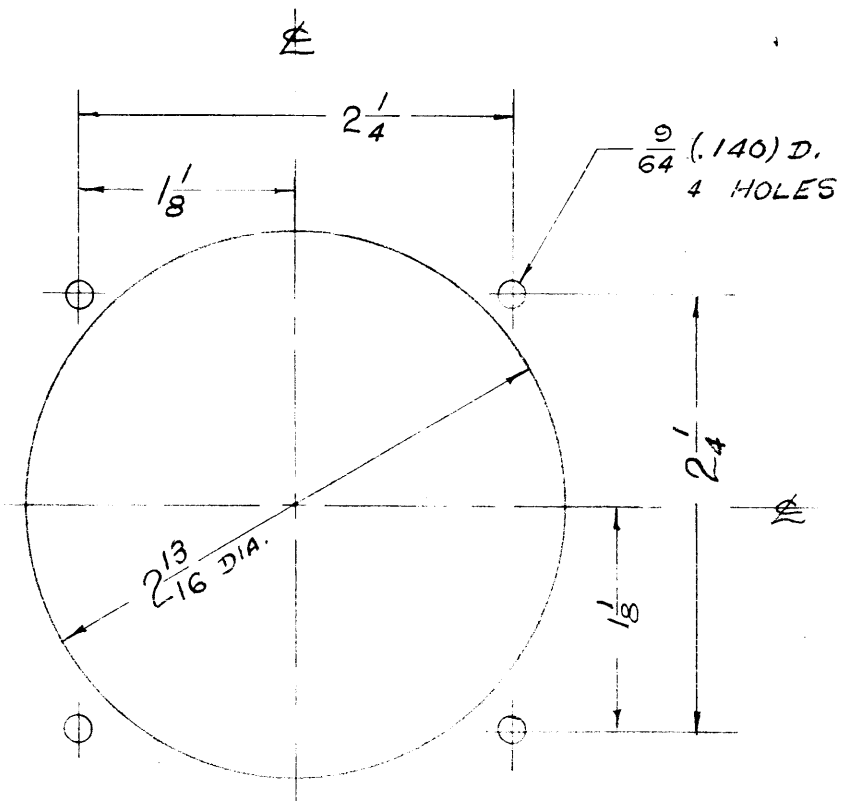
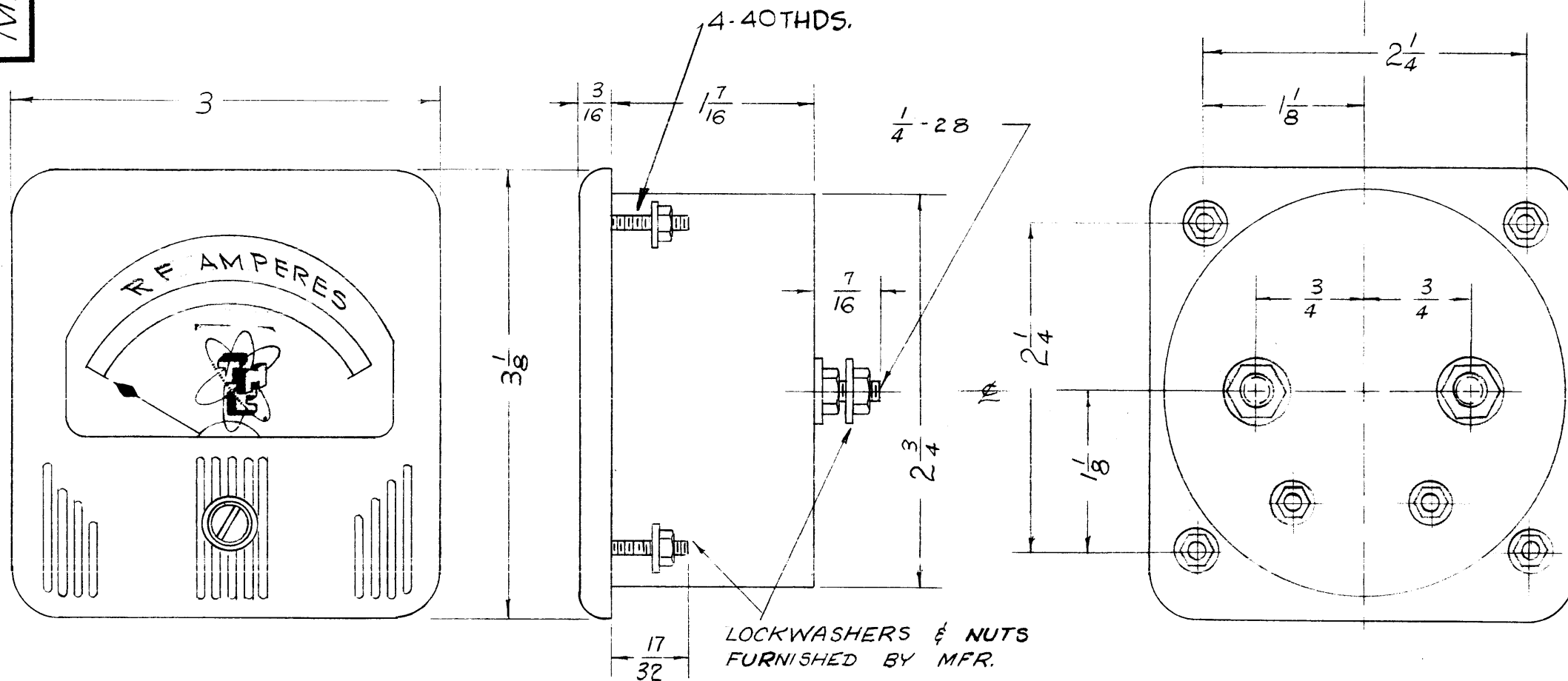
REF: SIMPSON MODEL 57 AC VOLTMETER

REQ.	ITEM	PART NO.	DESCRIPTION	SYMBOL
			THE TECHNICAL MATERIEL CORP.	
			MAMARONECK, NEW YORK	
			AC VOLTMETER	
			3 1/2"	
			CDD 9-9-55	
			DRAWN	
			16 9-10-55	
			HEAT TREAT. SPEC.	
			CHECKED	
			FINAL APPROVAL	
			MR-108 B	
			FINISH & SPEC. NO.	

ISSUE	ITEM	CHANGED FROM	DATE	CN. NO.	DRAFTS	CHECKER	ENG. APP.
B	1	MTG STUD NOTE ADDED	6-12-63	9243			

TOLERANCES		SCALE:	REQ. PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE
ALL OTHERS	DEC. DIM. ± FRAC. DIM. ± ANGULAR DIM. ±	DRILL, PUNCH, COMMERCIAL STOCK SIZES AND MANUFACTURERS TOLERANCES ARE NOT INCLUDED.					

STANDARD DRAWING



DRILLING PLAN

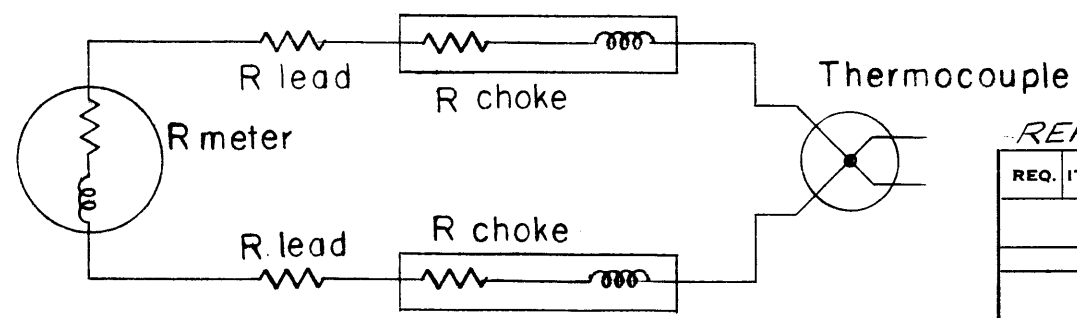
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ELECTRICAL SPECIFICATIONS

MOVEMENT 0-8 AMPS. DESIGNED FOR USE WITH EXTERNAL THERMOCOUPLE (TH-100-8). INTERNAL METER RESISTANCE MUST BE ALTERED TO ACCOMODATE EXTERNAL CIRCUIT AS SHOWN BELOW.



$2(R \text{ lead}) + 2(R \text{ choke}) = .61 \Omega$

REF: SIMPSON MODEL 37 RF AMMETER

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
C	1	MTG STUDS WERE 4-36THD	6/2-63	9243			
B	2	1/4-28 WAS 1/4-20	4/3/61	4538	DM	JCB	
	1	4-36 THDS. added					
A	1	TMC INSIGNIA ADDED	5/16/56	1	JAG	WSD	

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP.			
MAMARONECK, NEW YORK			
RF AMMETER			
MATERIAL		PC 11-55	JAG
TYPE & TEMPER		HEAT TREAT. SPEC.	A.J.I.
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.

TOLERANCES		SCALE:
DEC. DIM. ±		MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES
FRAC. DIM. ±		
ANGULAR DIM. ±		

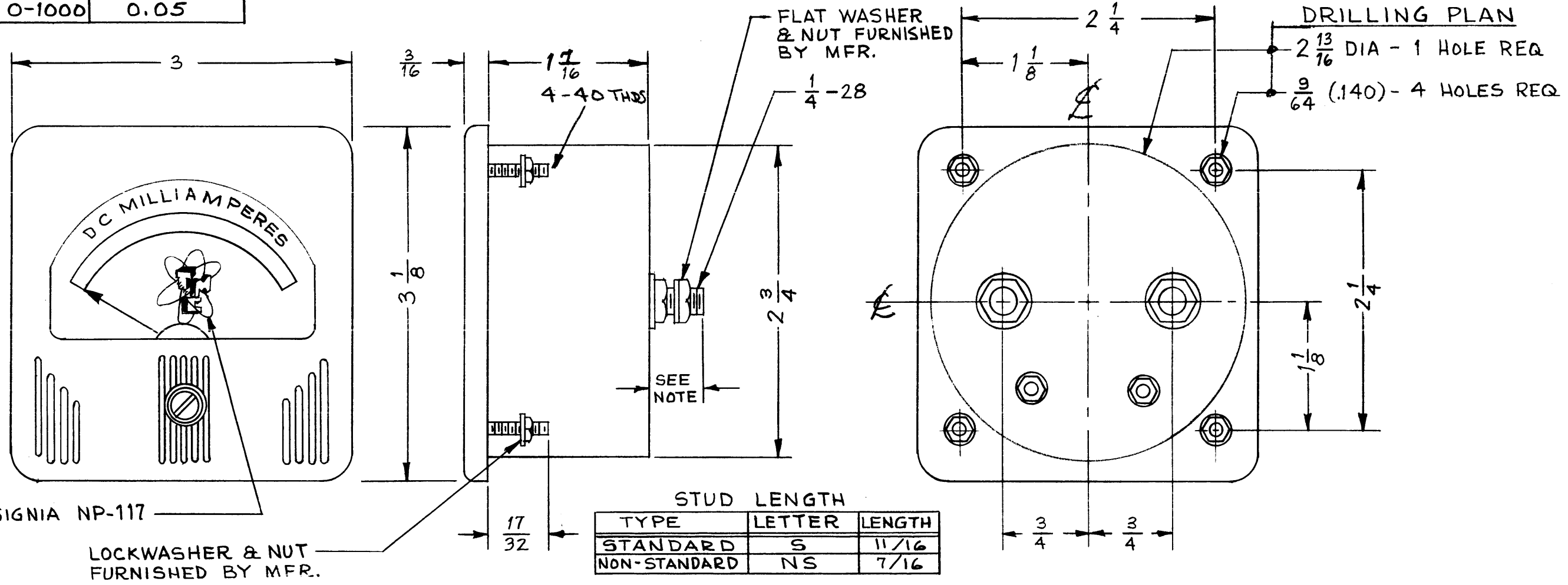
REQ. PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE

RANGE	APPROX. RES. Ω	RANGE	APPROX. RES. Ω
0-1	46	0-75	2.0
0-1.5	46	0-100	1.5
0-3	46	0-150	1.0
0-5	23	0-200	0.75
0-10	2.2	0-250	0.60
0-15	2.2	0-300	0.50
0-20	2.2	0-500	0.30
0-25	6.0	0-750	0.20
0-50	3.0	0-1000	0.05

MR-110

REVISIONS					
SYM	DESCRIPTION	DATE	E.M.N. NO.	DRAFT	CHKD APPD
D	REF CODE & INSIGNIA ADDED	7-17-63	9559		J.P. JDB
D	RES. CHART ADDED & SPECS				
D	REDRAWN W/O CHANGE LAST REV. WAS D	11-28-65			J.P. JDB

- SPECS:**
- 1- CASE:- MOLDED BLACK PHENOLIC METER FRONT MATTE FINISH
 - 2- ACCURACY AT FULL SCALE $\pm 2\%$
 - 3- CALIBRATED FOR NON-MAGNETIC PANEL. SPADE TYPE POINTER



STUD LENGTH

TYPE	LETTER	LENGTH
STANDARD	S	11/16
NON-STANDARD	NS	7/16

NOTE:
INDICATE POSITIVE POLE NEAR THE APPROPRIATE TERMINAL.

TYPE DESIGNATION TO BE IN FOLLOWING FORM

MR - 110 - 150 - S

TYPE NUMBER RANGE (MA) STUD LENGTH (TOP END SINCE LOWER END IS ALWAYS ZERO) R INDICATES DECIMAL POINT
EXAMPLE - 1RS = 1.5

Q'TY./UNIT	MODEL USED ON	ASSY. NO.
SCALE	CODE	S401-44

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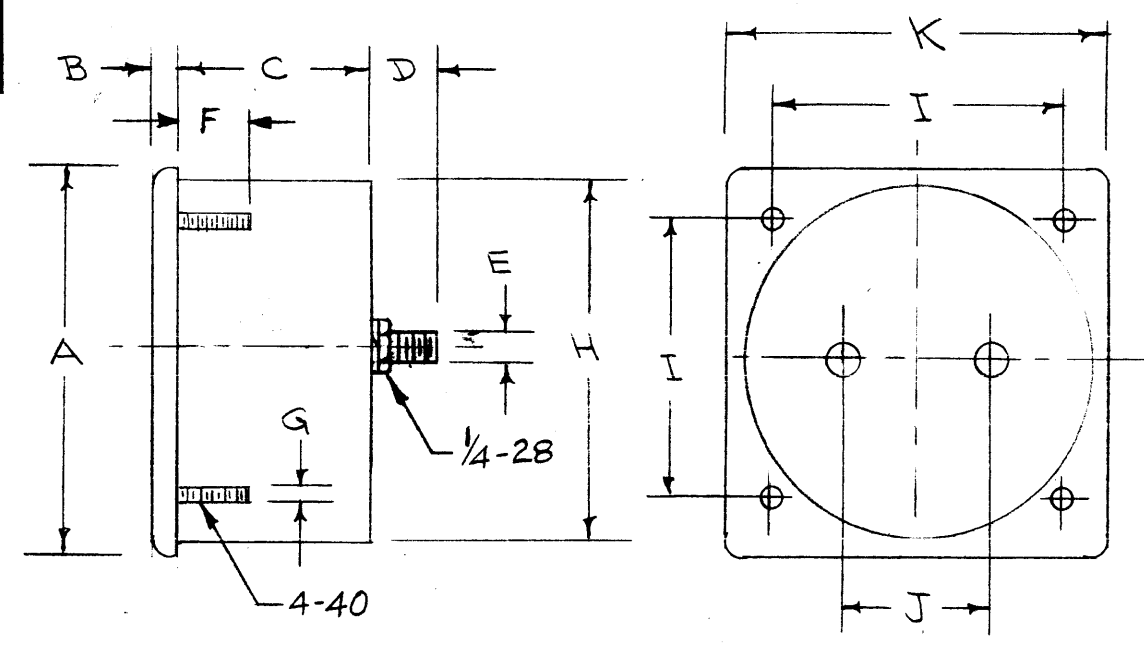
REQ'D.	ITEM	PART NUMBER	DESCRIPTION	SYMBOL
LIST OF MATERIAL				
MATERIAL		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK		
FINISH		TITLE DC MILLIAMMETER		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE CHEMICALLY APPLIED OR PLATED FINISHES		DRAWN PB 9-12-55	DATE	FINAL APPROVAL A.J.J. [Signature]
		CHECKER GOS 9/12/55	DATE	DATE 11/24/65
DECIMALS .X \pm .05 .XX \pm .01 .XXX \pm .05		ELECT. DES. O.I.P.		DATE
FRACTIONS $\pm 1/64$ ANGLES $\pm 0^{\circ} 30'$		MECH. DES.		DATE
TOLERANCES				SHEET
				REV. LTR.

