

*Class 22--Indicating Instruments*

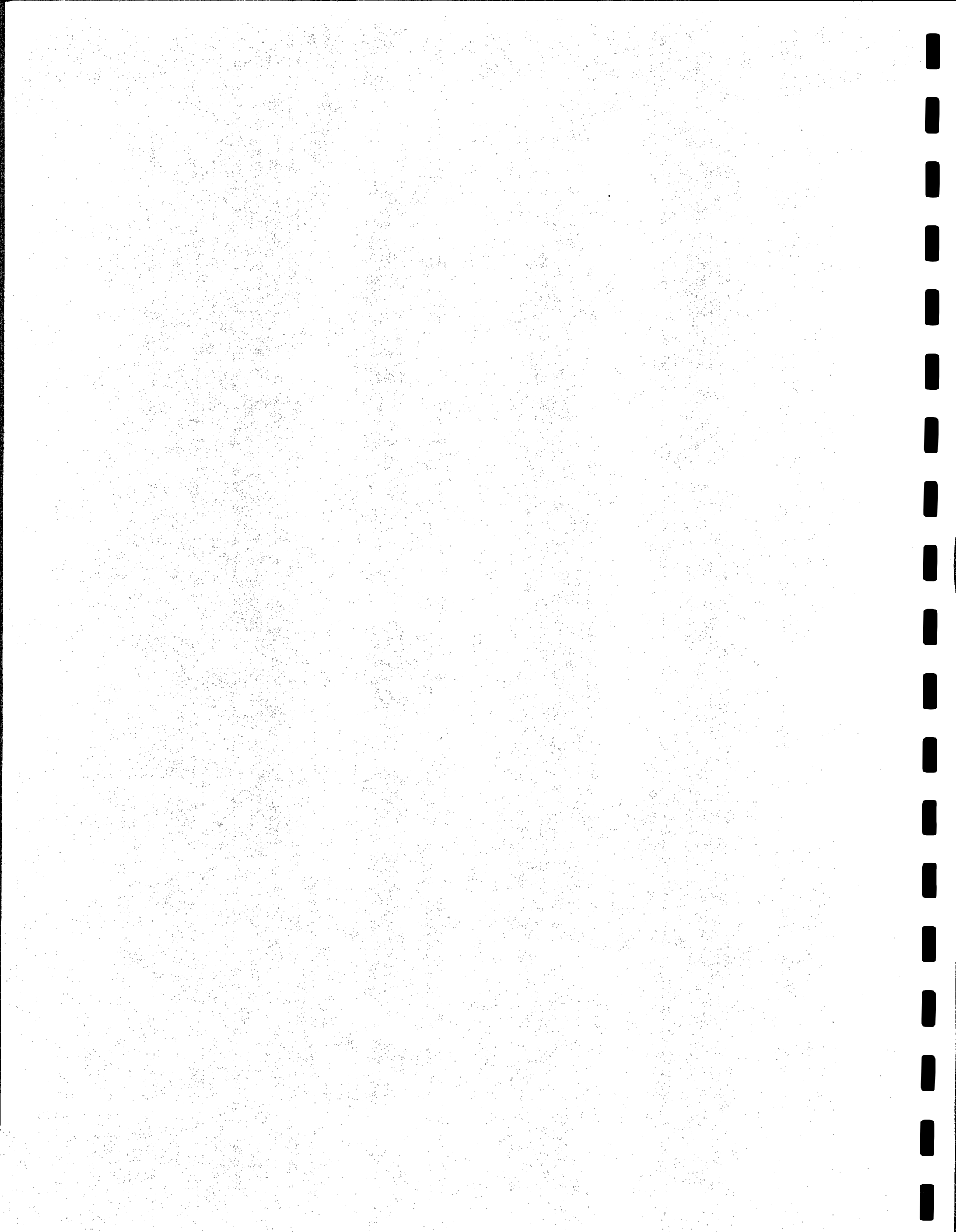
**CLASS 22  
INDICATING INSTRUMENTS**

**INCLUDES: GALVANOMETERS, AMMETERS,  
MILLIAMETERS, VOLTMETERS,  
KILOVOLT METERS, WATTMETERS,  
TUBE LIFE METERS, ETC.**

**NOTE: PORTABLE TEST EQUIPMENT, COMPLETE  
UNITS COVERED BY CLASS 60.**

**RESTRICTED**

**NAVSHIPS 900,109**





3.22-2

Class 22—Indicating Instruments

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
22020-B AMMETER-R.F. SCALE 0-2. 2 1/2" FLUSH TYPE. SAME AS BASIC NUMBER EXCEPT HAS EXPANDED SCALE. BLACK BACKGROUND AND WHITE POINTER.	17-1-12 PR TO 6/1/43		22024-B AMMETER-R.F. 0 TO 4 AMP. SAME AS -22024 EXCEPT HAS BLACK BACKGROUND AND WHITE MARKINGS AND EXPANDED SCALE.	17112 PR TO 6/1/43		22029 GENERAL USE AMMETER - R.F. SCALE 0-6. 2-1/2" F.O.B.	17 1 12 PR TO 6/1/43	
6/2/43 CG:80W-44 NOV. 43	CG:P-7761557-20		6/23/43 NOV. 43	CG:P-7761557-23		12/17/31 NOV. 43		(2788)
22021 GENERAL USE AMMETER - R.F. SCALE 0-3. 3-1/2" FLUSH.	17 1 12 PR TO 6/1/43		22025 GENERAL USE AMMETER - R.F. SCALE 0-5. 3-1/2" FLUSH.	17 1 12 PR TO 6/1/43		22030 GENERAL USE AMMETER - R.F. SCALE 0-8. 3-1/2" FLUSH.	17 1 12 PR TO 6/1/43	
12/17/31 NOV. 43		(2522)	12/17/31 NOV. 43		(2524)	12/17/31 NOV. 43		(2992)
22021A YA-1 AMMETER, R.F. SCALE 0 - 3 AMP. 3-1/2" FLUSH, SAME AS TYPE -22021 EXCEPT THAT IT IS OF THE EXPANDED SCALE TYPE.	17 1 12 PR TO 6/1/43		22025A YA-1 AMMETER, R.F. SCALE 0-5 AMP. 3-1/2" FLUSH, SAME AS TYPE -22025 EXCEPT THAT IT IS OF THE EXPANDED SCALE TYPE.	17 1 12 PR TO 6/1/43		22031 GENERAL USE AMMETER - R.F. SCALE - 0-10. 3-1/2" FLUSH.	17 1 12 PR TO 6/1/43	
3/11/42 CV:425 NOV. 43			3/11/42 CV:425 NOV. 43			12/17/31 NOV. 43		(2447)
22022 GENERAL USE AMMETER - R.F. SCALE 0-3. 2-1/2" FLUSH.	17 1 12 PR TO 6/1/43		22026 GENERAL USE AMMETER - R.F. SCALE 0-5. 2-1/2" FLUSH.	17 1 12 PR TO 6/1/43		-22031A TDE AMMETER-R.F. SCALE 0-10 AMPS. 3-1/2" FLUSH TYPE. FREQUENCY RANGE 25 CPS TO 20 MCS. SAME AS -22031 EXCEPT HAS A SEMI-UNIFORM (EXPANDED) SCALE. CAY:T-7605997-41 SUB 27 M-7408568 SUB 0 5/3/42 CAY:NT-55 NOV. 43	17 1 12 PR TO 6/1/43	
12/17/31 NOV. 43		(2572)	12/17/31 NOV. 43		(4248)	12/17/31 NOV. 43		
22022A AMMETER R.F. SCALE 0-3. 2 1/2" FLUSH TYPE. SAME AS BASIC NUMBER EXCEPT HAS EXPANDED SCALE, BLACK BACKGROUND AND WHITE POINTER.	17-1-12 PR TO 6/1/43		CAY 22026-A G0-3 AMMETER - R.F. SAME AS 22026 EXCEPT: (A) BLACK BACKGROUND WITH WHITE MARKINGS & POINTER, GLARE PROOF GLASS, (B) CERAMIC STOPS SHALL BE PROVIDED, (C) EXPANDED LOWER RANGE SCALE TYPE. SEE PAR. 2-2(2) OF RE13A472D. USES NO EXTERNAL THERMO- AUG. 43			22032 GENERAL USE AMMETER, R.F. SCALE 0-10. 3-1/2" F.O.B.	17 1 12 PR TO 6/1/43	
6/2/43 CG:80W-44 NOV. 43	CG:P-7761557-					12/17/31 NOV. 43		(3302) (3402)
22023 GENERAL USE AMMETER - R.F. SCALE 0-4. 3-1/2" FLUSH.	17 1 12 PR TO 6/1/43		CAY22026A COUPLE OR SHUNT.			22033 GENERAL USE AMMETER - R.F. SCALE 0-10. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	17 1 12 PR TO 6/1/43	
12/17/31 NOV. 43		(2923)				12/17/31 NOV. 43		(2925)
22024 GENERAL USE AMMETER - R.F. SCALE 0-4. 2-1/2" FLUSH.	17 1 12 PR TO 6/1/43		22027 GENERAL USE AMMETER - R.F. SCALE 0-6. 3-1/2" FLUSH.	17 1 12 PR TO 6/1/43		22034 GENERAL USE AMMETER - R.F. SCALE 0-10. EXTERNAL THERMOCOUPLE. 3-1/2" F.O.B.	17 1 12 PR TO 6/1/43	
12/17/31 NOV. 43		(3127)	12/17/31 NOV. 43		(2989)	12/17/31 NOV. 43		(2045)
22024-A TCK-4 AMMETER-R.F. SAME AS -22024 EXCEPT HAS BLACK BACKGROUND AND WHITE MARKINGS.	17112 PR TO 6/1/43		22028 GENERAL USE AMMETER - R.F. SCALE 0-6. 2-1/2" FLUSH.	17 1 12 PR TO 6/1/43		22035 GENERAL USE AMMETER - R.F. SCALE 0-15. 3-1/2" FLUSH.	17 1 12 PR TO 6/1/43	
6/5/43 CG: NOV. 43	CG:K-47J844 REV		12/17/31 NOV. 43		(2787)	12/17/31 NOV. 43		(2975)

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3.22-3

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22036	GENERAL USE	17 I 12 AMMETER - R.F. PR TO 6/1/43 SCALE 0-15. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	22044	GENERAL USE	17 I 12 AMMETER - R.F. PR TO 6/1/43 SCALE 0-100. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	22052	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-10. 3-1/2" FLUSH.		
12/17/31 NOV. 43		(3125)	12/17/31 NOV. 43		(2930)	12/18/31 NOV. 43		(2994)		
22037	GENERAL USE	17 I 12 AMMETER - R.F. PR TO 6/1/43 SCALE 0-20. INTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	22045	GENERAL USE	17 I 12 MICROAMMETER - D.C. PR TO 6/1/43 SCALE 0-750. 3-1/2" FLUSH.	22053	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-10. 2-1/2" FLUSH.		
12/17/31 NOV. 43		(3115)	12/18/31 NOV. 43		(4359)	12/18/31 NOV. 43		(3043)		
22038	GENERAL USE	17 I 12 AMMETER - R.F. PR TO 6/1/43 SCALE 0-20. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	22046	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-1. 3-1/2" FLUSH.	22054	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-25. 3-1/2" FLUSH.		
12/17/31 NOV. 43		(2927)	12/18/31 CV:301 NOV. 43		(3265)	12/18/31 CV:301 NOV. 43		(3126)		
22039	GENERAL USE	17 I 12 AMMETER - R.F. PR TO 6/1/43 SCALE 0-30. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	22047	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-1.5. 2-1/2" FLUSH.	22055	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-25. 2-1/2" FLUSH.		
12/17/31 NOV. 43		(3122)	12/18/31 NOV. 43		(2432)	12/18/31 NOV. 43		(2991)		
22040	GENERAL USE	17 I 12 AMMETER - R.F. PR TO 6/1/43 SCALE 0-35. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	22048	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-2. 3-1/2" FLUSH.	22056	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-50. 3-1/2" FLUSH.		
12/17/31 NOV. 43		(3112)	12/18/31 NOV. 43		(4266)	12/18/31 CAY:HX NOV. 43 CV:301		(2926)		
22041	GENERAL USE	17 I 12 AMMETER - R.F. PR TO 6/1/43 SCALE 0-50. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	22049	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-2. 2-1/2" FLUSH.	22057	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-50. 2-1/2" FLUSH.		
12/17/31 NOV. 43		(3134)	12/18/31 NOV. 43		(3363)	12/18/31 NOV. 43		(3817)		
22042	GENERAL USE	17 I 12 AMMETER - R.F. PR TO 6/1/43 SCALE 0-60. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	22050	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 (18J-1121). SCALE 0-5. 3-1/2" FLUSH.	22058	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-100. 2-1/2" FLUSH.		
12/17/31 NOV. 43		(3113)	12/18/31 DO-24 NOV. 43		(3057)	12/18/31 NOV. 43		(3025)		
22043	GENERAL USE	17 I 12 AMMETER - R.F. PR TO 6/1/43 SCALE 0-80. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.	22051	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-5. 2-1/2" FLUSH.	22058-A	CO-3	17 I 12 MILLIAMMETER D.C. PR TO 6/1/43 AIRCRAFT TYPE. SAME AS 22058 EXCEPT (A) BLACK BACKGROUND WITH WHITE MARKINGS & POINTER NON GLARE. SHATTER- PROOF GLASS (B) CERAMIC POINTER STOPS.		
12/17/31 NOV. 43		(2929)	12/18/31 NOV. 43		(3042)	3/22/31 CAY:HX NOV. 43		CO:P-7761557-16 REV. 6.		
DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER

RESTRICTED

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22059	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 (18J-499 & 1134). SCALE 0-100. 3-1/2" FLUSH.	22066	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-300. 3-1/2" FLUSH.	22073	GENERAL USE	17 I 12 MILLIAMMETER - R.F. PR TO 6/1/43 SCALE 0 TO 150. 3-1/2" FLUSH.
12/18/31 NOV. 43		(2055)	12/18/31 NOV. 43		(2490)	12/18/31 NOV. 43		(2520)
22060	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-100. 3-1/2" F.O.B.	22067	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-500. 3-1/2" FLUSH.	22074	GENERAL USE	17 I 12 MILLIAMMETER - R.F. PR TO 6/1/43 SCALE 0-150 2-1/2" FLUSH.
12/18/31 NOV. 43		(2434)	12/18/31 NOV. 43		(2945)	12/18/31 NOV. 43		(3045)
22061	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-150. 3-1/2" FLUSH.	22068	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-500. 2-1/2" FLUSH.	22075	GENERAL USE	17 I 12 MILLIAMMETER - R.F. PR TO 6/1/43 SCALE 0-250 3-1/2" FLUSH.
12/18/31 NOV. 43		(3417)	12/18/31 NOV. 43		(3384)	12/18/31 NOV. 43		(2924)
22062	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-150. 2-1/2" F.O.B.	22068-A	GO-4	17-1-12 MILLIAMMETER - DC PR TO 6/1/43 AIRCRAFT TYPE. 0-500 MA DC; 2-1/2" FLUSH. BLACK BACKGROUND, WHITE POINTERS & LETTERS, CERAMIC STOPS.	22076	GENERAL USE	17 I 12 MILLIAMMETER - R.F. PR TO 6/1/43 SCALE 0-250 2-1/2" FLUSH.
12/18/31 NOV. 43		(2643)	11/29/38 NOV. 43	CG:8DW-41 REV 6	CC:P-7761557-15	12/18/31 NOV. 43		(3167)
22063	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-200. 3-1/2" FLUSH.	22069	GENERAL USE	17 I 12 MILLIAMMETER - R.F. PR TO 6/1/43 (73J-1195) SCALE 0-100. 3-1/2" FLUSH.	22077	GENERAL USE	17 I 12 MILLIAMMETER - R.F. PR TO 6/1/43 SCALE 0-500 3-1/2" FLUSH.
12/18/31 NOV. 43		(2518)	12/18/31 NOV. 43		(2995)	12/18/31 NOV. 43		(2999)
CG-22063-A	TCK-3	17112 MILLIAMMETER-DC; PR TO 6/1/43 RANGE 0 TO 200 MADC. SAME AS TYPE-22063 EXCEPT HAS BLACK BACKGROUND AND WHITE MARKINGS AND POINTER.	22070	GENERAL USE	17 I 12 MILLIAMMETER - R.F. PR TO 6/1/43 SCALE 0-100. 2-1/2" FLUSH.	22078	GENERAL USE	17 I 12 VOLTMETER - A.C. PR TO 6/1/43 SCALE 0-10 3-1/2" FLUSH.
5/22/43 NOV. 43	CG:CD0-41 REV 0	CG:P-7765919-4	12/18/31 NOV. 43		(3038)	12/18/31 NOV. 43		(3101)
22064	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-200. 2-1/2" FLUSH.	22071	GENERAL USE	17 I 12 MILLIAMMETER - R.F. PR TO 6/1/43 SCALE 0-120. 3-1/2" FLUSH.	22079	GENERAL USE	17 I 12 VOLTMETER - A.C. PR TO 6/1/43 SCALE 0-10 2-1/2" FLUSH.
12/18/31 NOV. 43		(4187)	12/18/31 NOV. 43		(3169)	12/18/31 NOV. 43		(3576)
22065	GENERAL USE	17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 SCALE 0-250. 3-1/2" FLUSH.	22072	GENERAL USE	17 I 12 MILLIAMMETER - R.F. PR TO 6/1/43 SCALE 0-125 3-1/2" FLUSH.	22080	GENERAL USE	17 I 12 VOLTMETER - A.C. PR TO 6/1/43 SCALE 0-15. 3-1/2" FLUSH.
12/18/31 NOV. 43		(2848)	12/18/31 NOV. 43		(3056)	12/18/31 NOV. 43		(2957)
		ASSIGNED ISSUED			ASSIGNED ISSUED			
DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER



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22100	GENERAL USE	17 I 12	22107A	N140S-96359	17 I 12	22115	GENERAL USE	17 I 12
VOLTMETER - D.C.	PR TO 6/1/43		KILO-VOLTMETER DC:	PR TO 6/1/43		VOLTMETER - D.C.	PR TO 6/1/43	
SCALE 0-500. EXTERNAL MULTIPLIER.			SCALE 0-2.5 KV DC. FLUSH TYPE BAKELITE CASE. 3-1/2" DIA. FLANGE. 1000 OHMS PER VOLT. WITH HIGH HUMIDITY RESISTING MULTIPLIER.			DOUBLE SCALE 0-2/0-00. FOUR STUD TYPE. 2-1/2" FLUSH.		
3-1/2" FLUSH.		(3123)						(2972)
12/19/31			7/1/42	CV:301	CV:CO-56240	12/19/31		
NOV. 43			NOV. 43		DATED 11/1/38	NOV. 43		
22101	GENERAL USE	17 I 12	22108	GENERAL USE	17 I 12	22116	GENERAL USE	17 I 12
VOLTMETER - D.C.	PR TO 6/1/43		KILO-VOLTMETER, D.C.	PR TO 6/1/43		VOLTMETER - D.C.	PR TO 6/1/43	
SCALE 0-750. EXTERNAL MULTIPLIER.			SCALE 0-3. EXTERNAL MULTIPLIER.			DOUBLE SCALE 0-10/0-120. PUSH BUTTON TYPE. 2-1/2" FLUSH.		
3-1/2" FLUSH.		(2565)	3-1/2" FLUSH.		(2978)			(2973)
12/19/31			12/19/31			12/19/31	CG:8DX41V	CG:K-4142744
NOV. 43			NOV. 43			NAR. 45		REV 2
22102	GENERAL USE	17 I 12	22109	GENERAL USE	17 I 12	22117	GENERAL USE	17 I 12
VOLTMETER - D.C.	PR TO 6/1/43		KILO-VOLTMETER, D.C.	PR TO 6/1/43		VOLTMETER - D.C.	PR TO 6/1/43	
SCALE 0-1000. EXTERNAL MULTIPLIER.			SCALE 0-3.5. EXTERNAL MULTIPLIER.			DOUBLE SCALE 0-7.5/0-150 PUSH BUTTON TYPE. SENSITIVITY 125 OHMS/VOLT SELF-CONTAINED MULTIPLIERS. 2-1/2" FLUSH.		
3-1/2" FLUSH.		(4393)	3-1/2" FLUSH.		(3059)			(2974)
12/19/31			12/19/31			12/19/31		
NOV. 43			NOV. 43			NOV. 43		
22103	GENERAL USE	17 I 12	22110	GENERAL USE	17 I 12	22118	GENERAL USE	17 I 12
VOLTMETER - D.C.	PR TO 6/1/43		KILO-VOLTMETER, D.C.	PR TO 6/1/43		VOLTMETER - D.C.	PR TO 6/1/43	
SCALE 0-400. EXTERNAL MULTIPLIER.			SCALE 0-4. EXTERNAL MULTIPLIER.			DOUBLE SCALE 0-5/0-150. PUSH BUTTON TYPE. 2-1/2" FLUSH.		
3-1/2" FLUSH.		(5305)	3-1/2" FLUSH.		(2997)			(3180)
12/19/31			12/19/31			12/19/31		
NOV. 43			NOV. 43			NOV. 43		
22104	GENERAL USE	17 I 12	22111	GENERAL USE	17 I 12	22119	GENERAL USE	17 I 12
KILO-VOLTMETER - D.C.	PR TO 6/1/43		KILO-VOLTMETER, D.C.	PR TO 6/1/43		VOLTMETER - D.C.	PR TO 6/1/43	
SCALE 0-1.5. EXTERNAL MULTIPLIER.			SCALE 0-7.5. EXTERNAL MULTIPLIER.			DOUBLE SCALE 0-2/0-120. PUSH BUTTON TYPE. 2-1/2" FLUSH.		
3-1/2" FLUSH.		(2998)	3-1/2" FLUSH.		(3114)			(3268)
12/19/31			12/19/31			12/19/31		
NOV. 43			NOV. 43			NOV. 43		
22105	GENERAL USE	17 I 12	22112	GENERAL USE	17 I 12	22120	GENERAL USE	17 I 12
KILO-VOLTMETER, D.C.	PR TO 6/1/43		KILO-VOLTMETER, D.C.	PR TO 6/1/43		VOLTMETER - D.C.	PR TO 6/1/43	
SCALE 0-1.5. EXTERNAL MULTIPLIER.			SCALE 0-10. EXTERNAL MULTIPLIER.			DOUBLE SCALE 0-4/0-160. PUSH BUTTON TYPE. 2-1/2" FLUSH.		
3-1/2" F.O.B. FOR REPLACEMENT USE -22392		(2483)	3-1/2" FLUSH.		(2990)			(3269)
12/19/31			12/19/31			12/19/31		
OCT. 43			NOV. 43			NOV. 43		
22106	GENERAL USE	17 I 12	22113	GENERAL USE	17 I 12	CV-22121	GM	
KILO-VOLTMETER, D.C.	PR TO 6/1/43		KILO-VOLTMETER, D.C.	PR TO 6/1/43		MILLIAMMETER - D.C.		
SCALE 0-2. EXTERNAL MULTIPLIER.			SCALE 0-15. EXTERNAL MULTIPLIER.			DOUBLE SCALE: 0-20/0-200. PUSH BUTTON TYPE.		
3-1/2" FLUSH.		(2979)	3-1/2" FLUSH.		(3044)			
12/19/31			12/19/31			3/22/32	SPECIAL	CH-C-115
NOV. 43			NOV. 43			NOV. 41.		SHEET 38
22107	GENERAL USE	17 I 12	22114	GENERAL USE	17 I 12	22122	T88	17 I 12
KILO-VOLTMETER, D.C.	PR TO 6/1/43		VOLTMETER - D.C.	PR TO 6/1/43		KILO-VOLTMETER - D.C.	PR TO 6/1/43	
SCALE 0-2.5. EXTERNAL MULTIPLIER.			DOUBLE SCALE 0-2/0-60. PUSH BUTTON TYPE. 2-1/2" FLUSH.			SCALE: 0-8 KILOVOLTS. EXTERNAL MULTIPLIER. 3-1/2" FLUSH.		
3-1/2" FLUSH.		(2567)			(2971)			
12/19/31			12/19/31			4/30/32	DO-16A	
NOV. 43			NOV. 43			NOV. 43		