NOTES

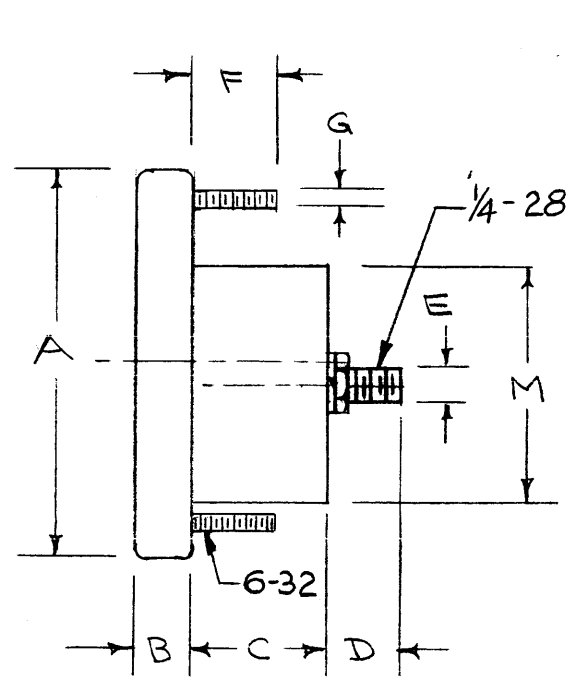
STANDARD DRAWING

MR-III

LEVEL	A	B	C	D	E	F	G	H	I	J	K	L	M
27	3.12	.20	1.36	.68	.25	.53	.11	2.73	2.25	1.50	3.00	—	—
29	4.20	.60	1.00	.68	.25	.65	.14	2.00	4.66	1.50	.24	1.78	2.75
127	2.37	.20	1.45	.68	.25	.54	.11	2.17	1.87	1.00	2.37	—	—



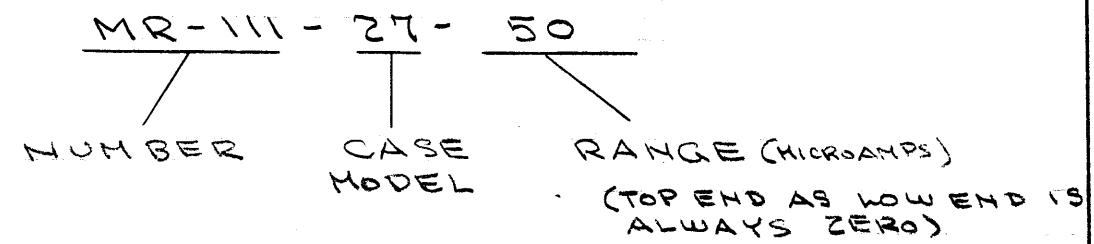
CASE MODELS 27 & 127



CASE MODEL 29

MICROAMPERE RANGE
0 - 25
0 - 50
0 - 100
0 - 200
0 - 500

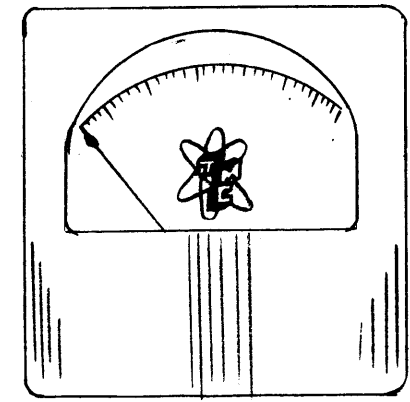
TYPE DESIGNATION TO BE IN FOLLOWING FORM.



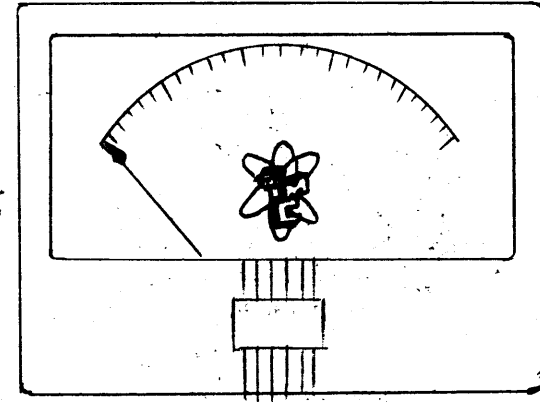
ACCURACY AT FULL SCALE ± 2%
 CALIBRATED FOR NON-MAGNETIC PANEL
 CASE FRONT BLACK MATTE FINISH.
 SPADE TYPE POINTER

NOTE: HARDWARE SUPPLIED BY MFR. FOR EACH MODEL:
 4- MOUNTING NUTS & FLAT WASHERS
 4- TERMINAL NUTS
 2- TERMINAL SPLIT LOCKWASHERS
 2- TERMINAL FLAT WASHERS

NOTE: TMC INSIGNIA TO BE PRINTED ON DIAL FACE AS SHOWN (REF - TMC DWG. NP-117)



MODEL 27 & 127



MODEL 29

NOT TO SCALE

ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
C	1	1/4-28, 6-32, 4-40 & NUTS & LOCKWASHERS ADDED TO PICTORIAL HARDWARE NOTE ADDED	4/23/64	1274	AM	@	R
B	2	ADDED NOTE CODE "S 401-44" REMOVED REF. SIMPSON	7-12-63	9563	AK	RF	RF
A	1	TMC INSIGNIA INFO. ADDED	10/13/59	1413	VB	RF	AMP

TOLERANCES SCALE: S 401-44

DEC. DIM. ± MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.
 FRAC. DIM. ± REMOVE ALL BURRS AND SHARP EDGES
 ANGULAR DIM. ±

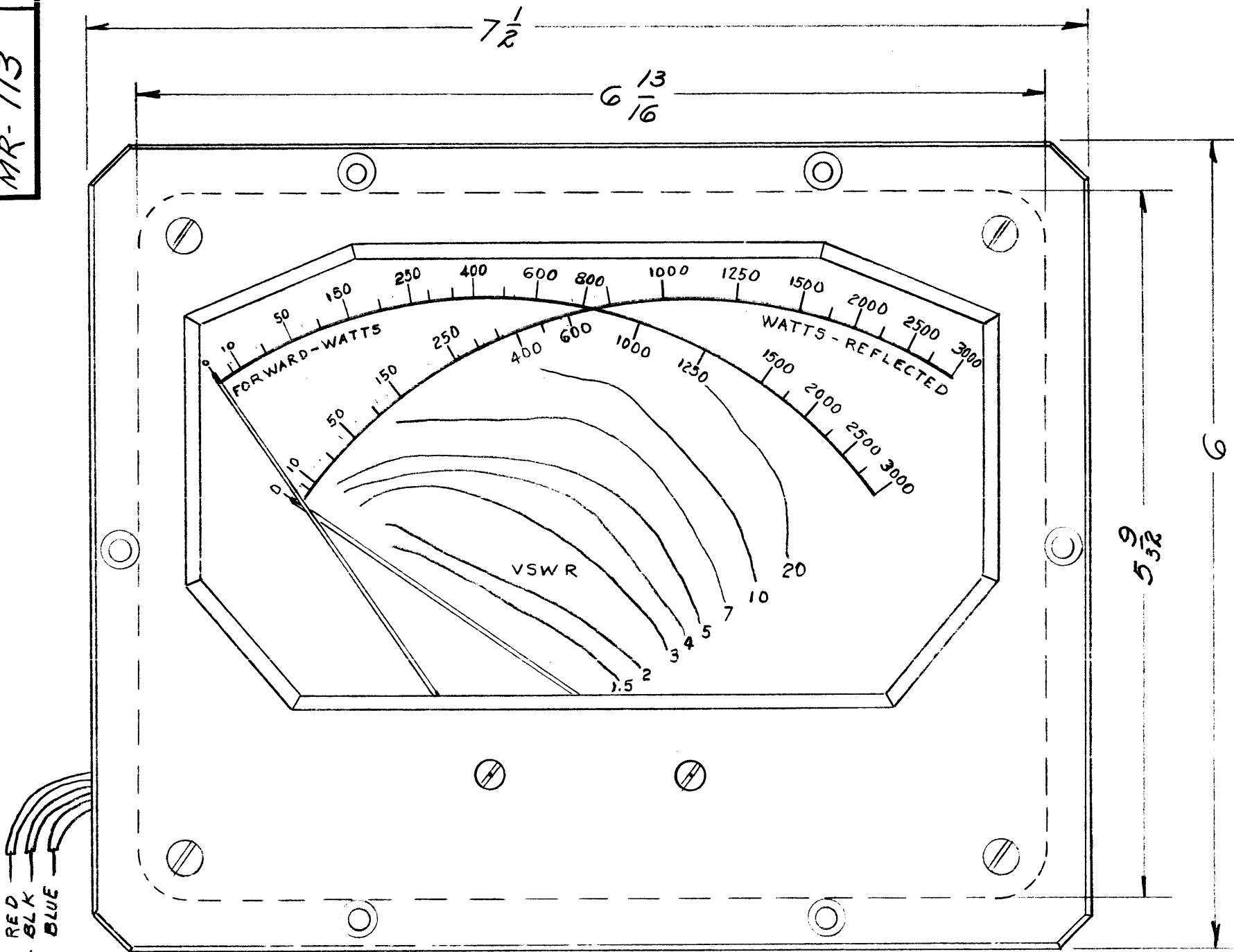
REQ. PER UNIT	MODEL	PROJECT N.	A S'Y. NO.	DATE

USED ON

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK			
STOCK SIZE			
METER, D.C.			
MICROAMPERE			
MATERIAL			
TYPE & TEMPER		HEAT TREAT. SPEC.	
DRAWN		CHECKED	FINAL APPROVAL
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.

MR-III C

MR-113



RED
BLK
BLUE

LEAD LENGTHS APPROX 6" LONG

MECHANICAL DATA

CASE — BLACK BAKELITE
 FRONT PLATE — ALUMINUM, BLACK GLOSS ENAMEL FINISH
 SCALE COLORS —
 FORWARD WATTS — BLACK
 REFLECTED WATTS — RED
 V.S.W.R. — BLUE

ELECTRICAL DATA

RESISTANCE -
 LEADS BLK/BLUE - 1700 Ω ± 20%
 LEADS BLK/RED - 1700 Ω ± 20%
 RANGE - 0 - 90 AMPS ± 2%

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ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
TOLERANCES		SCALE:		8A-1509			
DEC. DIM. ±		MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES					
FRAC. DIM. ±							
ANGULAR DIM. ±							

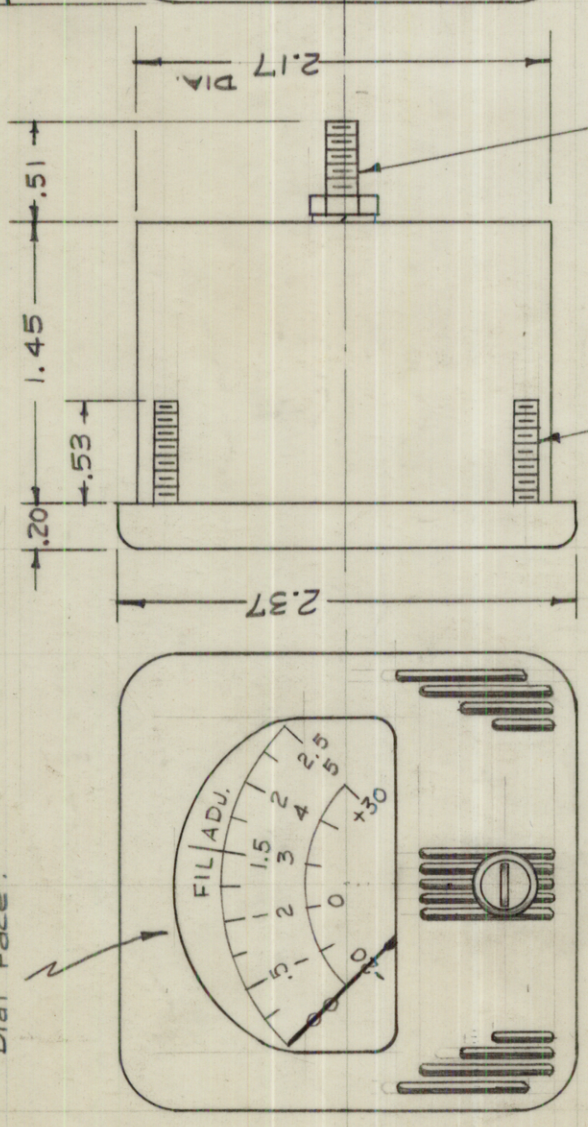
1	SWR-3000 RM	5-21-58
REQ. PER UNIT	MODEL	DATE
	PROJECT NO.	ASS'Y. NO.
USED ON		

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
STOCK SIZE		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
MATERIAL		METER, STANDING WAVE RATIO (0-3000)	
TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.

CUST DNG

MR-114

See Details at right for Dial Face.



Note - Meter Front must be a black Matt Finish, with Line Design as shown.

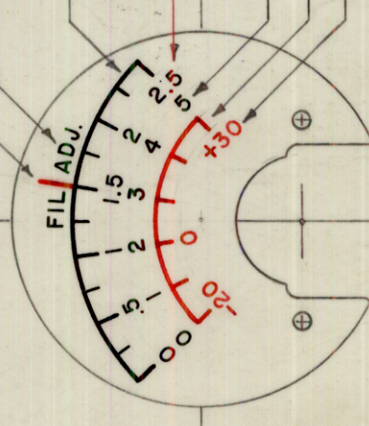
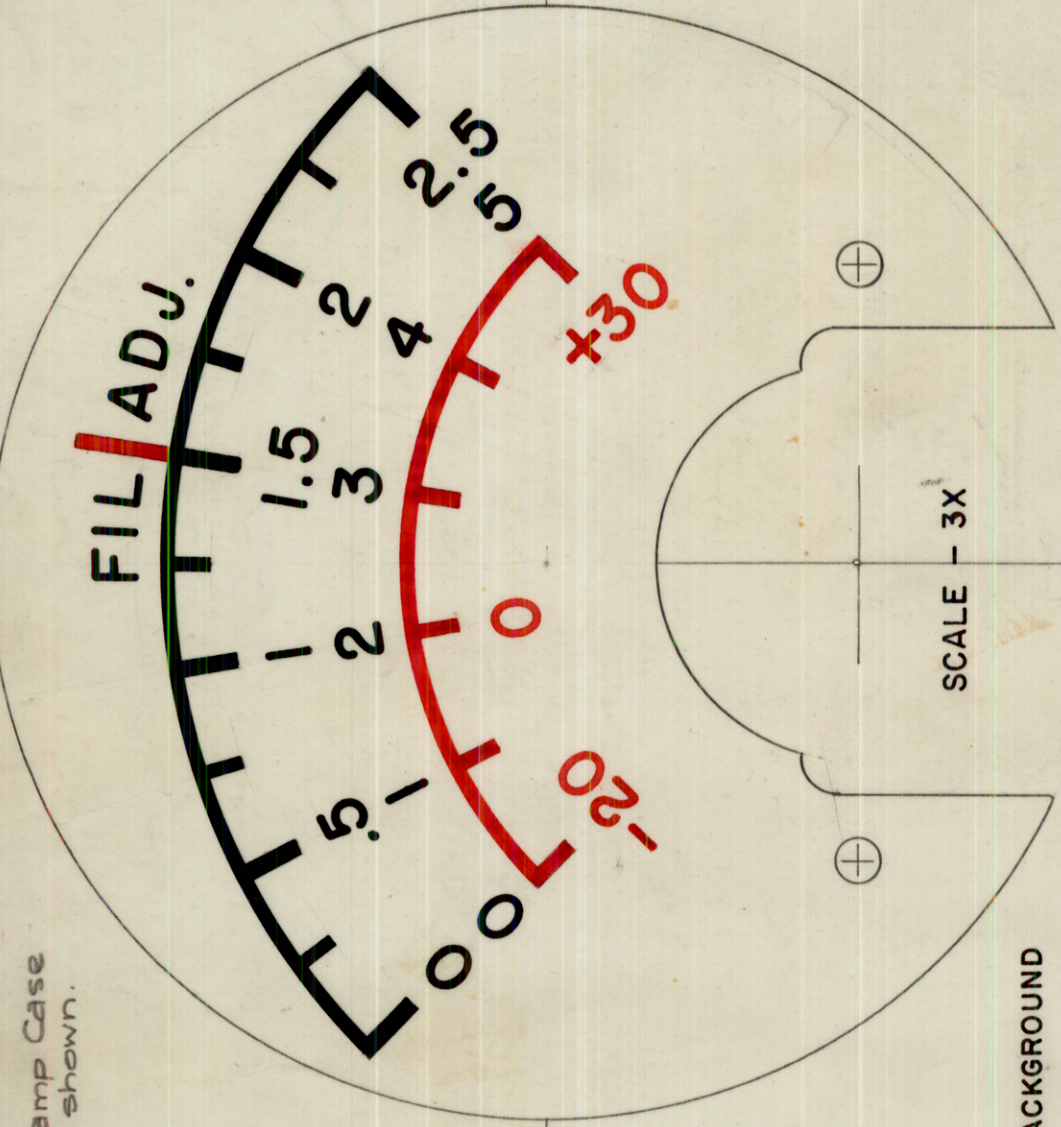
Standard Simpson # 127 Case

Specifications:
Case - Standard Simpson No. 127
Movement - 0-50 Micro-Amp.
Approx. Resistance - 2000 ohms.
Pointer Type - Knife Edge
All necessary Mounting & Terminal Hardware Supplied by Mfg.

All letters & numerals to be the fine line type.

WHITE BACKGROUND

"FIL ADJ" LINE - RED (TO TOP OF SCALE DIRECTLY BELOW)
FIL ADJ. - BLACK
SCALE - BLACK
NUMBERS "0 TO 2.5" - BLACK
NUMBERS "0 TO 5" - BLACK
SCALE - RED
NUMBERS "-20, 0, +30" - RED



FULL SCALE

REF: SIMPSON METER NO.

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
		MULTI-METER, DC MICROAMP (M201 RFA-1)	
	LG 7-16-58	CHECKED	FINAL APPROVAL
		DRAWN	
		ELEC. DES. APP.	
		MECH. DES. APP.	
		FINISH & SPEC. NO.	
			MR-114
			A

REQ. PER UNIT	1	MODEL	RFA-1	PROJECT NO.	PAL-350	DATE	7-16-58
USED ON							

ISSUE ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
A 1	MTG STUDS WERE 4-36 THD	6-12-63	9243			
TOLERANCES						
SCALE: MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES						
DEC. DIM. ±						
FRAC. DIM. ±						
ANGULAR DIM. ±						

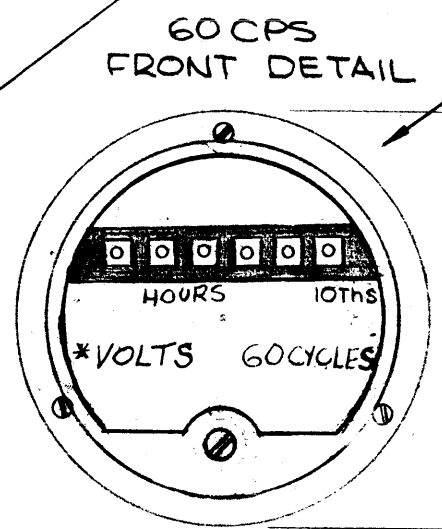
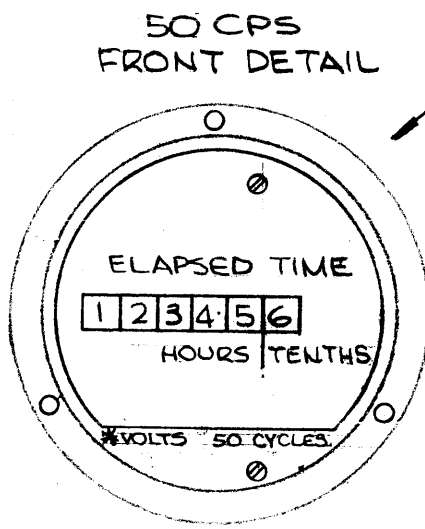
MR 125 F

TMC PART NO. (SEE NOTE)	OPERATING VOLT. 50 OR 60 CYCLES AC
MR 125-1	110-125 (120)
MR 125-2	220-250 (240)

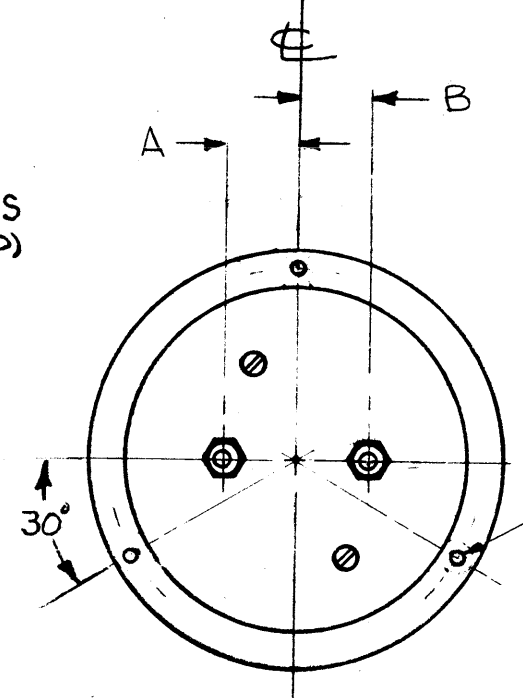
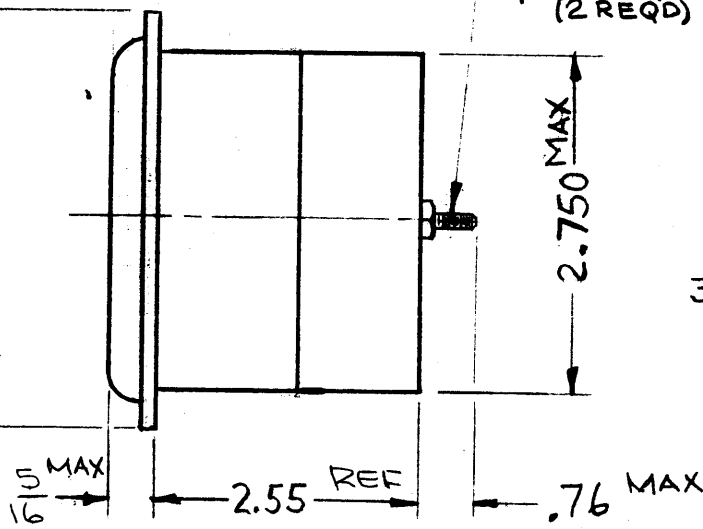
	A	B
50 CPS	.50	.50
60 CPS	.75	.75

HRS WHITE NUMERALS
ON BLACK BKGRD, TENTHS
RED DIGIT ON WHITE BKGRD

BLACK NUMERALS
ON WHITE BKGRD



BEZEL DESIGN
SHOWN AS REF. ONLY



3 HOLES .16 DIA. REF
120° APART ON 1.58 R

*-INSERT NOMINAL OPERATING VOLTAGE

SPECIFICATIONS

REGISTERS: 1/10 HOUR STEPS TO 99999.9

CASE TYPE 8 MOLDED BAKELITE

OPERATING TEMP: -55°C TO +85°C.

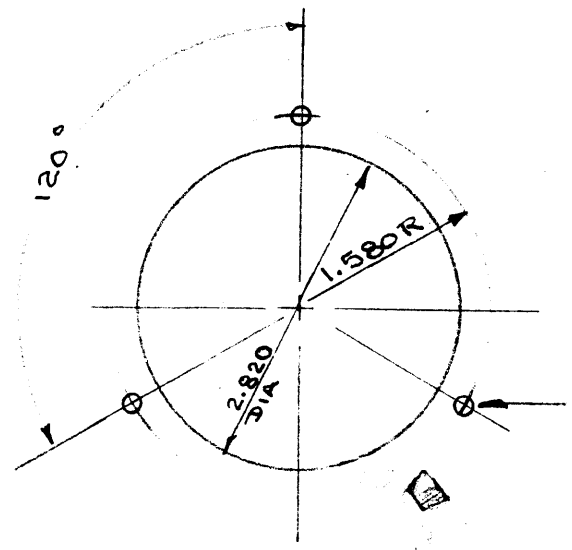
OPERATING VOLTAGE: SEE CHART ABOVE.

NOTE: IF 50CPS METERS ARE REQ, ADD SUFFIX
-50 TO P/N. IE MR125-2-50

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.150 DIA
3 HOLES, 120° O.C.

MOUNTING DETAIL

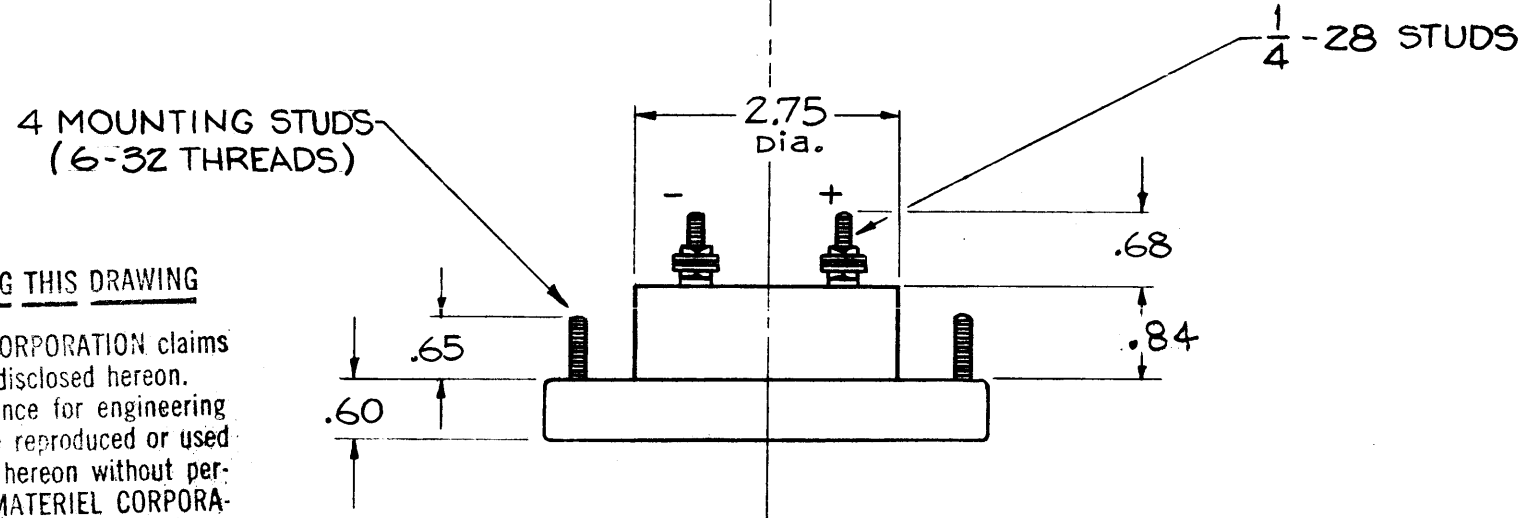
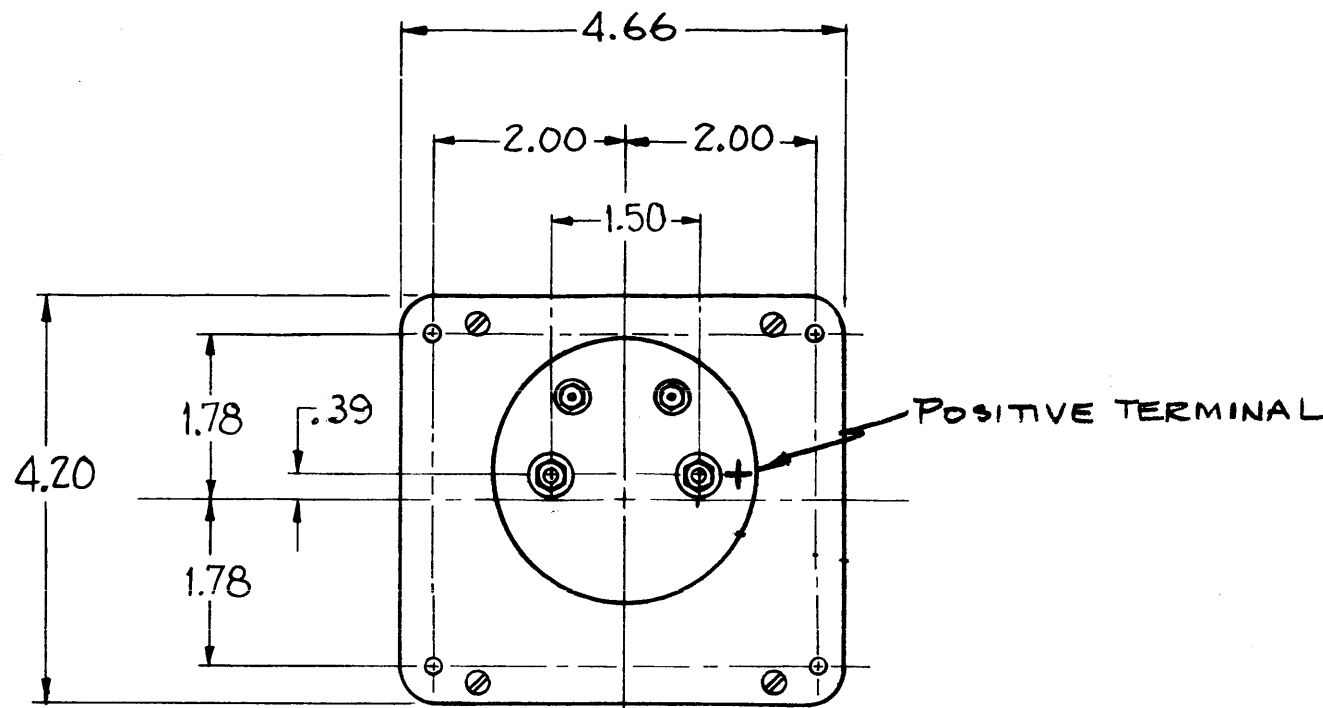
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
F		REVISED AND UPDATED	12-8-66	17421	LHW	<i>[Signature]</i>	
TOLERANCES			SCALE:				
DEC. DIM. ± .015			MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES				
FRAC. DIM. ±							
ANGULAR DIM. ±							