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CN-22142	CM	CN-G-115	CV-22148-A	TBF-1		CAY 22154	MODIFIED TAL	
TEST METER HOLDER FOR MOUNTING TYPE CV-22121 METER.			TUBE LIFE METER 11 VOLTS, 60 CYCLES AC; 0 TO 10,000 HOURS, VEEDER COUNTER.			VOLTMETER, A.C. - SPECIAL SCALE: 0-7.5. CALIBRATED TO READ 5 VOLTS ON SCALE WITH 186 VOLTS ON TERMINALS.		
5/3/33			10/26/36	MODEL #691		1/23/34	CA	
NOV. 41			NOV. 41	TYPE 2		NOV. 41		
22143	TBG	17 1 12	CAY 22148-B	TBK-B		CAY 22155	MODIFIED TAL	
VOLTMETER - D.C. SCALE: 0-350. 3-1/2" FLUSH. (1000 OHMS PER VOLT).			TUBE LIFE METER RANGE: 0 TO 10,000 HOURS. NO. DIALS: 5; 11 VOLTS, 60 CYCLES. MINIMUM CALIBRATION: 1/10 HOUR.			VOLTMETER, AC - SPECIAL SCALE: 0-5. CALIBRATED TO READ 2.5 VOLTS ON SCALE WITH 186 VOLTS ON TERMINALS.		
5/24/33			10/27/38	S#1001602	CAT 43-353	1/23/34	CA	
NOV. 43			NOV. 41			NOV. 41		
22144	TBG	17 1 12	22149	DO		22156	TAY-1	17 1 12
VOLTMETER, D.C. SCALE: 0-175, 3-1/2" FLUSH.			METER, OUTPUT (CANCELLED - USE 22152)			KILO-VOLTMETER - D.C. SCALE: 0-2.5 - EXTERNAL MULTIPLIER. SENSITIVITY: 1000 OHMS PER VOLT. 3-1/2" FLUSH.		
5/24/33			6/21/33			5/10/34		
NOV. 43			NOV. 41			NOV. 43		
22145	TBG	17 1 12	CBG 22150	PC		CBY 22157	RU-3&RU-3a	
KILO-VOLTMETER, D.C. SCALE: 0-3.5. (1000 OHMS PER VOLT) 3-1/2" FLUSH. EXTERNAL MULTIPLIER.			METER (FREQUENCY) RANGE: 33.3 - 60 - 68.6 - 80 - 96 CYCLES - 115 VOLTS. EXTENDED 3-1/2" PHENOLIC CASE.			TEST METER HOLDER & CONNECTING CABLE.		
5/24/33			8/4/33		K-802595	6/14/34		
NOV. 43			NOV. 41			NOV. 41		
22145-A	* SEE BELOW	17-1-12	22151	PC	17 1 12	22158	GF-1&GF-2	17 1 12
KILOVOLT METER D.C. SCALE 0 TO 3.5 KV DC, 1000 OHMS PER VOLT; 3-1/2" FLUSH WITH HIGH HUMIDITY RESISTING EXTERNAL MULTIPLIER.			VOLTMETER, AC. RECTIFIER TYPE; SCALE 0 - 3, 3-1/2" FLUSH.			AMMETER, R.F. SCALE: 0-1.25. 2-1/2" FLUSH.		
5/24/33			8/9/33			6/14/34		
NOV. 43			NOV. 43			NOV. 43		
22146	TAJ-4&TBF-1	17 1 12	22152	DO-1,2,3	17 1 12	CG-22159	*SEE BELOW	17-1-12
VOLTMETER, D.C. SCALE: 0-750. (1000 OHMS PER VOLT) 3-1/2" FLUSH. EXTERNAL MULTIPLIER.			METER, OUTPUT SCALE: ZERO CENTER; MINUS 10 TO PLUS 5 DECIBELS; 2-1/2" FLUSH; ACCURACY ± 5%; REF. OUTPUT IMPEDANCE 600 OHMS; 0 POWER LEVEL; 6 MILLIWATTS; INSTRUMENT RESISTANCE 5000 OHMS ± 5%; RECTIFIER TYPE.			VOLTMETER - A.C. SCALE: 0-30. 6" RECTANGULAR.		
5/24/33			8/28/33	506		9/24/34	AD-6	
NOV. 43			NOV. 43		CRY:K-815011-1	NOV. 43		
22147	TAJ-4&TBF-1	17 1 12	22153	GENERAL USE	17 1 12	CG-22160	TBJ(20&140)	17 1 12
VOLTMETER, A.C. SCALE: 0-7.5. (TBJ-497) 3-1/2" FLUSH.			MILLIAMMETER, D.C. SCALE: 0-1. 2-1/2" FLUSH.			MILLIAMMETER, D.C. SCALE: 0-150. 6" RECTANGULAR.		
5/24/33			10/25/33			9/24/34	DD-6	
NOV. 43			NOV. 43			NOV. 43		
CAY 22148	TAJ-4&TBF-1	17 1 12	22153-A	GO		CG-22161	TBJ (21)	17 1 12
TUBE LIFE METER RANGE: 0-10,000 HOURS. 11 VOLTS A.C., 60 CYCLES - SYNCHRONOUS MOTOR. 4 DIALS & SHEEP HAND CALIBRATED IN TENTH HRS 3-7/8 DEEP. 3-1/2 EXTENDED STANDARD METER CASE. FLUSH MOUNTING.			MILLIAMMETER, DC; SAME AS TYPE -22153 EXCEPT (A) MOISTURE- PROOF, (B) BLACK BACKGROUND WITH WHITE LETTERS & POINTER, NONGLARE, (C) NORMAL VALUE SCALE MARKINGS, (D) CERAMIC POINTER STOPS. INTERNAL RESISTANCE 26 OHMS. 7/15/37 (CV) 506 DEC. 41			AMMETER, D.C. SCALE: 0-1. 6" RECTANGULAR.		
5/29/33	S#930399		7/15/37	(CV) 506		9/24/34	DD-6	
NOV. 41			NOV. 41			NOV. 43		

Class 22—Indicating Instruments

3.22-9

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CG-22162	* SEE BELOW	17-1-12	CG-22170	TBJ	17-1-12	CG-22177	* SEE BELOW	17-1-12
AMMETER, R.F.	PR TO 6/1/43		AMMETER, D.C.	PR TO 6/1/43		AMMETER - A.C.	PR TO 6/1/43	
SCALE: 0-20. 6" RECTANGULAR. FULL SCALE DEFLECTION AT 10 MV DC CALIBRATED WITH TYPE 22259 INTERCHANGEABLE THERMO-COUPLE RATED 5 AMP RF, 10 MV DC AND A 20:5 AMP CURRENT TRANSFORMER. (24)			SCALE: 5-0-5. 6" RECTANGULAR.			SCALE: 0-150 - FOR USE WITH 150:5 CURRENT TRANSFORMER. 6" RECTANGULAR.		
* TBJ (25 & 128)						* TBJ (622 & 653).		
9/24/34 DD-6			9/24/34 DD-6			9/24/34 AD-6		
NOV. 43			NOV. 43			NOV. 43		
CG-22163	TBJ (118)	17-1-12	CG-22171	TBJ	17-1-12	CG-22178	TBJ(625)	17-1-12
AMMETER, D.C.	PR TO 6/1/43		KILO-VOLTMETER, D.C.	PR TO 6/1/43		KILOWATTMETER AC.	PR TO 6/1/43	
SCALE: 0-3. 6" RECTANGULAR.			SCALE: 0-20. FULL SCALE DEFLECTION AT 62.5 MA. 6" RECTANGULAR. INTERNAL RESISTANCE = 1.56 OHMS. EXTERNAL MULTIPLIER. (421) 15-63425 RESISTORS IN SERIES. PROTECTIVE RESISTOR(422) 63403 ADJUSTING RESISTOR(493) 63326, AND			SCALE: 0-60 - FOR USE WITH 150:5 AMP. CURRENT TRANSFORMER, AND 220 VOLTS, 3-PHASE, 3-WIRE. INCLUDES ONE 2-TUBE CAGE EXTERNAL MULTIPLIER. 6" RECTANGULAR.		
			9/24/34 DD-6			9/24/34 AD-6		
NOV. 43			NOV. 43			NOV. 43		
CG-22164	TBJ(139-327)	17-1-12	BY-PASS CAPACITOR (416)	22171		CG-22179	TBJ(641)	17-1-12
VOLTMETER, D.C.	PR TO 6/1/43					AMMETER, A.C.	PR TO 6/1/43	
SCALE: 0-900; INCLUDES EXTERNAL MULTIPLIER CONSISTING OF ONE 1-TUBE CAGE. 6" RECTANGULAR.						SCALE: 0-200 - FOR USE WITH 200:5 AMP. CURRENT TRANSFORMER. 6" RECTANGULAR.		
9/24/34 DD-6						9/24/34 AD-6		
NOV. 43						NOV. 43		
CG-22165	TBJ(141)	17-1-12	CG-22172	TBJ	17-1-12	CG-22180	*SEE BELOW	17-1-12
VOLTMETER, D.C.	PR TO 6/1/43		AMMETER, D.C.	PR TO 6/1/43		AMMETER, A.C.	PR TO 6/1/43	
SCALE: 0-3,000. INCLUDES EXTERNAL MULTIPLIER, CONSISTING OF TWO 4-TUBE CAGES AND ONE 1-TUBE CAGE. 6" RECTANGULAR.			SCALE: 0-80. EXTERNAL SHUNT. 6" RECTANGULAR.			SCALE: 0-50; FOR USE WITH 50:5 AMP. CURRENT TRANSFORMER. 3 PHASE, 3 WIRE, 25 CYCLES. 6" RECTANGULAR.		
						* TAN-1 (770) TBJ (645)		
9/24/34 DD-6			9/24/34 DD-6			9/24/34 AD-6		
NOV. 43			NOV. 43			NOV. 43		
CG-22166	TBJ(303)	17-1-12	CG-22173	* SEE BELOW	17-1-12	CG-22181	TAN-a	17-1-12
VOLTMETER R.F.	PR TO 6/1/43		VOLTMETER, A.C.	PR TO 6/1/43		AMMETER, A.C.	PR TO 6/1/43	
SCALE: 0-2000 (SCALE TO BE CALIBRATED AFTER INSTALLATION) CALIBRATED WITH NO. INTERCHANGEABLE THERMOCOUPLE (P-1290452 G-8) RATED 6 AMPS. R.F. 6" RECTANGULAR.			SCALE: 0-300. INCLUDES ONE 1-TUBE CAGE EXTERNAL MULTIPLIER. 6" RECTANGULAR.			SCALE: 0-10 - FOR USE WITH 10:5 AMP. CURRENT TRANSFORMER. 6" RECTANGULAR.		
			* TBJ (418,621,662) & TAN-1 (481,662)					
9/24/34 DD-6			9/24/34 AD-6			9/24/34 AD-6		
NOV. 43			NOV. 43			NOV. 43		
CG-22167	*SEE BELOW	17-1-12	CG-22174	TBJ(610)	17-1-12	CG-22182	TBJ(661)	17-1-12
AMMETER, D.C.	PR TO 6/1/43		VOLTMETER, A.C.	PR TO 6/1/43		VOLTMETER, D.C.	PR TO 6/1/43	
SCALE: 0-10. 6" RECTANGULAR.			SCALE: 0-20,000. CALIBRATED FOR USE WITH 20,000:166.7 VOLT POTENTIAL TRANSFORMER. 6" RECTANGULAR.			SCALE: 0-150. 6" RECTANGULAR.		
* TBJ (311) (1643).			9/24/34 AD-6			9/24/34 DD-6		
9/24/34 DD-6			NOV. 43			NOV. 43		
NOV. 43								
CG-22168	TBJ(313)	17-1-12	CG-22175	TBJ(614&671)	17-1-12	CG-22183	TBJ(670)	17-1-12
VOLTMETER, A.C.	PR TO 6/1/43		AMMETER, A.C.	PR TO 6/1/43		WATTMETER AC.	PR TO 6/1/43	
SCALE: 0-40. 6" RECTANGULAR.			SCALE: 0-80. CALIBRATED FOR USE WITH 80:5 AMP. CURRENT TRANSFORMER. 6" RECTANGULAR.			300 KW - FOR USE WITH 800:5 CURRENT TRANSFORMER, AND 220 VOLTS - 3-PHASE, 3 WIRE. INCLUDES ONE 2-TUBE CAGE EXTERNAL MULTIPLIER. 6" RECTANGULAR.		
9/24/34 AD-6			9/24/34 AD-6			9/24/34 AD-6		
NOV. 43			NOV. 43			NOV. 43		
CG-22169	TBJ(319)	17-1-12	CG-22176	TBJ(616)	17-1-12	CG-22184	TBJ	17-1-12
AMMETER, R.F.	PR TO 6/1/43		KILOWATTMETER, A.C.	PR TO 6/1/43		AMMETER, A.C.	PR TO 6/1/43	
SCALE: 0-500. FOR USE WITH 500:5 AMP CURRENT TRANSFORMER & AN INTERCHANGEABLE 5 AMP 10 MILLIVOLT. EXTERNAL THERMOCOUPLE. TYPE 22259. 6" RECTANGULAR.			SCALE 0-2000 FOR USE WITH 80:5 AMPS. CURRENT TRANSFORMER AND 13,800:115 VOLTS POTENTIAL TRANSFORMER. 5 AMP, 115 VOLT THREE-PHASE, THREE-WIRE - 6" RECTANGULAR.			SCALE: 0-80 - FOR USE WITH 80:5 AMP. CURRENT TRANSFORMER. 6" RECTANGULAR.		
9/24/34 DD-6			9/24/34 AD-6			9/24/34 AD-6		
NOV. 43			NOV. 43			NOV. 43		