60 CPS 5401-44 (5SET)
50 CPS 5401-444 (31 EXW)

RE PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE
	4PT-10K		MR 125-2	
USED ON				

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
		METER, TIME TOTALIZING	
		MATERIAL	
		TYPE & TEMPER	
		HEAT TREAT. SPEC.	
		FINISH & SPEC. NO.	
		ELEC. DES. APP. (MECH. DES. APP.)	
		MR 125 F	

MR-126 E

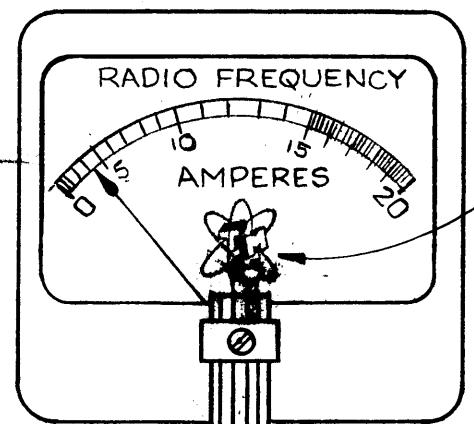


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TMC INSIGNIA
REF. TMC DWG. NP-117

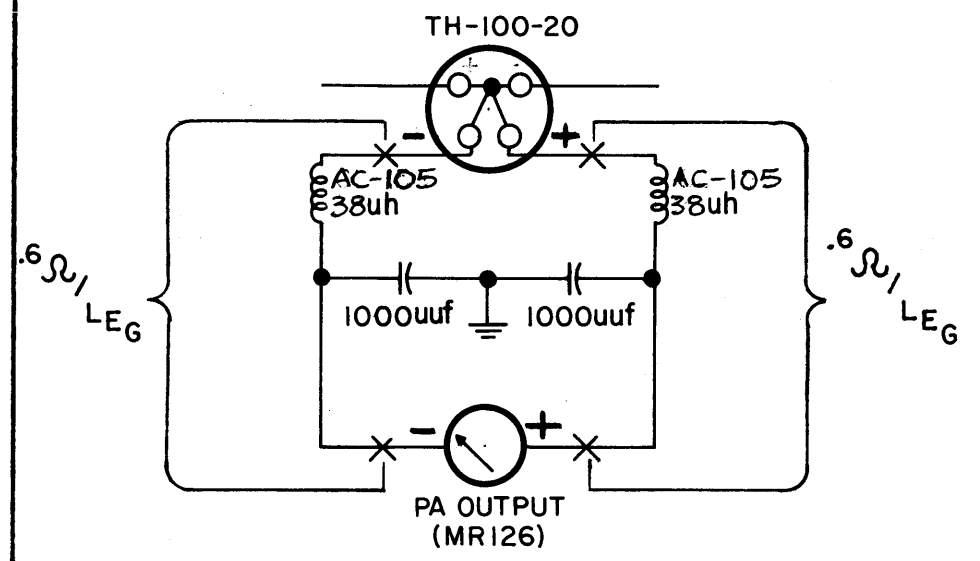
NOTE: DIAL FACE TO BE CALIBRATED BY MANUFACTURER FOR USE W/TH-100-20

NOTES:

- 0-20 R.F. Ammeter with xternal thermocouple.
- Thermocouple to withstand maximum current of 55 amps for 15 seconds.
- Calibrated for coil and leads 6 ohm/1 g
ACCURACY AT FULL SCALE ± 3%
- Designed for use with thermocoupl TH-100-20
- CALIBRATED FOR NON-MAGNETIC PANEL.

SPECIFICATIONS:

- Case-standard commercial rectangular 4-1/2
- Finish - Glossy black.
- Movement - 3.00 ma.
- Approximate Resistance - 11 ohms.
- Pointer - Spade type.
- Hardware - Two flat washers and two 1/4-28 hex nuts for terminals. Four lockwashers and four 6-32 hex nuts for mounting, supplied by mfg.
- Dial Face - TYPE 0-20 R.F. AMP-Expanded scale with TMC Insignia as shown.
- Meter Resistance - 3.8 ohms

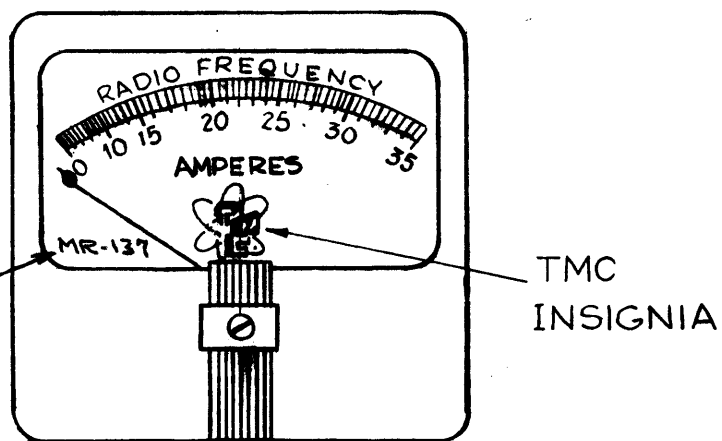
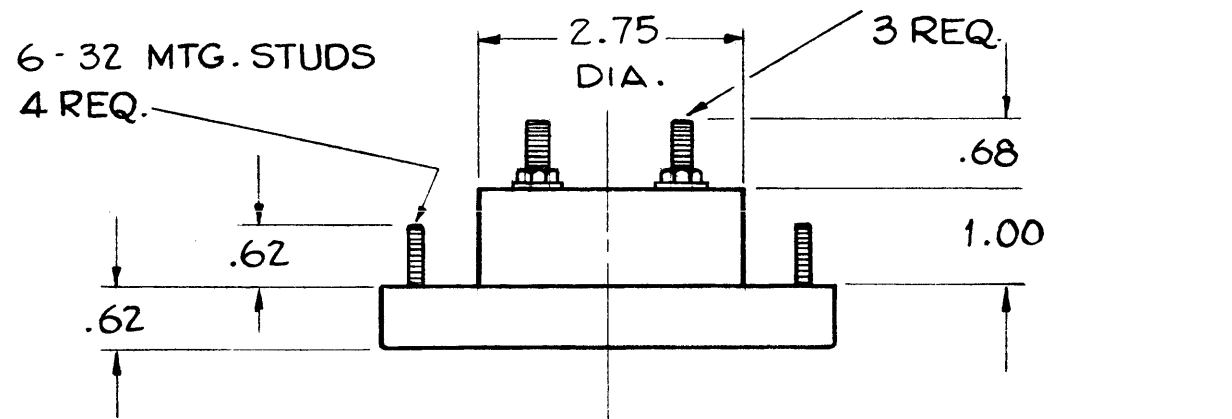
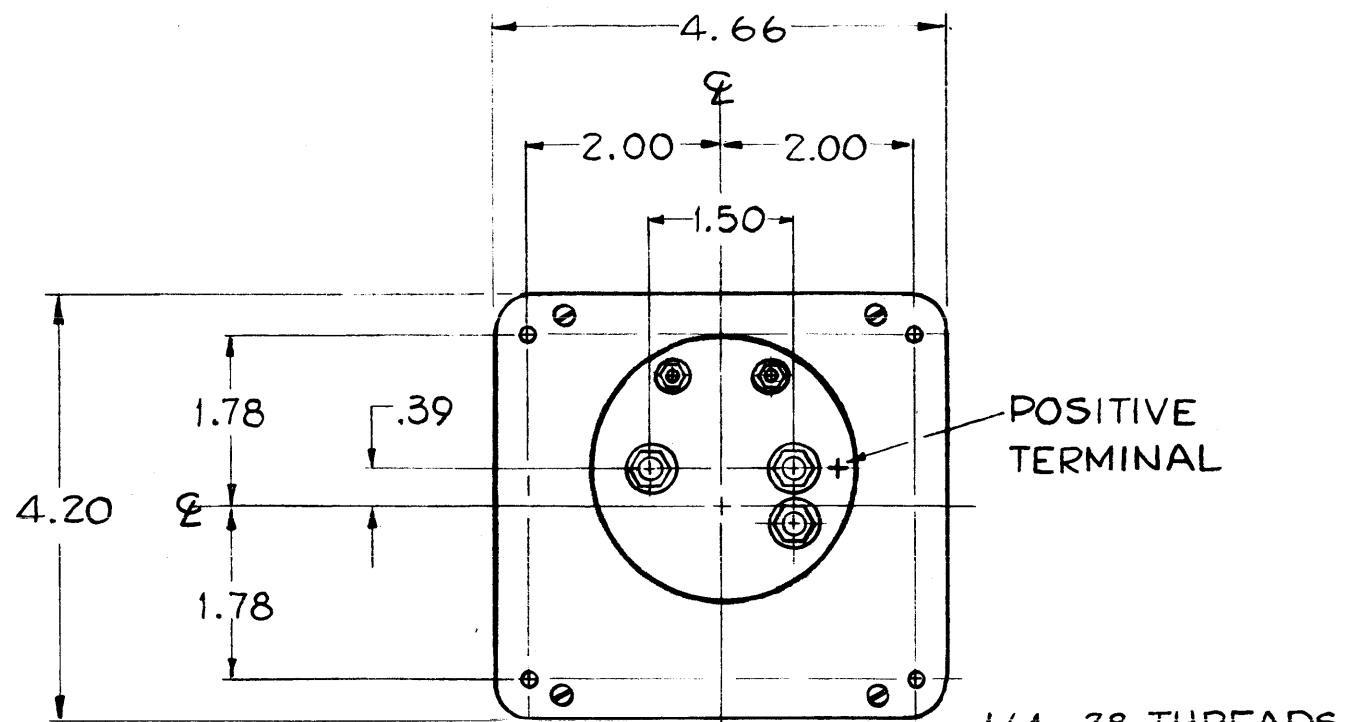


ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
F	2	ADDED REF DWG. NP-117	7-12-63	9562	A.K.	<i>W.P.</i>	<i>[Signature]</i>
E	1	NOTE 5, NOTE 3 REV.	6-28-62	6793	V.R.R.	<i>[Signature]</i>	<i>[Signature]</i>
D	1	Added '+' to Terminal on Rear. (Reversed schem - ++)	11/59	1545	KG	<i>[Signature]</i>	<i>[Signature]</i>
C	1	Mod. was 30C 84 was 1.00, .35 was 24	9/21/59	1305	J.C.	<i>[Signature]</i>	<i>[Signature]</i>
B	1	In Schem. AC-105, 338uh was CL-158-20uh. Added Note 3. Chgd Note 3 was 1.00	9/7/59	1244	KG	<i>[Signature]</i>	<i>[Signature]</i>
A	3	Note No. 2 was: Calibrated for 8 Leads & max. line res 10.	6/1/59	1075	J.C.B.	<i>[Signature]</i>	<i>[Signature]</i>
A	2	.6Ω/LEG on Schematic was 8"					
A	1	Radio Frequency added					

TOLERANCES		SCALE: S401-44 (#17, MOD. 39)	
DEC. DIM. ±		MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.	
FRAC. DIM. ±		REMOVE ALL BURRS AND SHARP EDGES	
ANGULAR DIM. ±		1	GPT10K
		REQ. PER UNIT	MODEL
			PROJECT NO.
			ASS'Y. NO.
			DATE
			USED ON

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK			
AMMETER, R.F. (PA OUTPUT)			
J.C. BIELE		<i>[Signature]</i>	<i>[Signature]</i>
TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.
		MR-126 F	

MR-137 A



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 TION to the user. This drawing is loaned for mutual
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 THE TECHNICAL MATERIEL CORPORATION
 MAMARONECK, NEW YORK

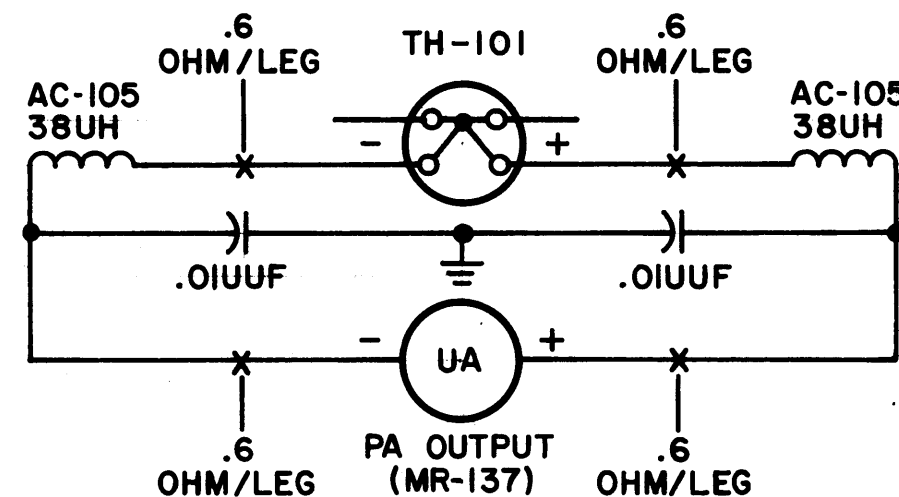
NOTES:

- 0-35 R.F. Ammeter with external thermocouple.
- Thermocouple to withstand maximum current of 100 amps for 15 seconds.
- Calibrated for coil and leads .6 ohm/leg
- Designed for use with thermocouple TMC #TH-101.

SPECIFICATIONS:

- Case-standard commercial rectangular 4-1/2
- Finish - Glossy black.
- Movement - 3.00 ma.
- Approximate Resistance - 11 ohms.
- Pointer - Spade type.
- Hardware - three flat washers and three 1/4-28 hex nuts for terminals. Four lockwashers and four 6-32 hex nuts for mounting, supplied by mfg.
- Dial Face - M39 E 0 - 35 R.F. AMP Expanded scale. with TMC Insignia, and TMC part number as shown.

THIS METER WILL BE USED FOR SPARE PARTS ONLY
 ALL NEW GPT-40K'S WILL USE MR-147.



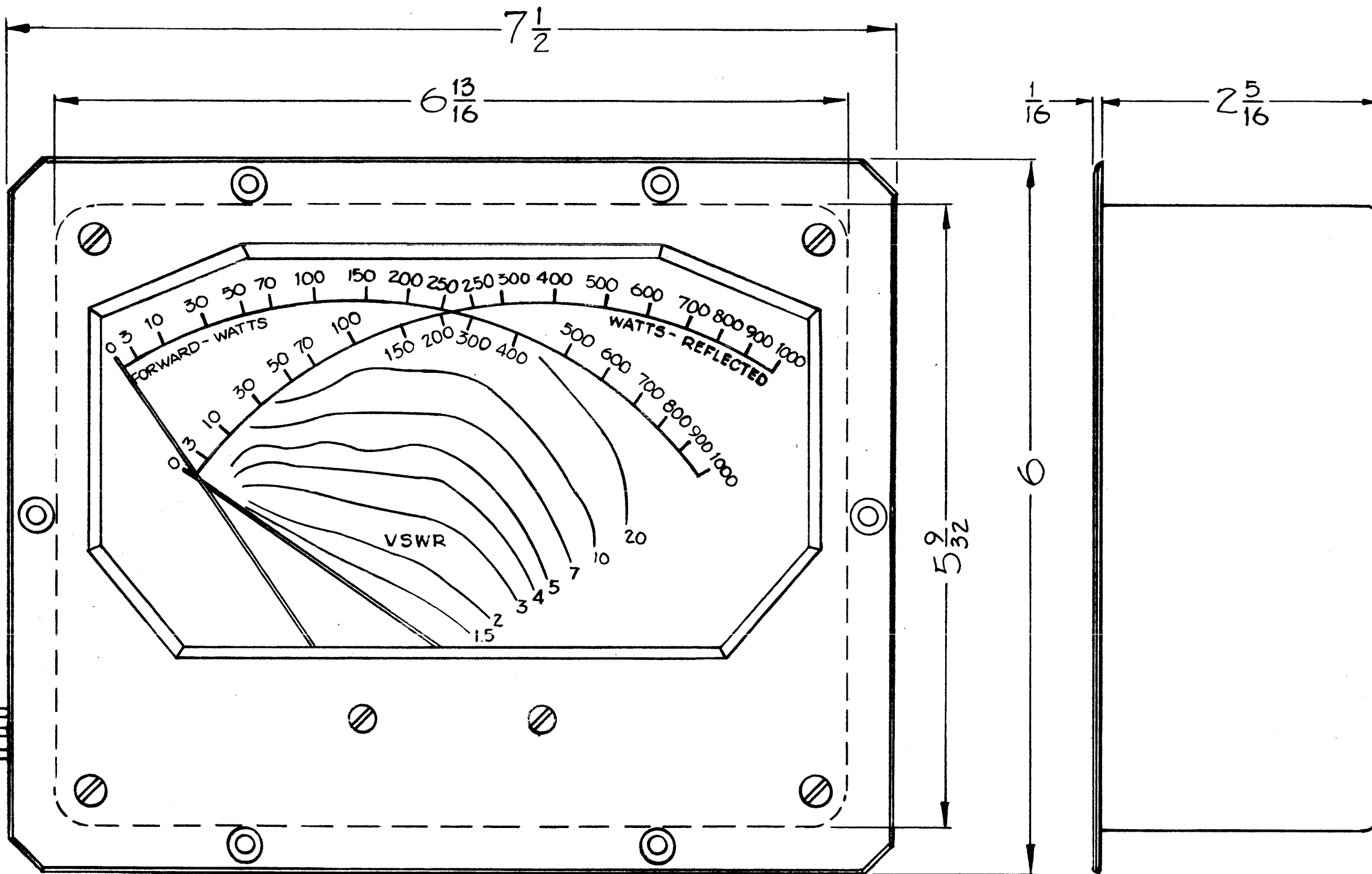
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
A	1	SPARE PARTS NOTE ADDED.	11/28/60	3593	JCM	JCB	QBR

REQ. PER UNIT	1	MODEL	GPT 40K	PROJECT NO.		ASS'Y. NO.		DATE	3-16-60
USED ON									

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK			
AMMETER, R.F.			
MATERIAL		J.C. Biele	QBR
TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.

MR-137 A

MR-138



LEADS APPROXIMATELY 16" LONG

Red
Blk.
Blue

MECHANICAL DATA

CASE ~ BLACK BAKELITE

FRONT PLATE ~ ALUMINUM, BLACK GLOSS ENAMEL FINISH

SCALE COLORS ~

FORWARD WATTS ~ BLACK

REFLECTED WATTS ~ RED

V.S.W.R. ~ BLUE

ELECTRICAL DATA

RESISTANCE ~

BLK/BLUE LEADS ~ $1700 \Omega \pm 20\%$

BLK/RED LEADS ~ $1700 \Omega \pm 20\%$

RANGE ~ 0-1000 μ AMPS $\pm 2\%$

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Property of

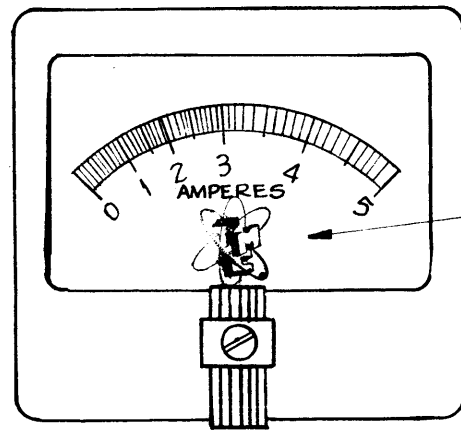
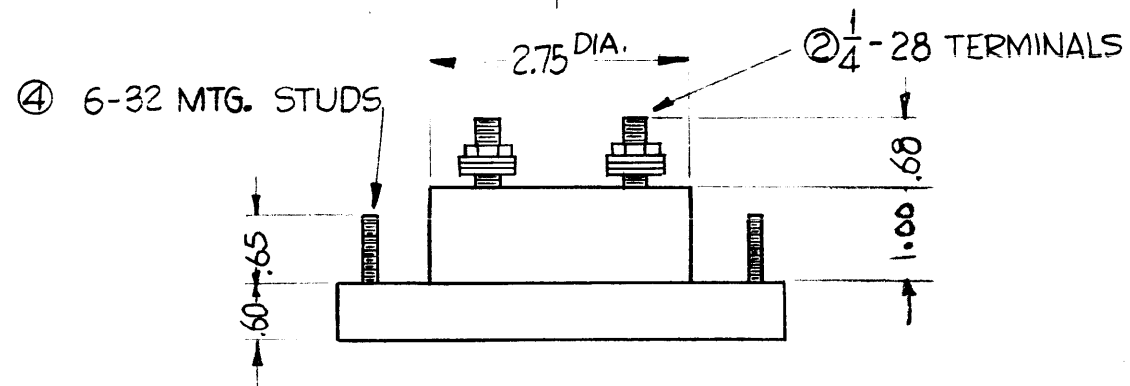
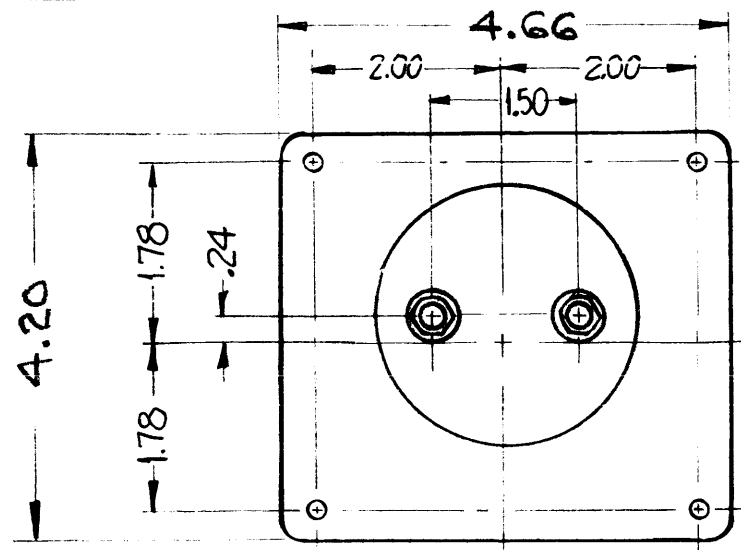
THE TECHNICAL MATERIEL CORPORATION
MAMARONECK, NEW YORK

							REQ. ITEM	PART NO.	DESCRIPTION	YMBOL
									THE TECHNICAL MATERIEL CORP.	
							STOCK SIZE		MAMARONECK, NEW YORK	
							MATERIAL		METER, STANDING WAVE	
									RATIO (0-1000)	
									J.C. Biela	
									DRAWN	CHECKED
									FINAL APPROVAL	
									MR-138	
									ELEC. DE. APP. MECH. DE. APP.	

REQ. PER UNIT	M DEL	PROJECT NO.	ASSY. NO.	DATE
1		SWR 1000 SBTIK, A & C		1-4-60
USED ON				

ISSUE	ITEM	CHANGED FROM	DATE	CH. N.	RAFS	CHECKER	ENG. APP.
TOLERANCES							
SCALE: BA-1509							

MR-139 A



INSERT TMC
INSIGNIA (NP-117)
(BLACK) IMMEDIATELY
BELOW WORD "AMPERES"

NOTES -

CASE - STANDARD COMMERCIAL RECTANGULAR 4 1/2"
CASE SIZE #39 w/INTERNAL THERMOCOUPLE.
FINISH - GLOSSY BLACK
RANGE - 0-5A RF
MATCHED WITHIN 2%
POINTER - SPADE TYPE
HARDWARE - ② FLATWASHERS, ② 1/4-28 HEXAGON NUTS FOR TERMINALS,
④ LOCKWASHER, ④ 6-32 HEXAGON NUTS FOR MOUNTING, SUPPLIED
BY MANUFACTURER.

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TION to the user. This drawing is loaned for mutual
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MAMARONECK, NEW YORK

SYM	DESCRIPTION	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
A	(2) 1/4-28 TERMINALS w/AS (2) 1/4-28 MTG. STUDS	4-3-61	453B	DM	JCB	DR

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES ON
FRACTIONS ± 1/64 DECIMALS ± .005 ANGLES ± 1/2°

SCALE:
MAXIMUM ALLOWABLE TOLERANCES HAVE
BEEN DETERMINED AND ANY DEVIATIONS
WILL BE CAUSE FOR REJECTION.
REMOVE ALL BURRS AND SHARP EDGES

REQ. PER UNIT	MODEL	SECTION	ASS'Y. NO.	DATE
1	TMA	AX-192		1-4-61

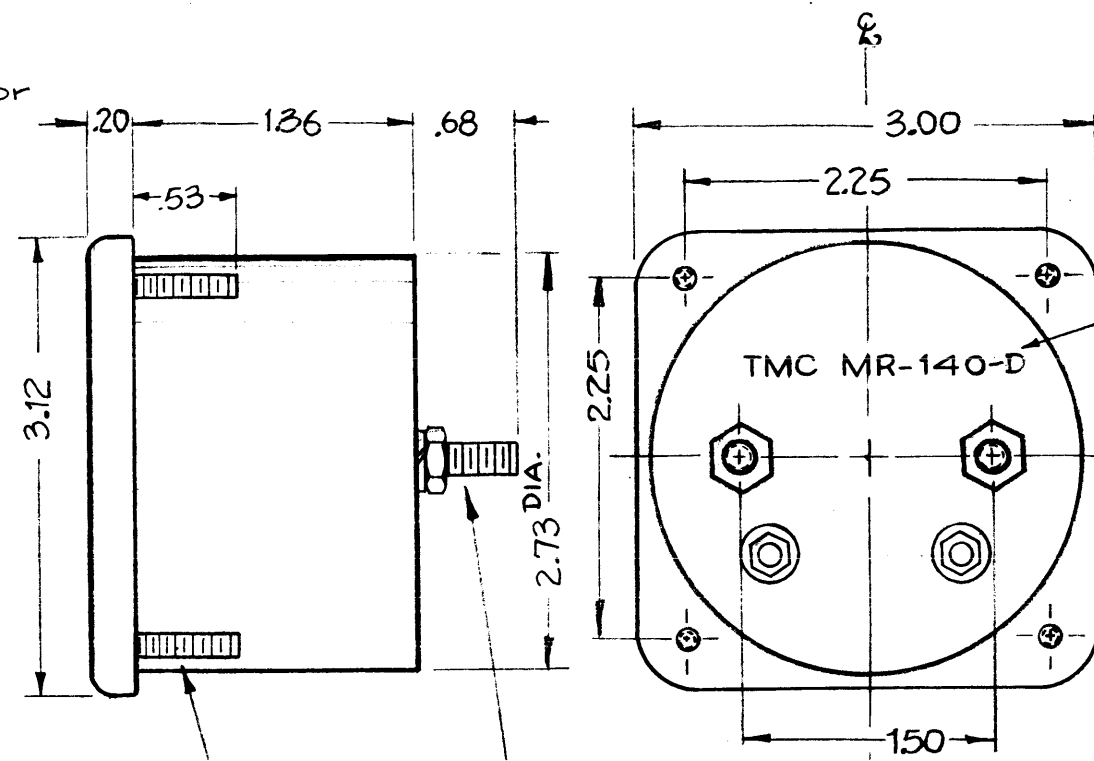
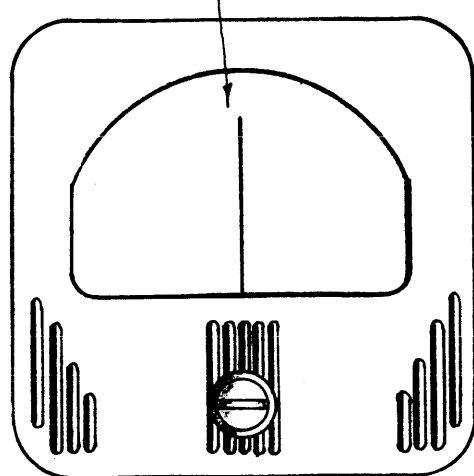
USED ON

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
STOCK SIZE			
		METER, RF	
MATERIAL			
TYPE & TEMPER		HEAT TREAT. SPEC.	DRAWN
			CHECKER
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.
		MR-139	A

MR-140

D

See Details at right for Dial Face.