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DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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RESTRICTED

NAVSHIPS 900,109

3.22-10

Class 22—Indicating Instruments

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CG-22135	TBJ(673)	17 1 12 PR TO 6/1/43	CV-22193	10/17/34	665-3 NOV. 41	CV-22199-B	6/2/41	MODEL 691 MAR. 42 TYPE 2
AMMETER, D.C. SCALE: 0-30. 6" RECTANGULAR.			D.C. VOLT/MILLIAMPERE/OHM METER. RANGE: 1/2.5/10/25/50/100/250 VOLTS AT 20,000 OHMS PER V. 500/1000 V AT 1,000 OHMS PER VOLT. 1/2.5/5/10/25/ 50/100 MA. & 0-10 MEGOHMS. PORTABLE.			OXAMCOXAM-1 TUBE LIFE METER. 115 VOLTS, 60 CYCLES; 0 TO 10,000 HOURS, VEEGER COUNTER. SAME AS CV-22148A EXCEPT FOR SUPPLY VOLTAGE.		
9/24/34 DD-6 NOV. 43			10/17/34 665-3 NOV. 41			CRV:M-421650 SUB 0		
CG-22186	TAW-1 (674)	17 1 12 PR TO 6/1/43	CV-22194	10/17/34	664 NOV. 41	CAY22199C	10/22/34	NA NOV. 41
AMMETER, A.C. SCALE: 0-500 - FOR USE WITH 600:5 AMP. CURRENT TRANSFORMER. 6" RECTANGULAR.			A.C. VOLT/CAPACITY METER RANGE: 4/8/40/200/400/800 VOLTS - 1000 OHMS PER VOLT RECTIFIER TYPE. 10-200/1-20/0.1-2/0.01-2/0.001-.02 MFDS. PORTABLE.			T&U-1,-2 TUBE LIFE METER; RATED 75% TO 125% OF 120 VOLTS 60 CYCLES. 0 TO 10,000 HOURS, VEEGER TYPE COUNTER. SAME AS -22199B EXCEPT 1-7/8" LESS DEPTH BEHIND PANEL, -22199A EXCEPT 3/32" DEEPER BEHIND PANEL AND VEEGER COUNTER INSTEAD OF SWEEP HANDS. LOWEST 6/13/42 CAY:MH-35 CAT 43-351 AUG. 43 S#1205858		
9/24/34 AD-6 NOV. 43			10/17/34 664 NOV. 41			CALIBRATION 1 REVOLUTION CAY 22199C PER HOUR CALIBRATED IN TENTHS. 3-1/2" FLUSH PHENOLIC CASE.		
CG-22187	TBJ	17 1 12 PR TO 6/1/43	CV-22195	10/17/34	695-3A NOV. 41	CAY 22200	10/22/34	NA NOV. 41
POWER FACTOR METER SCALE 0.5 LAG TO 0.5 LEAD. FOR USE WITH 800:5 AMP. CURRENT TRANSFORMER. 220 VOLTS A.C. 5 AMPS, INCLUDES ONE 2-TUBE CAGE EXTERNAL MULTIPLIER. 6" REC- TANGULAR.			GENERAL USE POWER LEVEL/VOLTMETER RANGE: -8/-4/0/4/8/12/16/20/24/28/32 DECIBELS. MULTIPLIER RANGE ZERO LEVEL 6 MILLIWATTS AT 500 OHMS. 1.5/6/15/60/ 150 VOLTS A.C. - RECTIFIER TYPE. PORTABLE.			TAJ-5 & TBK VOLTMETER-A.C.-SPECIAL SCALE: 0-7.5. CALIBRATED TO READ 5 VOLTS ON SCALE WITH 200 VOLTS ON TERM- INALS - 7500 VOLTS INSULATION - 3-1/2" FLUSH.		
9/24/34 AD-6 NOV. 43			10/17/34 695-3A NOV. 41					
CG-22188	TBJ(677)	17 1 12 PR TO 6/1/43	CV-22196	10/17/34	689-1E NOV. 41	CG-22201	10/22/34	NA NOV. 41
AMMETER, A.C. SCALE: 0-300 - FOR USE WITH 600:5 AMP. CURRENT TRANSFORMER. 6" RECTANGULAR.			GENERAL USE OHMMETER RANGE: 0-5,000/0-50,000 OHMS. USES ONE "D" CELL OF FEDERAL SPEC. W-B-101; PORT- ABLE.			TAW-1 (442) 17 1 12 AMMETER - D.C. SCALE: 0-50, 6" RECTANGULAR.		
9/24/34 AD-6 NOV. 43			10/17/34 689-1E NOV. 41					
CG-22189	TBJ(680)	17 1 12 PR TO 6/1/43	22197	10/22/34	NOV. 43	CG-22202	11/1/34	DD-6 NOV. 43
KILOWATTMETER. SCALE 0-120 - FOR USE WITH 600:5 AMP. CURRENT TRANSFORMER. 220 VOLTS - SINGLE PHASE, 3 WIRE. 6" RECTANGULAR.			T&A-2 17 1 12 KILO-VOLTMETER - D.C. SCALE: 0-4 - EXTERNAL MULTIPLIER. SEN- SITIVITY - 1,000 OHMS PER VOLT. 3-1/2" FLUSH.			GF-1 & RU-3 17 1 12 MILLIAMMETER - D.C. SCALE: 0-35. 2-1/2" FLUSH.		
9/24/34 AD-6 NOV. 43			10/22/34 NOV. 43					
CG-22190	TBJ(1154)		22198	10/22/24	NOV. 43	CG-22203	11/14/34	AD-6 NOV. 43
VOLTMETER, A.C. - SPECIAL. SCALE: 0-150. RECTIFIER TYPE.			TAJ-5&TBK 17 1 12 VOLTMETER - D.C. SCALE: 0-500 - EXTERNAL MULTIPLIER. 1000 OHMS PER VOLT. 3-1/2" FLUSH.			TAW-B(1606) 17 1 12 KILO-VOLTMETER - A.C. SCALE: 0-15. FOR USE WITH 15,000:150 VOLT POTENTIAL TRANSFORMER. 6" REC- TANGULAR.		
9/24/34 800-27 NOV. 41 SPECIAL		7350132-P1154	10/22/24 NOV. 43					
CG-22191	TBJ(1153)		CAY 22199	10/22/34	S#838946 NOV. 41	CG-22204	11/14/34	AD-6 NOV. 43
FREQUENCY METER - SPECIAL SCALE: 25-0-25 CYCLES - FOR USE ON 115 V 350 TO 1350 CYCLES.			TAJ-5 & TBK TUBE LIFE METER 120 VOLTS - 60 CYCLES. 10,000 HRS. MAX- IMUM 7500 VOLT INSULATION. 4 DIALS & SWEEP HAND. ONE RPH OF SWEEP HAND MARKED IN TENTHS; 3-1/2" FLUSH, 3-7/8" DEEP.			TAW-D(1607) 17 1 12 KILO-WATTMETER AC. SCALE 0-2,000 KW - 6" RECTANGULAR. 5 AMP, 115, VOLT, 3 WIRE, 3 PHASE. FOR USE WITH TWO 11500:115 VOLT POTENTIAL TRANSFORMERS, & TWO 30:1 CURRENT TRANS- FORMERS, 115 VOLT, 3 WIRE, 3 PHASE.		
9/24/34 AH-12 NOV. 41		8AH12F-Y10	10/22/34 S#838946 NOV. 41					
CG-22192	TBJ(521)	17 1 12 PR TO 6/1/43	CAY 22199A	11/14/34	AD-6 NOV. 43			
AMMETER - A.C. SCALE: 0-1500 - FOR USE WITH 300:1 AMP. CURRENT TRANSFORMER. 7" RECTANGULAR.			TBK-7 TUBE LIFE METER; 115 TO 120 VOLTS, 60 CYCLES, 10000 HOURS MAXIMUM, 5 DIALS. LOWEST CALIBRA- TION 1 REV PER HOUR CALIBRATED IN TENTHS MEMCO STYLE S#1001606 (NO SHROUD) OR S-1205849. (WITH SHROUD). SIMILAR TO -22199C EXCEPT SWEEP COUNTER. 4/4/38 NH-35 CAT:43-353 AUG. 42.					
9/29/34 AD-7 NOV. 43			11/14/34 AD-6 NOV. 43					

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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Class 22—Indicating Instruments