Stamp TMC Partnumber as shown.

LOCATED AT -10ua

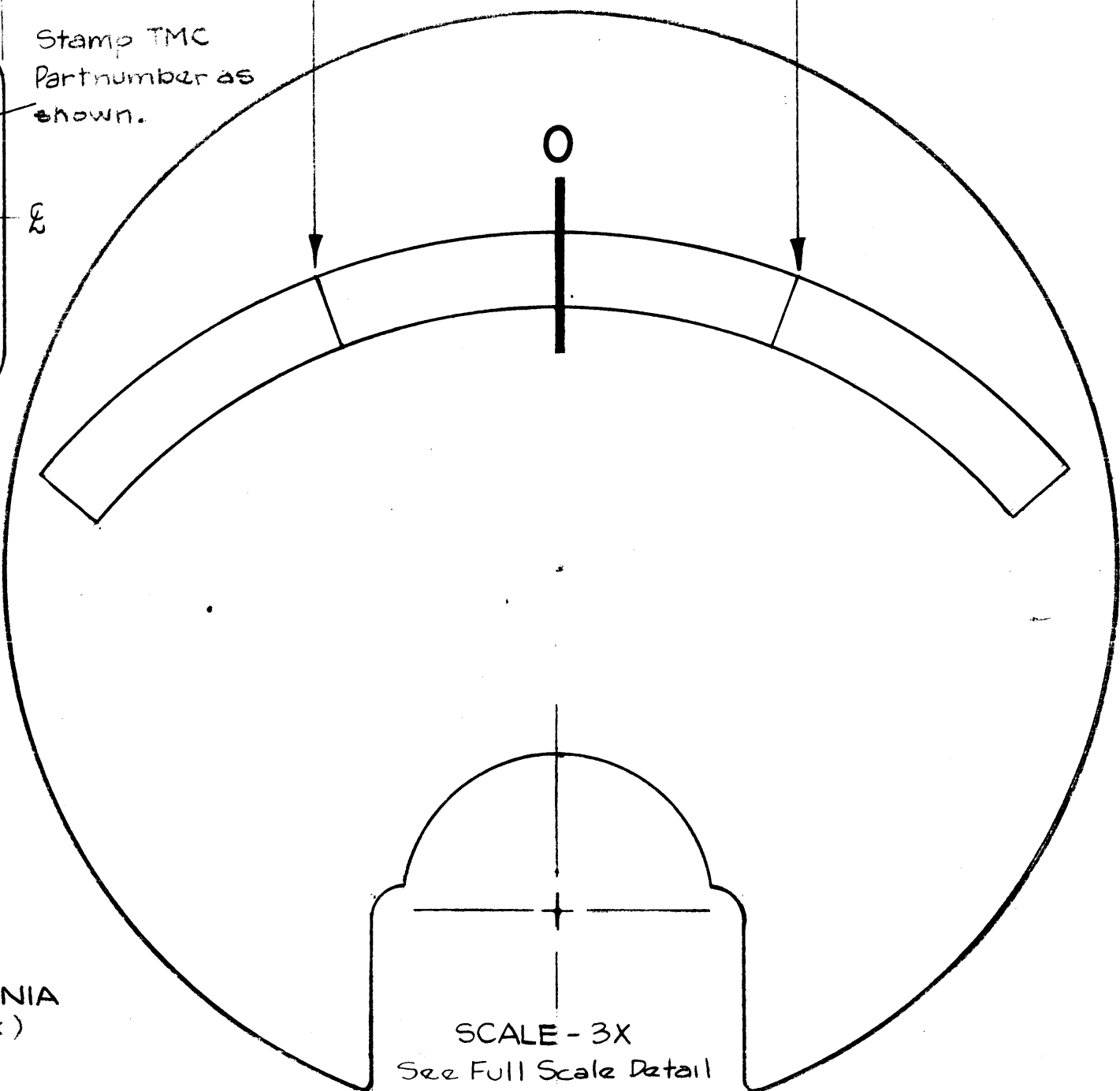
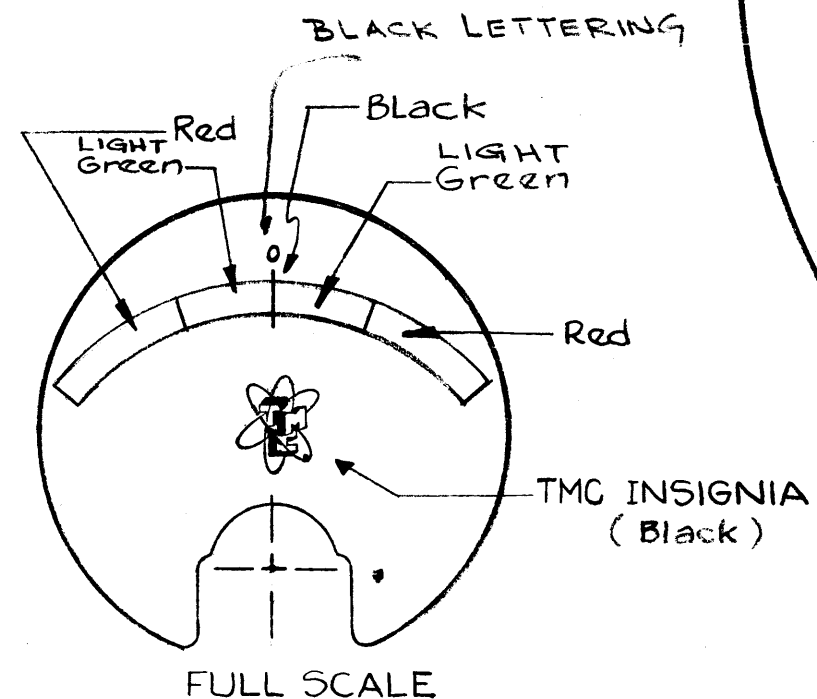
LOCATED AT +10ua

Note ~ Meter Front must be a black Matt Finish, with Line Design as shown.

4 Mtg Studs 1/4-28 THD.
2 TERMINALS 4-40 Thds.

SPECIFICATIONS:

Case - Standard Simpson No 27.
Movement - 25-0-25 Micro-Amp.
Approx. Resistance - 2000 ohms.
Pointer Type - Knife Edge.
All necessary Mounting & Terminal Hardware Supplied by Mfg.



SCALE - 3X
See Full Scale Detail for Colors.

D	1	POINTER POSITION CHANGED	7-26-63	9653	AP	W.A.F.	AP
C	1	MTG STUDS WERE 4-36 THD	6-12-63	9243	ES	W.A.F.	AP
B	2	2 TERMS 1/4-28 THD WAS 2 STUDS 8-32 THD ON SCALE - 5X LOCATED AT -10ua & +10ua ADDED	4-4-61	4556	W.A.F.	W.A.F.	AP
A	1	0" Added To DIAL LIGHT GREEN WAS GREEN	6/8/60	-4	DM	W.A.F.	AP
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.

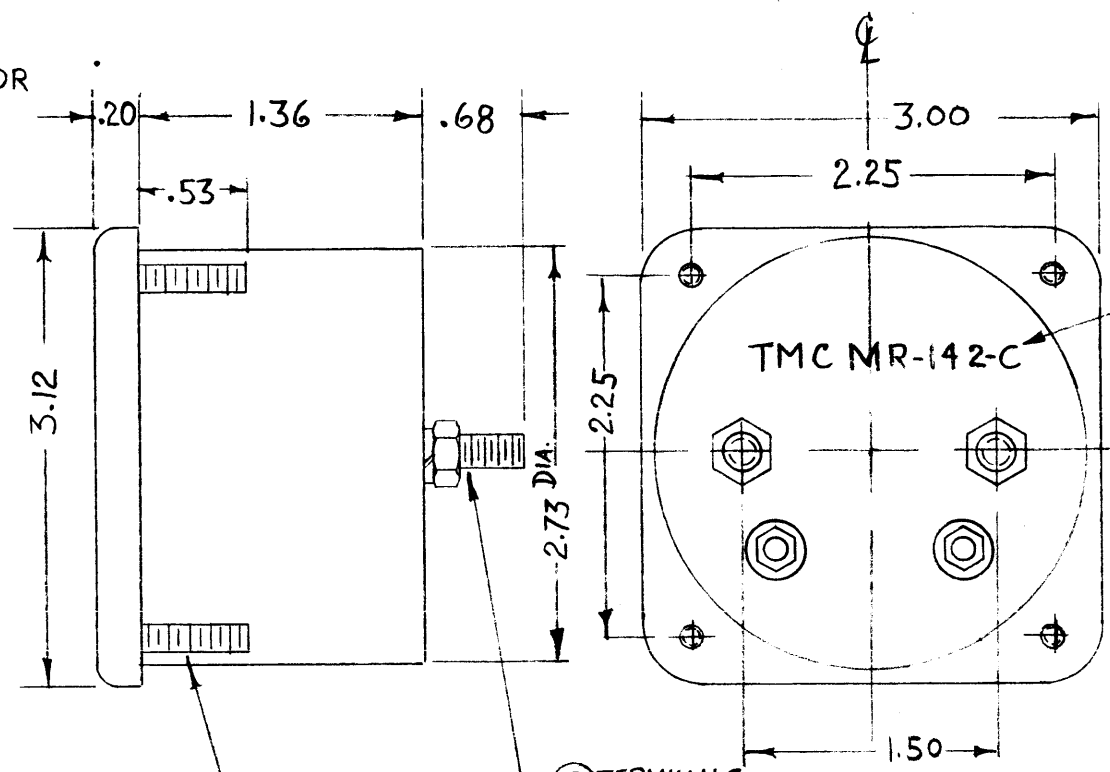
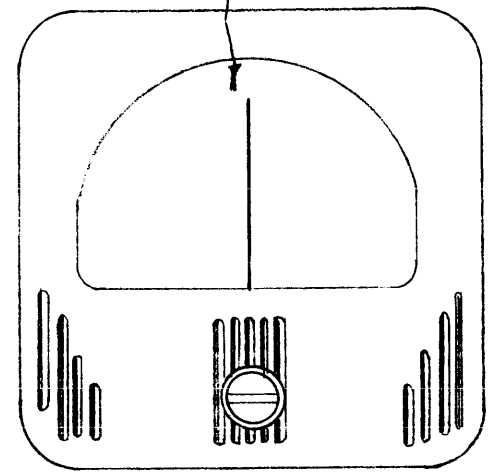
TOLERANCES		SCALE:
DEC. DIM. ±		MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.
FRAC. DIM. ±		REMOVE ALL BURRS AND SHARP ED ES
ANGULAR DIM. ±		

1	CMO-2			4-7-60
1	CMO-1			4-7-60
REQ. PER UNIT	MODEL	PROJECT NO.	ASS'Y. NO.	DATE

STOCK SIZE				THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK			
MATERIAL				METER, SYNTHESIZER, DC MICRO AMPS			
TYPE & TEMPER		HEAT TREAT. SPEC.		DRAWN		CHECKED	
FINISH & SPEC. NO.		ELEC. DES. APP.		MECH. DES. APP.		FINAL APPROVAL	
				AR.F.		MR-140 D	

MR-142 C

SEE DETAILS AT RIGHT FOR DIAL FACE.



STAMP TMC PART NO. AS SHOWN

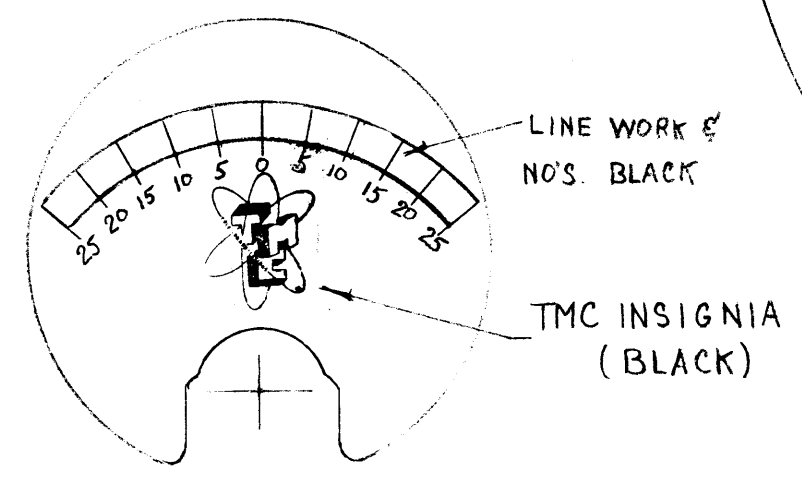
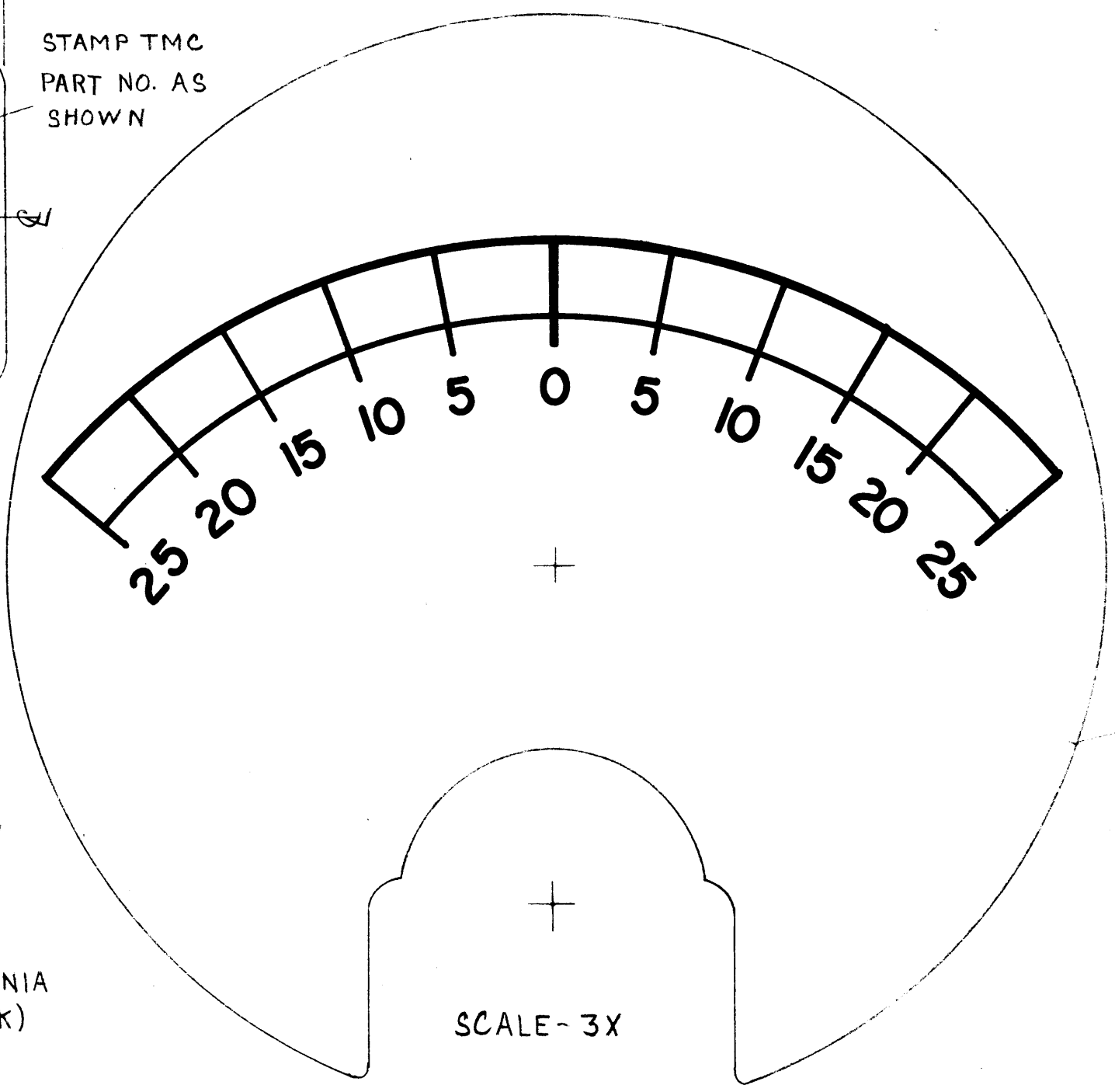
TMC MR-142-C

NOTE - METER FRONT MUST BE A BLACK MATT FINISH, WITH LINE DESIGN AS SHOWN

④ MTG STUDS 4-40 THDS.
② TERMINALS 1/4-28 THDS.