3.22-11

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CG-22205	TAW-a	17 1 12 PR TO 6/1/43	CG-22213	* SEE BELOW	17-1-12 PR TO 6/1/43	CG-22220	TAW-1(759)	17-1-12 PR TO 6/1/43
WATTMETER RATED 1000 KW - 6" RECTANGULAR. FOR USE WITH 15,000:150 VOLT POTENTIAL TRANSFORMER AND 50:1 CURRENT TRANSFORMER			AMMETER - R.F. SCALE: 0-1000 - 6" RECTANGULAR. FOR USE WITH TWO 500:5 AMP. CURRENT TRANSFORMERS AND TWO TYPE 22259 INTERCHANGEABLE THERMOCOUPLES RATED 5 AMP RF, 10 MV DC. TOTAL LEAD RESISTANCE .065 OHMS; * TAW-1(360) (TBJ-360). 12/19/34 DD-6 NOV. 43			WATTMETER AC. SCALE 0-160 KW. 3 PHASE, 3 WIRE, 440 VOLTS A.C. FOR USE WITH 200:5 AMP. CURRENT TRANSFORMER. INCLUDES ONE 4-TUBE CAGE EXTERNAL MULTIPLIER.		
11/14/34 AD-6 NOV. 43						12/19/34 AD-6 NOV. 43		
CG-22206	TAW-a(1614)	17 1 12 PR TO 6/1/43	CG-22214	TAW-1(387)	17-1-12 PR TO 6/1/43	CG-22221	TAW-1(761)	17-1-12 PR TO 6/1/43
AMMETER - A.C. SCALE: 0-75 - 6" RECTANGULAR. FOR USE WITH 75:5 CURRENT TRANSFORMER.			AMMETER - R.F. SCALE: 0-300 - 6" RECTANGULAR. FULL SCALE DEFLECTION AT 10 MV DC. FOR USE WITH 300:5 AMP. CURRENT TRANSFORMER AND THERMOCOUPLE. (INTERCHANGEABLE) (P-1290452G-1) (5 AMP RF, 10 MV DC. TYPE 22259). 12/19/34 DD-6 NOV. 43			POWER FACTOR METER SCALE 0.5 LAG TO 0.5 LEAD. 3-PHASE, 3-WIRE, 440 VOLTS A.C. FOR USE WITH 300:5 AMP. CURRENT TRANSFORMER. INCLUDES ONE 4-TUBE CAGE EXTERNAL MULTI- PLIER. 6" RECTANGULAR.		
11/14/34 AD-6 NOV. 43						12/19/34 AD-6 NOV. 43		
CG-22207	* SEE BELOW	17 1 12 PR TO 6/1/43	CG-22215	TAW-1(743)	17-1-12 PR TO 6/1/43	CG-22222	TAW-1(762)	17-1-12 PR TO 6/1/43
AMMETER - A.C. SCALE: 0-40 - 6" RECTANGULAR. FOR USE WITH 40:5 CURRENT TRANSFORMER.			VOLTMETER - A.C. SCALE: 0-600 - 6" RECTANGULAR. INCLUDES ONE 1-TUBE CAGE EXTERNAL MULTIPLIER.			AMMETER - A.C. SCALE: 0-300 - 6" RECTANGULAR. FOR USE WITH 300:5 AMP. CURRENT TRANSFORMER.		
* TAW-a(1616) TAW-16(741&760). 11/14/34 AD-6 NOV. 43			12/19/34 AD-6 NOV. 43			12/19/34 AD-6 NOV. 43		
CG-22208	TAW-a(1611)	17 1 12 PR TO 6/1/43	CG-22216	TAW-1(744)	17-1-12 PR TO 6/1/43	CG-22223	TAW-1(764)	17-1-12 PR TO 6/1/43
AMMETER - A.C. SCALE: 0-12.5 - 6" RECTANGULAR. FOR USE WITH 12.5:5 AMP. CURRENT TRANSFORMER.			AMMETER - A.C. SCALE: 0-60 - 6" RECTANGULAR. FOR USE WITH 60:5 AMP. CURRENT TRANSFORMER. (747)			SCALE 0-50 KW. SINGLE PHASE, 2-WIRE, 25 CYCLES, 220 VOLTS A.C. FOR USE WITH 200:5 AMP. CURRENT TRANSFORMER.		
11/14/34 AD-6 NOV. 41			12/19/34 AD-6 NOV. 43			12/19/34 AD-6 NOV. 43		
CG-22209	TAW-a	17-1-12 PR TO 6/1/43	CG-22217	TAW-1(746)	17-1-12 PR TO 6/1/43	CG-22224	TAW-1(768)	17-1-12 PR TO 6/1/43
AMMETER - A.C. SCALE: 0-150 - 3-1/2" FLUSH. FOR USE WITH 150:6.5 AMP. CURRENT TRANSFORMER.			WATTMETER AC. SCALE 0-45KW. 3-PHASE - 3-WIRE - 440 VOLTS A.C. FOR USE WITH 60:5 AMP. CUR- RENT TRANSFORMER. INCLUDES ONE 4-TUBE CAGE EXTERNAL MULTIPLIER.			KILO-WATTMETER SCALE 0-800 KW. 3-PHASE, 3-WIRE, 25 CYCLES. FOR USE WITH 50:5 AMP. CURRENT TRANSFORMER AND 11500:115 VOLT POTENTIAL TRANSFORMER.		
11/14/34 AD-21 NOV. 43			12/19/34 AD-6 NOV. 43			12/19/34 AD-6 NOV. 43		
CG-22210	* SEE BELOW	17-1-12 PR TO 6/1/43	CG-22218	TAW-1(754)	17-1-12 PR TO 6/1/43	CG-22225	TBL3T3L-1	17-1-12 PR TO 6/1/43
VOLTMETER - D.C. SCALE: 100-150 - 6" RECTANGULAR.			AMMETER - A.C. SCALE: 0-120 - 6" RECTANGULAR. FOR USE WITH 120:5 AMP. CURRENT TRANSFORMER.			VOLTMETER, D.C. SCALE: C-100, SELF-CONTAINED. SENSITIV- TIVITY: 1,000 OHMS PER VOLT, 3-1/2" FLUSH		
* TAW-1(1623) TBJ-1623. 11/15/34 DD-6 NOV. 43			12/19/34 AD-6 NOV. 43			1/9/35 NOV. 43		
CG-22211	TAW-1	17-1-12 PR TO 6/1/43	CG-22219	TAW-1(756)	17-1-12 PR TO 6/1/43	CG-22226	TAW-1(742)	17 1 12 PR TO 6/1/43
AMMETER - A.C. SCALE: 0-15 - 6" RECTANGULAR. FOR USE WITH 15:5 AMP. CURRENT TRANSFORMER.			AMMETER, A.C. SCALE: 0-20 - 6" RECTANGULAR. FOR USE WITH 20:5 AMP. CURRENT TRANSFORMER.			KILOWATTMETER SCALE: 0-800 KW. 3-PHASE, 3-WIRE. FOR USE WITH TWO 40:5 AMP. CURRENT TRANS- FORMERS AND TWO 11,500:115 VOLT POTENTIAL TRANSFORMERS.		
11/15/34 AD-6 NOV. 43			12/19/34 AD-6 NOV. 43			1/11/35 AD-6 NOV. 43		
CG-22212	TAW-1	17-1-12 PR TO 6/1/43				CG-22227	TAW-1	17 1 12 PR TO 6/1/43
AMMETER - A.C. SCALE: 0-30 - 6" RECTANGULAR. FOR USE WITH 30:5 AMP. CURRENT TRANSFORMER.						KILO-VOLTMETER, D.C. SCALE: 0-1.5. EXTERNAL MULTIPLIER. SENSITIVITY: 1,000 OHMS PER VOLT. 3-1/2" FLUSH.		
11/15/34 AD-6 NOV. 43						1/11/35 NOV. 43		

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NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION		
22228	TBM & TBN	17 I 12 PR TO 6/1/43	22235	TAO-4	17 I 12 PR TO 6/1/43	CG-22240	TBJ(329)	17 I 12 PR TO 6/1/43		
AMMETER, R.F. SCALE: 0-25, 3-1/2" FLUSH.			KILO-VOLTMETER, D.C. SCALE: 0-3, EXTERNAL MULTIPLIER. SENSITIVITY: 1,000 OHMS PER VOLT, 3-1/2" FLUSH.			AMMETER, D.C. SCALE: 1-0-9 - 6" RECTANGULAR.				
1/14/35 NOV. 43			4/17/35 NOV. 43			8/7/35 NOV. 43	DO-6			
CAY 22229	TBM & TBN	17 I 12	22236	GENERAL USE	17 I 12	22241	RAG & RAG-1	17 I 12		
MODULATION METER SCALE: 0-100%. USED WITH EXTERNAL TRANSFORMER. 3-1/2" FLUSH.			MICROAMMETER SCALE: 0-500. 3-1/2" FLUSH.			VOLTMETER, A.C./D.C. SCALE: 0-8 - ACCURACY: ± 2% ON 60 CYCLES AC. ± 3% ON D.C.; 2-1/2" FLUSH.				
1/14/35 NOV. 41	NX-30	42-D-426	6/29/35 NOV. 43			9/11/35 NOV. 43	517A			
22229-A	TBM-4, 5, 6.	17-1-12	22237		17 I 12	CAY 22242				
MODULATION METER SCALE: 0 TO 100%; 3-1/2" FLUSH; INCLUDES ONE NAVY TYPE CAY-30557 EXTERNAL TRANSFORMER. SAME AS BASIC TYPE EXCEPT FOR TRANSFORMER WHICH HAS BEEN HERMETICALLY SEALED AND REDUCED IN SIZE.			CANCELLED USE 22147.		PR TO 6/1/43	SUPERSEDED - USE -22242A.				
9/24/40 NOV. 43	CAY:HX	CAY:T-7605997-20 SUB 7.	6/29/43 NOV. 43							
CG-22230	TBJ (790)	17 I 12	22238	GP	17 I 12	CAY 22242-A	* SEE BELOW			
AMMETER, A.C. SCALE: 0-5, 6" RECTANGULAR. FOR USE WITH 10:5 AMP. CURRENT TRANSFORMER.			MILLIAMMETER, D.C. SCALE: 0-300. 2-1/2" FLUSH.		PR TO 6/1/43	TOTAL TIME METER 11 VOLTS, 30 CYCLES OPERATION; A HIGH TORQUE SELF STARTING SYNCHRONOUS MOTOR. 3-1/2" FLUSH, 2-5/8" DEEP(OVERALL) FOUR DIALS & SWEEP HAND OF 1, 10, 100, 1000 & 10,000 HRS. (TOTAL) * TAJ-3 REPLACEMENT. 1/20/38 NH-35 NOV. 41 (11V, 80CY) NRL REPORT R-1415				
1/31/35 NOV. 43	AD-6		7/8/35 NOV. 43	CV:506	CV:CD-65881 REV C					
CG-22231	TBJ (731)	17 I 12	CAY 22238-A	GP-3		CAY 22243	*SEE BELOW			
AMMETER, A.C. SCALE: 0-1,000. 6" RECTANGULAR. FOR USE WITH 1,000:5 AMP. CURRENT TRANSFORMER.			MILLIAMMETER - DC. 0 TO 300 MA DC(ACCORDING TO 17-1-12 EXCEPT AS FOLLOWS) BLACK BACKGROUND WITH WHITE MARKINGS & WHITE POINTERS, NON-GLARE POINTER STOPS ARE PROVIDED, 2-5/16" FLUSH MOUNT (PHENOLIC).			TOTAL TIME METER SUPPLY: 11 VOLTS, 40 CYCLES. 10,000 HR MAXIMUM 4 DIALS & SWEEP HAND. ONE RPH SWEEP HAND MARKED IN TENTHS; 3-1/2" FLUSH; 3-7/8" DEEP. *TAU(REPLACEMENTS).				
2/2/35 NOV. 43	AD-6		8/22/36 NOV. 41	HX		9/27/35 NOV. 41	S#934173			
CG-22232	TAW-B(1613)	17-1-12	22239	GP	17 I 12	CAY 22244				
WATTMETER 60 CYCLE, 3-PHASE, 3-WIRE. FOR USE WITH 40:5 AMP. CURRENT TRANSFORMER. AND 2300:115 VOLT POTENTIAL TRANSFORMER.			AMMETER, R.F. SCALE: 0-9. 2-1/2" FLUSH.		PR TO 6/1/43	CANCELLED				
2/4/35 NOV. 43	AD-6		7/23/35 NOV. 43							
CG-22233	TAW-B(1621)	17 I 12	CAY 22239-A	GP-3		CAY 22245				
VOLTMETER, A.C. SCALE: 0-3,000. 6" RECTANGULAR. FOR USE WITH 20:1 POTENTIAL TRANSFORMER. SAME PT AS FOR 22232.			AMMETER R.F. 0-9 AMPS R.F.(ACCORDING TO 17-1-12 EXCEPT AS FOLLOWS) BLACK BACKGROUND WITH WHITE LETTERS AND WHITE POINTERS, NON-GLARE GLASS, POINTER STOPS PROVIDED, EXPANDED SCALE, 2-9/16" FLUSH. NO EXTERNAL THERMOCOUPLE OR 1/22/37 HX AUG. 43			CANCELLED - USE 22148, 22148A.				
3/26/35 NOV. 43	AD-6									
22234	*SEE BELOW	17 I 12				22246	RAG & RAL	17-1-12		
VOLTMETER, A.C. SPECIAL SCALE: 0-15, CALIBRATED FOR 800 CYCLES. 3-1/2" FLUSH - SCALE RED MARKED AT 10 VOLTS.						VOLTMETER - A.C. D.C. SCALE: 0-10. ACCURACY: ± 2% ON A.C. FULL SCALE, (15 TO 100 CY) ± 2% ON D.C. FROM 5 TO 7 VOLTS. 2-1/2" FLUSH.				
* GH(REPLACEMENT).		(3369)								
4/8/35 NOV. 43						10/30/35 NOV. 43	517A	K-816830-1		
DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER

Class 22—Indicating Instruments

3.22-13

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CV-22247 GP-1 AMMETER - R.F. (AIRCRAFT) SCALE: 0-7, BLACK BACKGROUND WITH WHITE CHARACTERS; 2-1/2" FLUSH - CUSHION PIN NEEDLE STOPS. (PHENOLIC). EXPANDED SCALE-	12/31/35 507 NOV. 41	ESA-608995 ESO:609857-3	22254 GENERAL USE 17 I 12 VOLTMETER A.C. PR TO 6/1/43 0-300 VOLTS A.C. 3-1/2" FLUSH.	9/17/36 NOV. 43		CV-22257-A DP-7,830Q-2 OUTPUT METER - DB. SAME AS 22257 EXCEPT DEPTH INCREASED FROM 1-39/64" TO 2-1/64" OVERALL.	9/10/37 NOV. 41	K-837019-1 ALT 3
CV-22248 GP-1 MILLIAMMETER, D.C. (AIRCRAFT). BAKELITE. SCALE: 0-500. SAME AS 22068 EXCEPT SOME MARKED AT 230 VOLTS OTHERS AT 250 FOR NORMAL OPERATION BLACK BACKGROUND WITH WHITE CHARACTERS; 2-1/2" FLUSH, CUSHION PIN NEEDLE STOPS.	12/31/35 506 NOV. 41	ESA-608996	CV-22254-A NOS 49274 17 I 12 VOLTMETER A.C. PR TO 6/1/43 SAME AS 22254 EXCEPT FOR RED MARK AT 190 V.	9/17/36 476 NOV. 43		CG-22258 T80 17 I 12 VOLT-AMMETER - 3 RANGE DC PR TO 6/1/43 2-1/2" FLUSH, WITH EXTERNAL MULTIPLIER SHUNT UNIT. 0-140 MA DC. 0-140 VOLT DC (WITH RED MARK BETWEEN 67 TO 93 VOLTS & 100 TO 140 VOLTS). 0-500 MA DC (WITH RED LINES AT 300 AND 360 MA DC) BASIC METRE 1 MA DC. 12/29/36 D#41 NOV. 43		
CV-22249 GP-1 VOLTMETER, A.C. (AIRCRAFT). BAKELITE. SCALE: 0-15. BLACK BACKGROUND WITH WHITE CHARACTERS; 2-1/2" FLUSH - CUSHION PIN NEEDLE STOPS; 800 CYCLES.	12/31/35 517 NOV. 41	ESA-608994 ESO-609857-1	22255 TAJ-6 17 I 12 MILLIAMMETER - D.C. PR TO 6/1/43 0-750 MA. DC. 3-1/2" FLUSH. (FIRST FURNISHED BY CG).	10/14/36 00-41 NOV. 43		CG-22258-A T80 17 I 12 VOLT-AMMETER-3 RANGE DC PR TO 6/1/43 2 1/2" FLUSH TYPE WITH EXTERNAL MULTIPLIER TYPE -631598. METER IS MA DC WITH RED MARK AT 60% AND 72% FULL SCALE. THREE MEASUREMENTS AVAILABLE WITH SHUNT: 140 MA DC 140 VOLTS DC AND 500 MA DC. SIMILAR TO BASIC NUMBER EXCEPT FOR 7/21/43 DW41 NOV. 43.		
CAY22250 TBN-1 TUBE LIFE METER 120 VOLTS - 25 CYCLES. 7500 VOLT INSULATION. 4 DIALS WITH 1 RPH SWEEP HAND MARKED IN TENTHS. SAME AS CAY-22199 EXCEPT 25 CYCLES.	1/13/36 NOV. 41		22255-A SM 17-1-12 MILLIAMMETER DC. PR TO 6/1/43 0 TO 750 MA DC. 3X" FLUSH TYPE. SAME AS BASIC NUMBER, BUT HAS BLACK BACKGROUND AND WHITE MARKINGS.	4/10/43 CG:8D041 NOV. 43	CG:7763233-5,	CG-22258-A DIMENSIONS AND INTERNAL MAKE-UP OF SHUNT. SHUNT MAY BE USED WITH EITHER ASSEMBLY.		
CAY22250-A TBN-6 17 I 12 TUBE LIFE METER PR TO 6/1/43 10,000 HRS. FIVE DIALS; 115 VOLTS, SINGLE PHASE, 25 CYCLES; SAME AS NAVY TYPE CAY-22199A EXCEPT DESIGNED FOR 25 CYCLE OPERATION.	8/23/40 S#1001614 NOV. 43 NH-35		CG-22255-B TCK-5 17 I 12 MILLIAMMETER-DC: PR TO 6/1/43 0 TO 750 MADC, 3-1/2" FLUSH TYPE. SAME AS TYPE -22255-A EXCEPT HAS RED MARK AT 360 MA. MEETS 17 I 12 EXCEPT FOR RED MARK.	5/22/43 CG:8D0-41 NOV. 43	CG:P-7765919-5 REV 0	CG-22259 * SEE BELOW THERMOCOUPLE INTERCHANGEABLE THERMOCOUPLE. INPUT: 5 AMP R.F. OUTPUT: 5 MA AT 10 MV DC.		
CAY22251 TBN'S&TBN'S VOLUME INDICATOR METER: LOW RANGE: +20/-10/-4 DB. .6 VOLT =-10 DB. APPROX. 1280 OHMS. MIDDLE RANGE: -10/0/+6 DB. 1.895 VOLTS =0 DB APPROX. 4000 OHMS. HIGH RANGE: 0/+10/+16 DB. 5.4 VOLTS =+10 DB. APPROX. 11550 OHMS. 3-1/2" FLUSH.	2/11/36 NX NOV. 41 S#878636	19-D-884	22256 TBL-2 17 I 12 VOLTMETER - D.C. PR TO 6/1/43 0-200 VOLTS DC. 1000 OHMS PER VOLT. 3-1/2" FLUSH. (FIRST FURNISHED BY CAY)	11/23/36 NX; S#821160 NOV. 43		CV-22260 QC-7 17 I 12 AMMETER - R.F. PR TO 6/1/43 0-5 AMP. EXTERNAL THERMOCOUPLE. 3-1/2" CASE.		
22252 LD-5 17 I 12 VOLTMETER - A.C. PR TO 6/1/43 0-130 VOLTS. 2-1/2" FLUSH. FLANGE = 2-1/2". BODY = 2-1/16". DEPTH = 2-9/16".	6/17/36 517 NOV. 43		CV-22257 *SEE BELOW 17 I 12 DECIBEL(OUTPUT) METER PR TO 6/1/43 SCALE: -10 TO +5 DB; RESPONSIVENESS 0.6 SEC. OR LESS; DAMPING FACTOR BETWEEN 16 & 200; SENSITIVITY: ZERO LEVEL = 72 MICROWATTS, 10.6 VOLTS; IMPEDANCE 5000 OHMS -6 + 10% AT 0.6 VOLT, 1000 CYCLES *OP-4, 5, 6 & OQ-1. 12/15/36 506 NOV. 43 WIDE FLANGE CRV:K-837019-1			CV-22261 DV AZIMUTH POSITION INDICATOR 800 CYCLE SYNCHRONOUS REPEATER.	10/14/37 425 NOV. 41	
22253 LK-1 17 I 12 VOLTMETER - A.C. PR TO 6/1/43 (RECTIFIER TYPE- HIGH SENSITIVITY). 0-25 VOLTS. 3-1/2" FLUSH. RECTIFIER TYPE (2000 OHM PER VOLT).	1/29/37 CV:301 NOV. 43		2-1/2" WIDE FLANGE, METAL 22257 CASE.			CHE22262 * SEE BELOW 66RE22J1004A BEARING REPEATER INDICATOR 115 VOLTS, 60 CYCLE, SINGLE PHASE OPERATION USING TYPE -21290 SELF SYNCHRONOUS MOTOR.	1/20/38 CRR:N-90161-2 NOV. 41	CRR:N-90161-2 PD 8849

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CHE 22263	JK-2/QC-4	68RE22J1004A	22268-A	GO-4	17 1 12	CG-22275	TBC-2	
BEARING REPEATER INDICATOR 230 VOLT, 60 CYCLE, SINGLE PHASE OPERATION USING TYPE -21291 SELF SYNCHRONOUS MOTOR.			AMMETER - RF, AIRCRAFT PR TO 6/1/43 TYPE. 0-8 AMP RF EXPANDED SCALE, BLACK BACKGROUND WITH WHITE FIGURES AND POINTER; CERAMIC STOP.			AMMETER, D.C. 0 TO 4 AMP DC. 7" RECTANGULAR, SEMI FLUSH TYPE.		
2/3/38			11/29/38	CG:8DW-44	CG:P-7761577-13	7/19/38	8DD-7	K:4115570 REV 6
NOV. 41	CHE:10-839	TYPE 1.	NOV. 43	NOV. 43	REV 6	NOV. 41		
22264	GENERAL USE	17 1 12	22269	TBR/TBR-1	17 1 12	CG-22276	TBC-2	
DECIBEL METER (RECTIFIER* PR TO 6/1/43 TYPE AC VOLTMETER). -15 TO +3 DB, 0 DB = 6 VOLTS. FULL SCALE = 8.47 VOLTS. 11,195 OHMS, SELF CONTAINED, HIGH SPEED MOVEMENT, 3-1/2" FLUSH. (CV)			VOLTMETER - AC PR TO 6/1/43 (RECTIFIER TYPE). 0 TO 150 VOLTS AC. 2-1/2" FLUSH. (CG).			AMMETER, DC 0 TO 8 AMP. DC. 7" RECTANGULAR, SEMI FLUSH TYPE.		
*FOR SIZE			6/16/38	8DW-46	CG:P-7761557	7/19/38	8DD-7	K:4115570 REV 6
4/5/38	301		NOV. 43	NOV. 43	PT 6 REV 4	NOV. 41		
22265	DT	17 1 12	22269A	ASB-5		CG-22277	TBC-2	
VOLTMETER - DC PR TO 6/1/43 DOUBLE SCALE 0-8/0-250. PUSH BUTTON TYPE. 2-1/2" FLUSH. (CV).			VOLTMETER AC; RECTIFIER TYPE, 0-150 VOLTS AC, 2-1/2" FLUSH TYPE, SAME AS -22269 EXCEPT HAS BLACK BACKGROUND, WHITE MARKINGS AND POINTER, ETC. CANCEL.			VOLTMETER, D.C. 0 TO 1200 VOLTS - EXTERNAL MULTIPLIER, 100 OHMS PER VOLT, 7" RECTANGULAR, SEMI FLUSH TYPE.		
4/19/38	506		7/14/42		17112	7/19/38	8DD-7	K:4115570 REV 6
NOV. 43			OCT. 42			NOV. 41		
CBY22266	RV/GF SERIES		22270	TBR/TBR-1	17 1 12	CG-22278	TBC-2	
TEST METER USES A 0 TO 35 MA DC MILLIAMMETER, PHENOLIC CASE, (CV TYPE 506) WITH CARRYING CASE.			KILOVOLT METER - DC PR TO 6/1/43 0 TO 2 KV DC. (EXTERNAL MULTIPLIER, 1000 OHMS PER VOLT). 2-1/2" FLUSH. (CG).			KILOVOLT METER - DC 0 TO 20 KV, EXTERNAL MULTIPLIER OF 285,000 OHMS 7" RECTANGULAR, SEMI FLUSH TYPE.		
4/25/38	3140	3140-2-D	6/16/38	8DW-41	CG:P-7761557	7/19/38	8DD-7	K:4115570 REV 6
NOV. 41			NOV. 43	NOV. 43	PT 10 REV 4	NOV. 41		
CAN22266-B	QFA-3		CG8 22271	TBR/TBR-1		CG-22279	TBC-2	
STEERING STAND SAME AS CAN-23266 EXCEPT (1) ALTERATION TO TURNING CIRCLE INDEPENDENT OF SPEED, (2) ADDITION OF RUDDER RELAY, (3) ADDITION OF A SPEED DECAY WHEN TURNING AND (4) THE ELIMINATION OF ELECTRO-MAGNETIC DAMPING IN THE DESTROYER RUDDER			FREQUENCY METER (VIBRATING REED TYPE). CALIBRATED FOR 57, 58, 59, 60, 61, 62, 63 CYCLES; ± 2%; 115 VOLTS OPERATION; 3-1/2" FLUSH; 3-1/16" DEEP, PLUS 3/4" TERMINALS. *TRAHM (MINIATURE).			VOLTMETER, AC FULL SCALE DEFLECTION ON 300 VOLTS AC WITH SCALE MARKED 7.5 VOLT FULL SCALE. 7" RECTANGULAR, SEMI FLUSH TYPE.		
8/12/43			6/16/38	*SEE ABOVE	CG:M-7462680	7/19/38	8AD-7	K:4115570 REV 6
NOV. 43			NOV. 43	NOV. 43	REV 2	NOV. 41		
CAN22266-B			22272	TBC-2	17 1 12	CG-22280	TBC-2	
CIRCUIT & THEREFORE THE ELIMINATION OF THE DD-PC SWITCH ON THE TOP PANEL. SAME AS CAN-23266-A FOR SLIGHT MODIFICATIONS IN TERMINAL BOARD. ELECTRICALLY AND MECHANICALLY INTERCHANGEABLE WITH CAN-23266-A.			KILOVOLT METER - DC PR TO 6/1/43 0 TO 8 KV DC, 1000 OHMS PER VOLT. EXTERNAL MULTIPLIER. 3-1/2" FLUSH. (CG).			AMMETER - AC. 0 TO 25 VOLTS AC. 7" RECTANGULAR, SEMI-FLUSH TYPE.		
7/12/38	DO-41		7/12/38	DO-41	CG:K-4121298	7/19/38	8AD-7	K-4115570 REV 6
NOV. 43			NOV. 43		REV 2	NOV. 41		
22267	TBR & TBR-1	17 1 12	22273	TBC-2	17 1 12	CAY 22281	CXX	
VOLT AMMETER - DC PR TO 6/1/43 0 TO 25 AMP DC AND 0 TO 8 VOLTS DC. 2-1/2" FLUSH. (PUSH BUTTON NORMAL TO READ AMPERES). (CG).			VOLTMETER DC PR TO 6/1/43 0 TO 100 VOLTS DC (1000 OHMS PER VOLT). 3-1/2" FLUSH. (CG).			CROSS POINTER INSTRUMENT. TWO MICROAMMETERS IN SINGLE AIRCRAFT TYPE INSTRUMENT CASE; CASE TO MOUNT IN 3-1/8" DIA. HOLE - WITH FOUR MTG EARS. NOT TO EXTEND BACK MORE THAN 4-1/4".		
6/16/38	8DW-16	CG:P-7761557	7/12/38	DO-41	CG:K-4121298	7/26/38	NX-27	
NOV. 43		PT 5 REV 4	NOV. 43		REV 2	NOV. 41		
22268	TBR/TBR-1	17 1 12	CG-22274	TBC-2		CV-22282	*SEE BELOW	17 1 12
AMMETER - RF PR TO 6/1/43 0 TO 8 AMPS RF. 2-1/2" FLUSH. (CG).			MILLIAMMETER, D.C. 0 TO 750 MA DC. 7" RECTANGULAR, SEMI FLUSH TYPE.			AMMETER RF PR TO 6/1/43 0 TO 3 AMP RF. EXTERNAL THERMOCOUPLE. 3-1/2" FLUSH.		
6/16/38	8DW-44	CG:P-7761557	7/19/38	8DD-7	K:4115570			* -52094 (NM-10) -52095 (QCH). 8/10/38 425
NOV. 43		PT 8 REV 4	NOV. 41		REV 6			NOV. 43





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Class 22—Indicating Instruments

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
22298	HEA	17 1 12	22303	TCD	17 1 12	CG-22310-A	TCK-3	17 1 12
KILOVOLT METER, D.C.	PR TO 6/1/43		MODULATION METER	PR TO 6/1/43		KILOVOLT METER - DC	PR TO 6/1/43	
RANGE 0 TO 2 KILOVOLTS DC, 1000 OHMS PER VOLT; FULL SCALE DEFLECTION 1 MA DC; INCLUDES ONE NAVY TYPE 63747 (2 MEGOHM) EXTERNAL MULTIPLIER.			RANGE 0 TO 100% MODULATION; 2-1/2" FLUSH PHENOLIC CASE 1-19/32" PLUS 1/2 X 8-32 STUDS; BASICALLY A RECTIFIER TYPE AC VOLT METER; FULL SCALE DEFLECTION 425 VOLTS AC WHEN IN SERIES WITH A 420,000 OHM EXTERNAL MULTIPLIER.			RANGE 0 TO 2.5 KVDC, 1000 OHMS PER VOLT. 3-1/2" FLUSH PHENOLIC CASE 1-5/8" DEEP PLUS 27/32" STUD; FULL SCALE DEFLECTION IS 1 MADC. INCLUDES TYPE -63775 (3.5 MEG) EXTERNAL MULTIPLIER. HAS RED MARK AT 1.8KV. KEETS 17 1 12 EXCEPT FOR RED 5/22/43	CG:800-41	CG:P-7765919-3
6/27/41 (CAY) MFB			1/2/40	CG:80446VAV	CG:K-7875570	NOV. 43		REV 0
NOV. 41			NOV. 41		REV 1			
22299		17 1 12	22304	TBU,-1,2,3	17 1 12	CG-22310-A		
CANCELLED REASSIGNED -22298.		PR TO 6/1/43	ANMETER; RF 0 TO 25 AMPS	PR TO 6/1/43		MARK.		
			RF, FULL SCALE DEFLECTION 3.1 MA AT 12.37 MV DC. INCLUDES A NAVY TYPE -22345 EXTERNAL THERMOCOUPLE, 3-1/2" FLUSH. WHEN USED WITH .011 OHM LEADS (LOOP RESISTANCE) REQUIRES 3.1 MA AT 12.4 MV DC. FOR FULL SCALE DEFLECTION.					
11/16/39			6/14/41	CAY:5/1159516	CAY:4-D-1563			
NOV. 43			NOV. 43		REV 1			
22300		17 1 12	22305	TBL-5	17 1 12	22311	TBK-8	17 1 12
DECIBEL METER; RECTIFIER	PR TO 6/1/43		KILOVOLT METER - DC	PR TO 6/1/43		KILOVOLT METER - DC	PR TO 6/1/43	
TYPE. RANGE -10 TO +6 DB; W D3 C-11-X SCALE; FULL SCALE 3.8 VOLTS AC; INSTRUMENT RESISTANCE 5000 OHMS; REFERENCE LEVEL 6 MILLIWATTS IN 600 OHMS. HIGH SPEED MOVEMENT; DAMPING FACTOR 16 TO 50. * -46061 & -46061A			RANGE 0 TO 1.5 KV DC; 1000 OHMS PER VOLT; 3-1/2" FLUSH, PHENOLIC CASE; 1-5/8" BEHIND FLANGE PLUS 27/32" STUDS; FULL SCALE DEFLECTION 1 MA DC; INCLUDES NAVY TYPE -63755 (1.5 MEGOHM) EXTERNAL MULTIPLIER.			RANGE: 0 TO 3.5 KILOVOLTS DC; 1000 OHMS PER VOLT; 3-1/2" FLUSH PHENOLIC CASE; 1-5/8" DEEP PLUS 27/32" STUD; FULL SCALE DEFLECTION 1 MA DC; INCLUDES NAVY TYPE -63775 (3.5 MEGOHM) EXTERNAL MULTIPLIER.		
11/16/39	CV:301	TYPE 61	11/29/39	(CAY)		12/26/39	(CAY) NX-35	CRV:M-418316-9
AUG. 47			NOV. 43			NOV. 43		REV 5
RESPONSIVENESS 0.29 TO 0.35 SECONDS. 1.9 VOLTS AC EQUALS 0 DB. 2% TO 6% OVERTHROW. 3-1/2" FLUSH, PHENOLIC CASE, TROPICALLY TREATED. SAME AS -22388 EXCEPT HAS HIGH SPEED MOVEMENT			22306	TBL-5	17 1 12	22312	LR	17 1 12
			KILOVOLT METER, DC	PR TO 6/1/43		MILLIAMMETER - DC	PR TO 6/1/43	
			RANGE 0 TO 2.5 KV DC; 1000 OHMS PER VOLT; 3-1/2" FLUSH PHENOLIC CASE; 1-5/8" BEHIND FLANGE PLUS 27/32" STUD. FULL SCALE DEFLECTION 1 MA DC; INCLUDES NAVY TYPES -63754 (ONE MEGOHM) AND -63755 (1.5 MEGOHM) EXTERNAL MULTIPLIERS.			0 TO 3 MILLIAMPS DC; 2-1/2" FLUSH.		
			11/29/39	(CAY)		2/7/40	(CY) 506	
			NOV. 43			NOV. 43	METAL CASE	
22301	TCD	17 1 12	22307	RAR	17 1 12	CV-22313	LR	17 1 12
MILLIAMMETER DC DOUBLE	PR TO 6/1/43		MILLIAMMETER, DC	PR TO 6/1/43		FREQUENCY INDICATOR	PR TO 6/1/43	
SCALE. RANGE: SCALE #1:0 TO 100 MA DC; SCALE #2:0 TO 300 MA DC; 2-1/2" FLUSH PHENOLIC CASE, 1-19/32" BEHIND FLANGE PLUS 1/2" X 8-32 STUDS; FULL SCALE DEFLECTION 1 MA DC; 200 OHMS ± 1% DC RESISTANCE; SCALE #1 TO 1/2/40	CG:DW41AEM	CG:K-7875571	FULL SCALE DEFLECTION 50 MA DC. SPECIAL SCALE CALIBRATED IN MICROVOLTS; 2-1/2" FLUSH PHENOLIC CASE MOISTURE PROOF CONSTRUCTION.			FOUR SCALES. SCALE RANGES: 0 TO 5-1/2 KC, 0 TO 11 KC, 4-1/2 TO 10 KC & 9 TO 20 KC; FAN TYPE DC MICROAMMETER; 0 TO 600 MICROAMPS DC, ± 0.5%; 233 OHMS DC. ± 25%.		
NOV. 43		REV 1	12/8/39	CG:80W41AEV 6	CG:K-7875647	2/7/40	271	CAG:P-400-1
			NOV. 43		REV 0	NOV. 43		
READ 100 MA WITH 2.02 OHMS EXTERNAL SHUNT; SCALE #2 TO READ 300 MA WITH 0.67 OHM EXTERNAL SHUNT.			22308	RAR	17 1 12	CV-22314	TAJ-8	17 1 12
			DECIBEL METER - RECTIFIER	PR TO 6/1/43		VOLTMETER - DC	PR TO 6/1/43	
			TYPE. FULL SCALE DEFLECTION, 5.4 VOLTS AC. SCALE CALIBRATED IN DB ABOVE AND BELOW 1.9 VOLTS; 2-1/2" FLUSH, PHENOLIC CASE. MOISTURE PROOF CONSTRUCTION.			0 TO 750 VOLTS DC, 1000 OHMS PER VOLT; WITH WAX FILLED INTERNAL MULTIPLIER; 3-1/2" FLUSH PHENOLIC CASE.		
			12/8/39	CG:80W46VAT4	CG:K-7875646	4/23/40	301	CRRL-71800-6
			NOV. 43		REV 0	NOV. 43	MAX FILLED	REV 8
22302	TCD	17 1 12	22309	YE	17 1 12	CBM 22315		* SEE BELOW 55R22J1005
MILLIAMMETER DC - DOUBLE	PR TO 6/1/43		KILOVOLT METER - DC	PR TO 6/1/43		BEARING REPEATER INDICATOR		SCALES FOR TRUE AND RELATIVE BEARINGS; USES TWO CG-21285 SELF-SYNCHRONOUS GENERATORS; FOR OPERATION FROM 115 VOLTS, SINGLE PHASE, 60 CYCLES.
SCALE. RANGE: LOWER SCALE 0 TO 10 MA DC; UPPER SCALE(RED) 0 TO 10 IN UNIT MARKINGS CORRESPONDING TO EACH 1/10 MA OF METER WITHOUT SHUNT TO INDICATE RF OUTPUT IN ARBITRARY UNITS. 2-1/2" FLUSH PHENOLIC CASE, 1-19/32 BEHIND FLANGE 1/2/40	CG:8DW41AEX	CG:K-7875572	RANGE: 0 TO 1.0 KILOVOLT DC; 1000 OHMS PER VOLT; 3-1/2" FLUSH, PHENOLIC CASE; 1-5/8" DEEP PLUS 27/32" STUD; FULL SCALE DEFLECTION 1 MA DC; INCLUDES NAVY TYPE -63754 (ONE MEGOHM) EXTERNAL MULTIPLIER.			* FOR USE WITH XQC-1a & XQC-1b.		
NOV. 43		REV 1	12/26/39	(CAY)	CRV:M-418316-22	6/27/40	8118	CBM DWG 60,004
			NOV. 41		REV 5	NOV. 41		ALT 0
PLUS 1/2" X 8-32 STUDS FULL SCALE DEFLECTION 1 MA DC, 200 OHMS ± 1% DC RESISTANCE; SCALE #2 TO READ 10 MA WITH 22.2 OHM EXTERNAL SHUNT.			22310	QC; TBL-4	17 1 12	CAY 22316	ZA	
			KILOVOLT METER - DC	PR TO 6/1/43		LANDING INDICATOR		
			RANGE: 0 TO 2.5 KILOVOLTS DC; 1000 OHMS PER VOLT; 3-1/2" FLUSH PHENOLIC CASE; 1-5/8" DEEP PLUS 27/32" STUD; FULL SCALE DEFLECTION 1 MA DC; INCLUDES NAVY TYPE -63774 (2.5 MEGOHM) EXTERNAL MULTIPLIER.			CROSS POINTER INSTRUMENT. REASSIGNED "AN" DESIGNATION 10-24/ARN-9.		
			12/26/39	(CAY)	CRV:M-418316	7/31/40	NX27	*SEE ABOVE
			NOV. 43		REV 5	NOV. 43		