SPECIFICATIONS:

CASE - STANDARD SIMPSON №27
MOVEMENT - 25-0-25 MICRO-AMP.
APPROX. RESISTANCE - 2000 Ohms.
POINTER TYPE - SPADE EDGE.
ALL NECESSARY MOUNTING & TERMINAL HARDWARE SUPPLIED BY MFG.



FULL SCALE

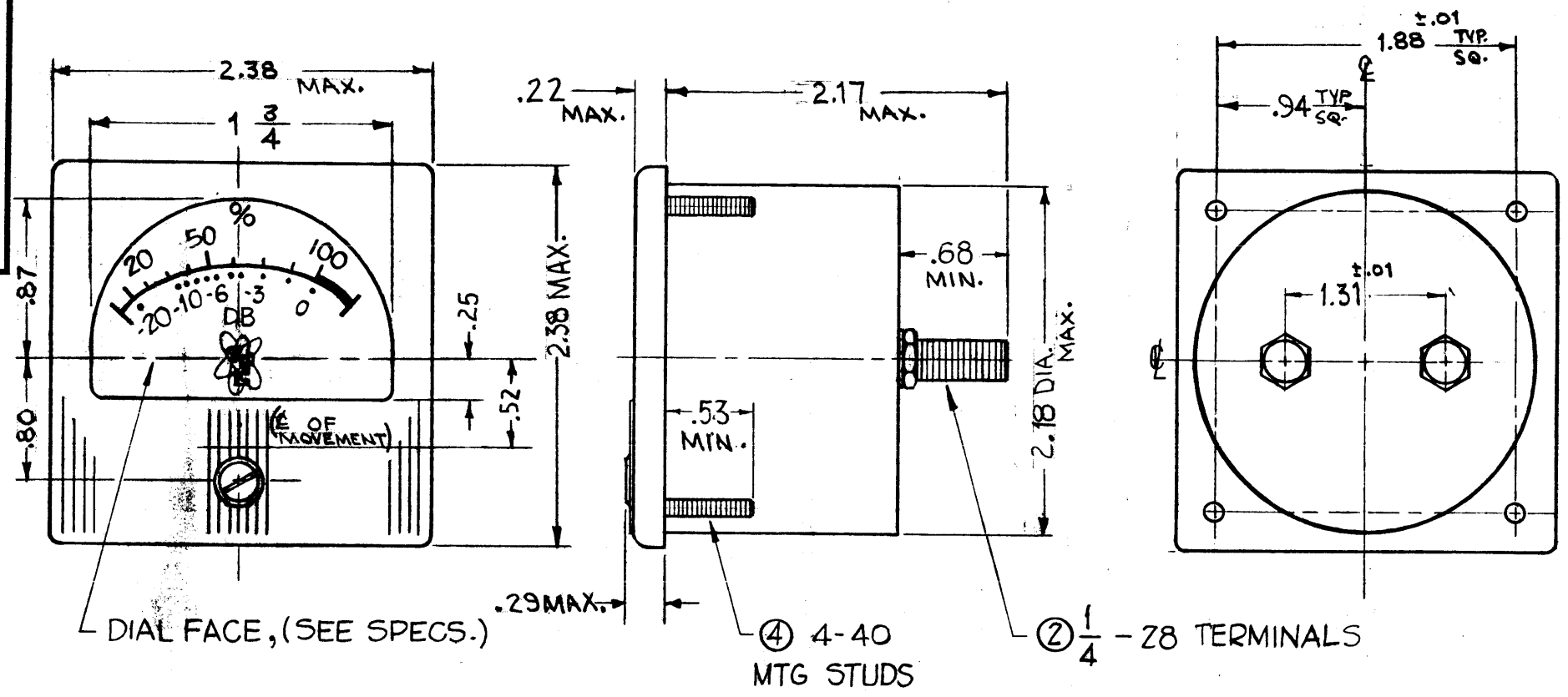
ISSUE	ITEM	CHANGED FROM	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
C	1	ON DIAL FACE, POSITION OF POINTER CHANGED	7-26-63	9653	AK	gms	[Signature]
B	1	MTG STUDS WERE 4-36 THD	6-12-63	9243	[Signature]	gms	[Signature]
A	1	2 terminals 1/4-28 was 2 studs 8-32 THDS.	4/3/61	4538	DM	JCS	[Signature]

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
STOCK SIZE		METER, PHASE, COMPARATOR	
MATERIAL		DC. MICRO AMPS	
TYPE & TEMPER	HEAT TREAT. SPEC.	DRAWN	CHECKED
FINISH & SPEC. NO.		ELEC. DES. APP.	MECH. DES. APP.

1	CSS	4-18-60
REQ. PER UNIT	MODEL	PROJECT NO.
		ASS'Y. NO.
		DATE
		USED ON

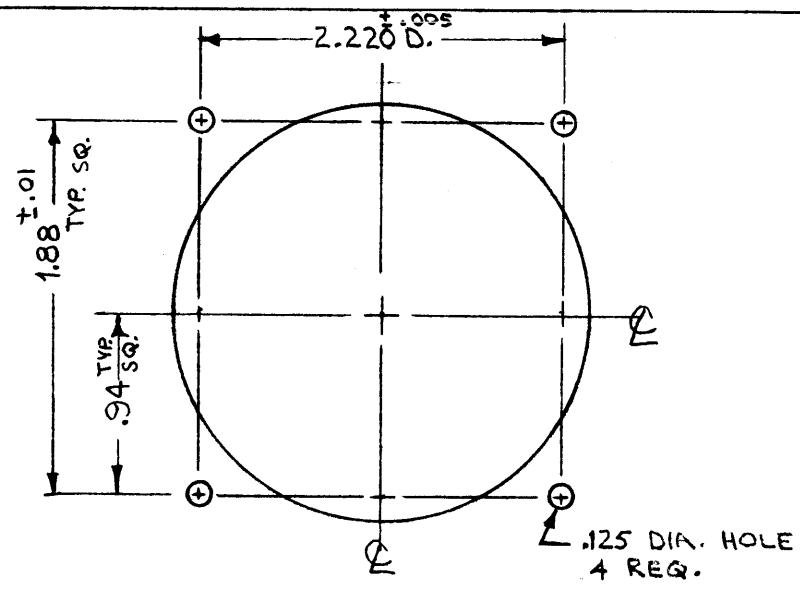
MR-142 C

MR-144 D



SPECIFICATIONS:

- CASE - STANDARD COMMERCIAL RECTANGULAR 2 3/8"
- FINISH - MATTE BLACK.
- MOVEMENT - O-50UA.
- APPROXIMATE RESISTANCE - 2000 OHMS
- POINTER - SPADE TYPE
- HARDWARE - ② 1/4 - 28 HEXAGON NUTS AND ② LOCK-WASHERS FOR TERMINALS.
- DIAL FACE - SUPPLIED BY MANUFACTURER, REF TMC DWG NO. LD-364.



DRILLING PLAN

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MAMARONECK, NEW YORK

SYM	DESCRIPTION	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
D	COMPLETELY REVISED AS PER MFR'S DRAWING.	11/16/66	17267	RME	JCS	
C	ON SPECS.: FINISH WAS GLOSSY BLACK	10-24-64	12754	WJB		
B	MTG STUDS WERE 4-36 THD	6-12-63	9243			
A	1/4-28 Terminals was 1/4-28 MTG. STUDS	4-3-61	4538	Dam		

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES ON FRACTIONS ± 1/64 DECIMALS .015 ANGLES ± 1/2°

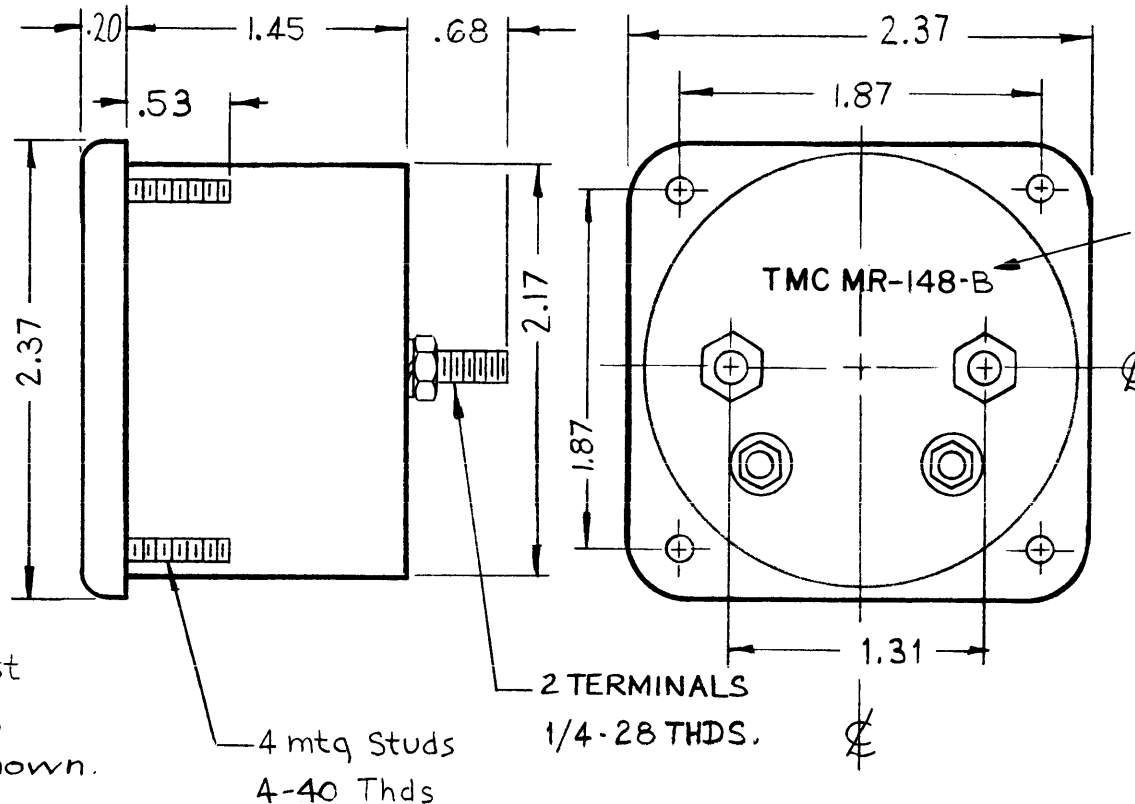
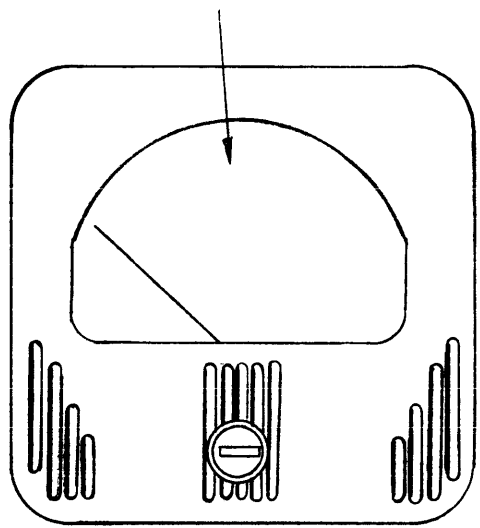
SCALE: FULL, Do Not SCALE
MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

REQ. PER UNIT	MODEL	SECTION	ASS'Y. NO.	DATE
1	TIS-3			11-15-60
USED ON				

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK			
METER, LEVEL INDICATING O-50 MICROAMPS			
TYPE & TEMPER		HEAT TREAT. SPEC.	FINISH & SPEC. NO.
DRAWN		CHECKER	FINAL APPROVAL
ELEC. DES. APP.		MECH. DES. APP.	MR-144 D

MR-148 B

See details at right for Dial Face



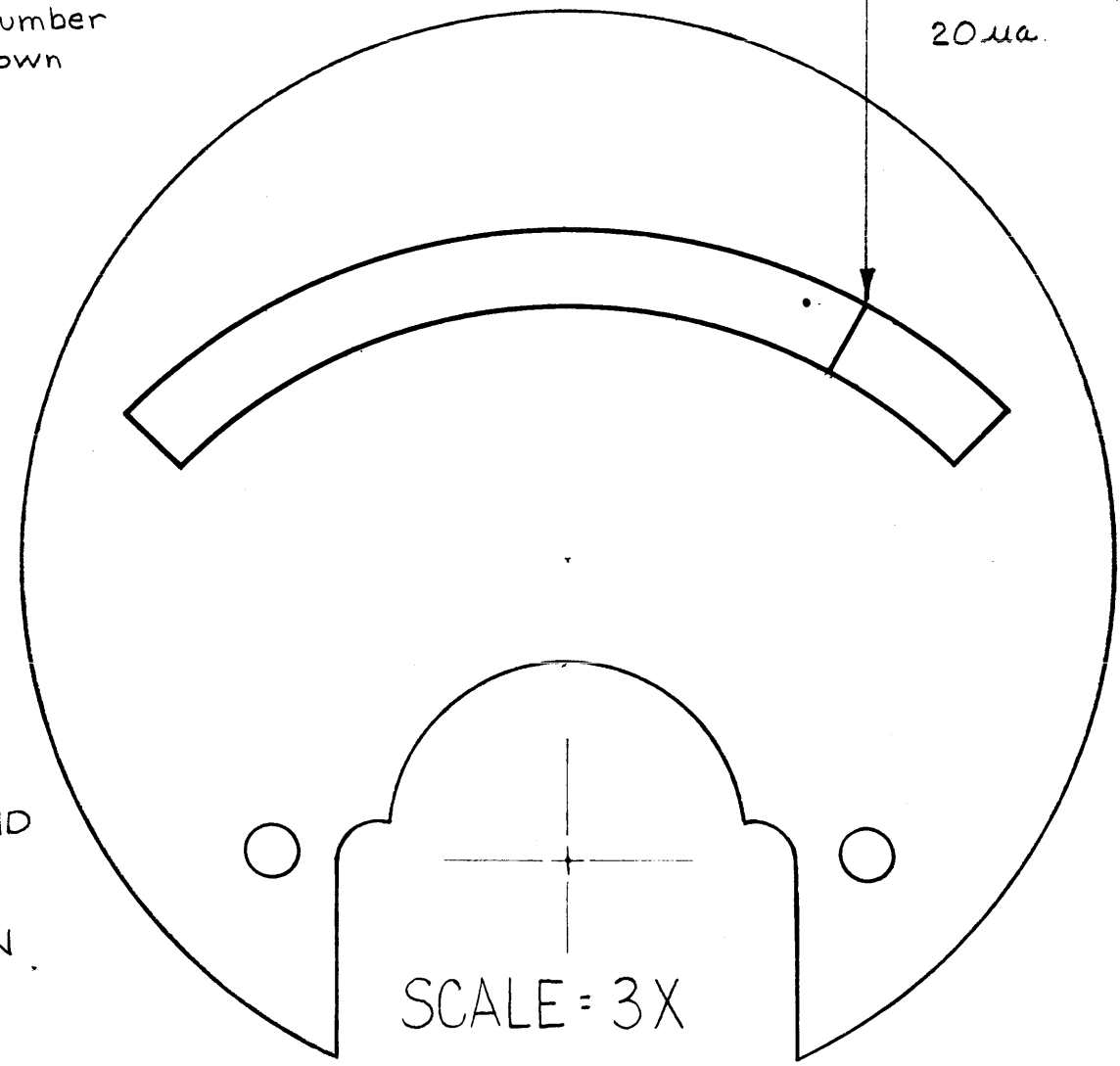
Stamp TMC Partnumber as shown

LOCATED AT 20ma.

NOTE ~ Meter Front must be a black Matt Finish, with Line Design as shown.

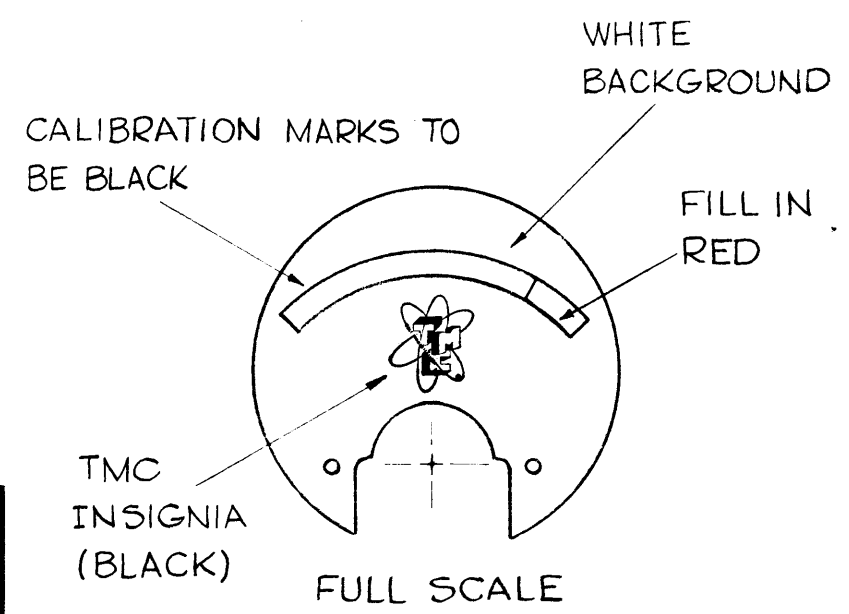
SPECIFICATIONS ~

Case ~ standard Simpson No 127
 Movement ~ 0-25 mA
 Approx ~ resistance-2200 ohms
 Pointer Type ~ knife edge.
 All necessary mounting & terminal hardware supplied by mfg.



SCALE = 3X

SEE FULL SCALE DETAIL FOR COLORS.



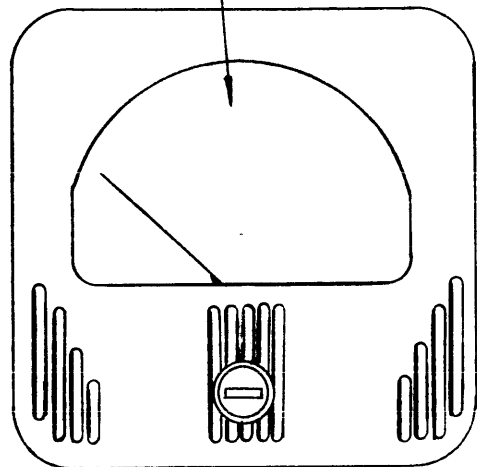
B	MTG STUDS WERE 4-36 THD	6-12-63	2243			
A	DIM. 1.31 WAS 1.00 DIM. .53 WAS .54 2 TERMS. 1/4-28 THD. WAS 2 STUDS 8-32 THD. ON SCALE = 3X ADDED LOCATED AT 20ma	4-4-61	A556			
SYM	DESCRIPTION	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
UNLESS OTHERWISE SPECIFIED:		SCALE:				
DIMENSIONS ARE IN INCHES		MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION.				
TOLERANCES ON FRACTIONS ± 1/64 DECIMALS ± .005 ANGLES ± 1/2°		REMOVE ALL BURRS AND SHARP EDGES				

1	CHG			11-19-60
REQ. PER UNIT	MODEL	SECTION	ASS'Y. NO.	DATE
USED ON				

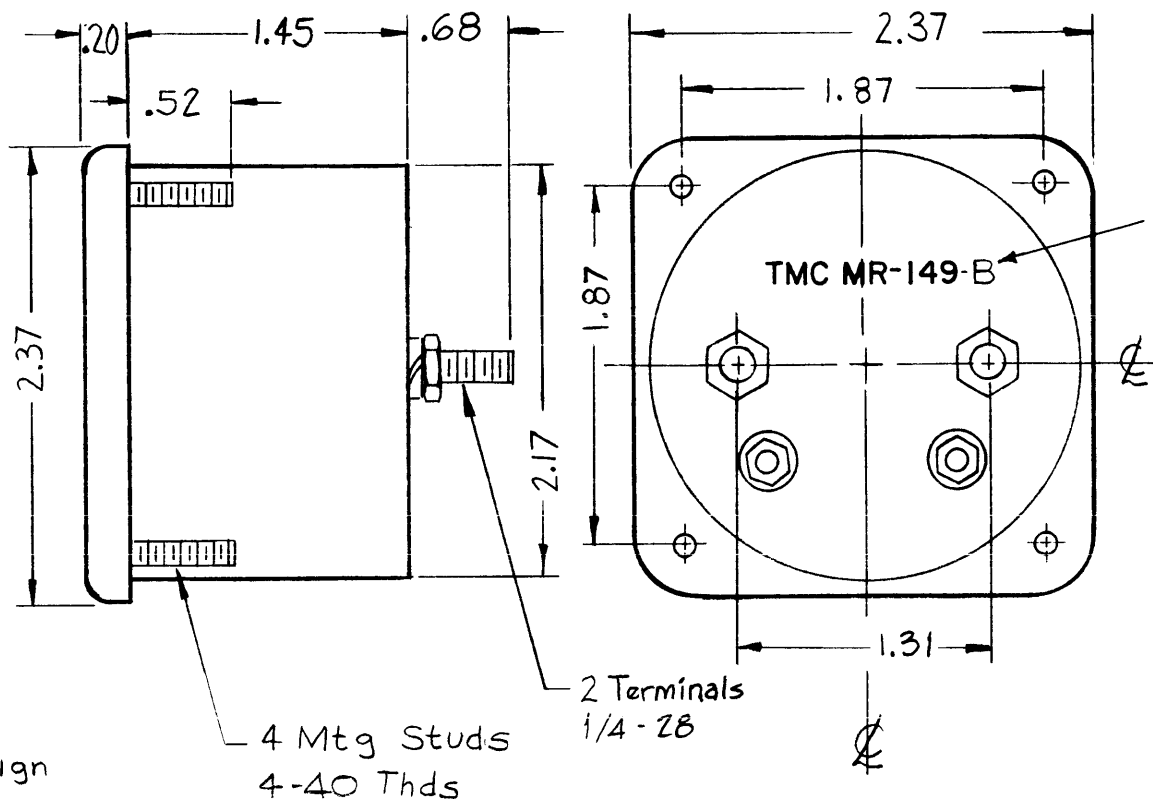
REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK			
METER, MF TUNING			
MATERIAL			
		Wingo	Julio
		DRAWN	CHECKER
TYPE & TEMPER		HEAT TREAT. SPEC.	
FINISH & SPEC. NO.		ELEC. DES. APP. MECH. DES. APP.	
			MR-148 B

MR-149 B

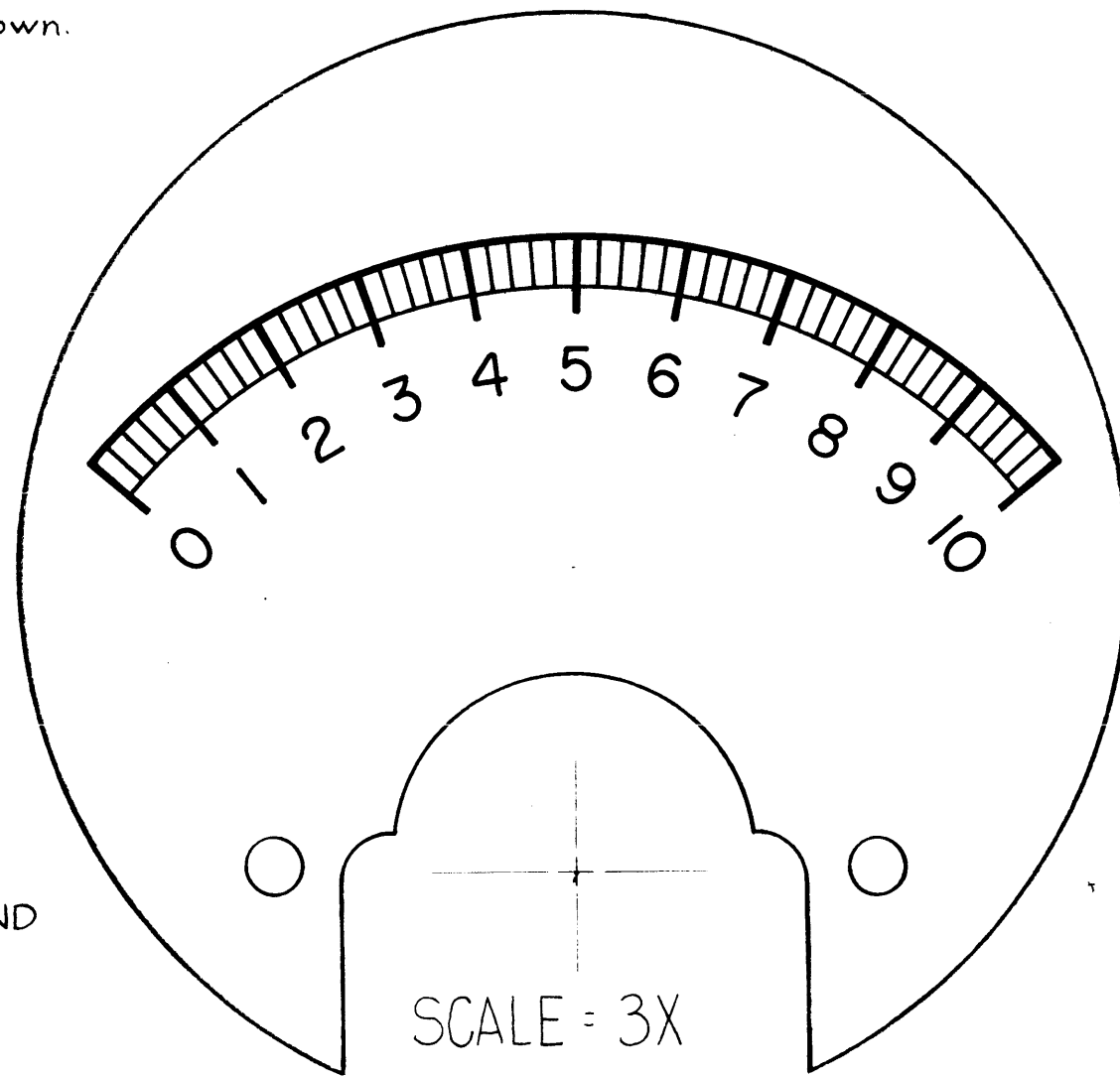
see detail at right for dial face.



NOTE ~ Meter Front must be a black Matt Finish, with Line Design as shown.



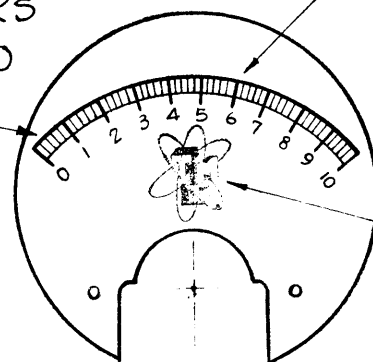
Stamp case as shown.



SPECIFICATIONS:

Case ~ standard Simpson No 127
 Movement ~ 0-25 MA.
 Approx ~ resistance ~ 2200 ohms
 Pointer Type ~ knife edge. All necessary mounting & terminal hardware supplied by mfg.

CALIBRATION MARKS AND NUMERALS TO BE IN BLACK.



FULL SCALE

SYM	DESCRIPTION	DATE	CH. NO.	DRAFTS	CHECKER	ENG. APP.
B	MTG STUDS WERE 4-36 THD	2/2-63	9243		JAN	
A	(2) Terminals were 8-32 Thds 1.31 Dim was 1.00 .52 Dim was .54	3/30/61	4541		W.F. QCBS	

UNLESS OTHERWISE SPECIFIED:
 DIMENSIONS ARE IN INCHES
 TOLERANCES ON FRACTIONS ± 1/64 DECIMALS ± .005 ANGLES ± 1/2°
 SCALE: MAXIMUM ALLOWABLE TOLERANCES HAVE BEEN DETERMINED AND ANY DEVIATIONS WILL BE CAUSE FOR REJECTION. REMOVE ALL BURRS AND SHARP EDGES

REQ. PER UNIT	MODEL	SECTION	ASS'Y. NO.	DATE
1	CHG			11-19-60

REQ. ITEM	PART NO.	DESCRIPTION	SYMBOL
		THE TECHNICAL MATERIEL CORP. MAMARONECK, NEW YORK	
		METER, OUTPUT	
		MATERIAL	
		TYPE & TEMPER	
		HEAT TREAT. SPEC.	
		FINISH & SPEC. NO.	
		DRAWN	CHECKER
		ELEC. DES. APP.	MECH. DES. APP.
		MR-149	B