Class 22—Indicating Instruments

3.22-17

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION																								
22317	QCJ-2 & QCL	17 I 12 DECIBEL METER -10 TO +6 DECIBEL; 3-1/2" FLUSH CASE; REFERENCE LEVEL 6 MILLIWATTS IN CIRCUIT OF 600 OHMS AT 1000 CYCLES; HIGH SPEED MOVEMENT; 200 MICROWATTS (MAX) REQUIRED FOR ZERO DB. 8/13/40 (CAY) NC-35 NOV. 43	CRV 22323	ZC INDICATOR 10/18/40 NOV. 41	K-865115 SUB 0	RESISTANCE 500 OHMS, EXTERNAL MULTIPLIER (TYPE -63860) 4500 OHMS ± 25 (33-1/3 OHMS PER VOLT); 2-1/2" FLUSH; NON GLARE GLASS.	22330	TBW & TBW-1	17 I 12 VOLTMETER - AC (DOUBLE SCALE) 0 TO 15 VOLTS + 0 TO 150 VOLTS; 800 CYCLES; 15 VOLT SCALE HAS A RED MARK AT 10 VOLTS, INTERNAL MULTIPLIER 75 OHMS (5 OHMS PER VOLT); 150 VOLT SCALE HAS A RED MARK AT 120 VOLTS, INTERNAL *CAY DWG T-7605997-25 SUB 13. 3/13/41 (CAY) MA NOV. 43	PR TO 6/1/43	22331	YC, YD (YB)	17 I 12 VOLTMETER, DC 0 TO 750 VOLTS DC, SELF CONTAINED MUL- TIPLIER 1000 OHMS PER VOLT. 3/14/41 (CAY) NX-35 NOV. 41	PR TO 6/1/43	22332	TCC	17 I 12 AMMETER D.C. SCALE 0 TO 1 AMP DC INTERNAL SHUNT, 7" RECTANGULAR SEMI-FLUSH TYPE; 7" REC- TANGULAR, SEMI-FLUSH CASE. 5/1/41 NOV. 43	PR TO 6/1/43														
22318	TBM-4.5.6	17 I 12 MILLIAMMETER DC 0 TO 30 MA DC; 3-1/2" FLUSH. * CAY DWG T-7805997-19 SUB 7. 9/17/40 (CAY) NX NOV. 43	22324	TAB-5	17 I 12 KILOVOLT METER DC RANGE 0 TO 3 KILOVOLTS DC, 1000 OHMS PER VOLT; 3-1/2" FLUSH; FULL SCALE DE- FLECTION 1 MA DC; INCLUDES ONE NAVY TYPE -63825 (3 MEGOHM) EXTERNAL MULTIPLIER. 10/23/40 CAY:NX NOV. 43	CG:80041VJL	22325	TAB-5	17 I 12 AMMETER RF RANGE 0 TO 40 AMPS RF WITH EXTERNAL THERMOCOUPLE. *CAY:S/1159616; S#873655. (4476) 10/23/40 *SEE ABOVE & NOV. 43 CAY TYPE NT-35	PR TO 6/1/43	22326	TBC-3	17 I 12 VOLTMETER - DC (ZERO CENTER). 150-0-150 VOLTS DC; 1000 OHMS PER VOLT; INTERNAL MULTIPLIER; 3-1/2" FLUSH. *CG:P-7762173-23 REV 9. 12/17/40 CG:80041VEY NOV. 43	PR TO 6/1/43	22327	TAJ-10	KILOVOLT METER DC RANGE 0 TO 4 KV; 1000 OHMS PER VOLT; 3-1/2" FLUSH; FULL SCALE DEFLECTION 1 MA DC; INCLUDES ONE NAVY TYPE -63815 (4 MEGOHM) EXTERNAL MULTIPLIER. 2/14/41 CG:90041VJN NOV. 41	PR TO 6/1/43	22328	*SEE BELOW	17 I 12 (INT) MICROMETER - DC 0 TO 200 MICRONS. 2-1/2" FLUSH RHEOLIC CASE. * CNA-50079 (RBE) 3/6/41 (CV) 506 MAR. 45	PR TO 6/1/43	22329	*SEE BELOW	17 I 12 VOLTMETER - DC 0 TO 500 VOLTS, 1000 OHMS PER VOLT - SELF CONTAINED. 2-1/2" FLUSH PHENOLIC CASE. * CNA-50079 (RBE) 3/6/41 (CV) 506 NOV. 43	PR TO 6/1/43	22330	TCC	17 I 12 AMMETER AC. SCALE 0 TO 1200; 6" RECTANGULAR. FOR INCLUDES AN EXTERNAL 1200/5 AMP CURRENT TRANSFORMER TYPE -30685. *CAD-6 CAT94X117) & (PLUS SCALE MARKING) 5/1/41 CG NOV. 43 *SEE ABOVE	PR TO 6/1/43		
22319	TBC-3	17 I 12 VOLTMETER - DC RANGE: 0 TO 750 VOLTS DC; 800 OHMS PER VOLT; INTERNAL MULTIPLIER; 3-1/2" FLUSH. * CG DWG P-7762173-15 REV 7. 9/26/40 (CG)80041VHY NOV. 43	22319-A	SM VOLTMETER, DC: RANGE 0 TO 750 VOLTS DC; 800 OHMS PER VOLT, EXTERNAL MULTIPLIER; 3" FLUSH. SAME AS -22319 BUT HAS BLACK BACK GROUND AND WHITE MARKINGS. 4/10/43 80041 AUG. 43	CG:7763233-2	CG-22319-B	TCK-3 VOLTMETER-DC: RANGE 0 TO 750 V DC; 800 OHMS PER VOLT. EXTERNAL MULTIPLIER 3" FLUSH. SAME AS TYPE -22319-A EXCEPT HAS A RED MARK AT 500 V. MEETS 12112 EXCEPT RED MARK. 5/22/43 CG:800-41 AUG. 43	CG:P-7765919-2 REV 1	22320	TBC-3	17 I 12 KILOVOLT METER DC. RANGE 0 TO 8 KILOVOLTS DC; 1000 OHMS PER VOLT; 3-1/2" FLUSH; FULL SCALE DEFLECTION 1 MA DC- INCLUDES TWO NAVY TYPE -63815(4 MEGOHMS) EXTERNAL MULTI- PLIERS. *CG:P-7762173-18 REV 7. 9/26/40 CG:80041VHZ NOV. 43	PR TO 6/1/43	22321	TBC-3	17 I 12 TUBE LIFE METER 230 VOLTS, 25 CYCLES; 3-1/2" FLUSH. 3-5/8" DEEP OVERALL, RECORDS 99,999 HRS WITH FIVE WHEEL VEEDER COUNTER; LOWEST CALIBRATION 1 HOUR; SAME AS -22286 EXCEPT FOR VOLTAGE & FREQUENCY RATING. *CG:M-7463729-4 REV 8. 9/27/40 CG:3KT8E24 NOV. 43	PR TO 6/1/43	22322	TBC-3	17 I 12 TUBE LIFE METER 230 VOLTS, 60 CYCLES; 3-1/2" FLUSH. 3-5/8" DEEP OVERALL, RECORDS 99,999 HRS WITH FIVE WHEEL VEEDER COUNTER; LOWEST CALIBRATION 1 HOUR; SAME AS -22286 EXCEPT FOR VOLTAGE RATING. *CG:M-7463729-3 REV 8. 9/27/40 CG:3KT8E6 NOV. 43	PR TO 6/1/43	22323	TBW & TBW-1	17 I 12 VOLTMETER - AC (DOUBLE SCALE) 0 TO 15 VOLTS + 0 TO 150 VOLTS; 800 CYCLES; 15 VOLT SCALE HAS A RED MARK AT 10 VOLTS, INTERNAL MULTIPLIER 75 OHMS (5 OHMS PER VOLT); 150 VOLT SCALE HAS A RED MARK AT 120 VOLTS, INTERNAL *CAY DWG T-7605997-25 SUB 13. 3/13/41 (CAY) MA NOV. 43	PR TO 6/1/43	22331	FA & FB	17 I 12 KILOVOLT METER - DC SCALE 0 TO 15 KV DC; 1000 OHMS PER VOLT; 3-1/2" FLUSH; FULL SCALE DEFLECTION 1 MA DC; INCLUDES A NAVY TYPE -631026 (15 MEGOHM) EXTERNAL MULTIPLIER - FOR REPLACEMENT PURPOSES ONLY. 4/24/41 (CV) 301 NOV. 43	PR TO 6/1/43	22332	TCC	17 I 12 AMMETER AC. SCALE 0 TO 1200; 6" RECTANGULAR. FOR INCLUDES AN EXTERNAL 1200/5 AMP CURRENT TRANSFORMER TYPE -30685. *CAD-6 CAT94X117) & (PLUS SCALE MARKING) 5/1/41 CG NOV. 43 *SEE ABOVE	PR TO 6/1/43
22319-A	SM	17 I 12 VOLTMETER, DC: RANGE 0 TO 750 VOLTS DC; 800 OHMS PER VOLT, EXTERNAL MULTIPLIER; 3" FLUSH. SAME AS -22319 BUT HAS BLACK BACK GROUND AND WHITE MARKINGS. 4/10/43 80041 AUG. 43	22319-B	TCK-3 VOLTMETER-DC: RANGE 0 TO 750 V DC; 800 OHMS PER VOLT. EXTERNAL MULTIPLIER 3" FLUSH. SAME AS TYPE -22319-A EXCEPT HAS A RED MARK AT 500 V. MEETS 12112 EXCEPT RED MARK. 5/22/43 CG:800-41 AUG. 43	CG:7763233-2	22320	TBC-3	17 I 12 KILOVOLT METER DC. RANGE 0 TO 8 KILOVOLTS DC; 1000 OHMS PER VOLT; 3-1/2" FLUSH; FULL SCALE DEFLECTION 1 MA DC- INCLUDES TWO NAVY TYPE -63815(4 MEGOHMS) EXTERNAL MULTI- PLIERS. *CG:P-7762173-18 REV 7. 9/26/40 CG:80041VHZ NOV. 43	PR TO 6/1/43	22321	TBC-3	17 I 12 TUBE LIFE METER 230 VOLTS, 25 CYCLES; 3-1/2" FLUSH. 3-5/8" DEEP OVERALL, RECORDS 99,999 HRS WITH FIVE WHEEL VEEDER COUNTER; LOWEST CALIBRATION 1 HOUR; SAME AS -22286 EXCEPT FOR VOLTAGE & FREQUENCY RATING. *CG:M-7463729-4 REV 8. 9/27/40 CG:3KT8E24 NOV. 43	PR TO 6/1/43	22322	TBC-3	17 I 12 TUBE LIFE METER 230 VOLTS, 60 CYCLES; 3-1/2" FLUSH. 3-5/8" DEEP OVERALL, RECORDS 99,999 HRS WITH FIVE WHEEL VEEDER COUNTER; LOWEST CALIBRATION 1 HOUR; SAME AS -22286 EXCEPT FOR VOLTAGE RATING. *CG:M-7463729-3 REV 8. 9/27/40 CG:3KT8E6 NOV. 43	PR TO 6/1/43	22323	TBW & TBW-1	17 I 12 VOLTMETER - AC (DOUBLE SCALE) 0 TO 15 VOLTS + 0 TO 150 VOLTS; 800 CYCLES; 15 VOLT SCALE HAS A RED MARK AT 10 VOLTS, INTERNAL MULTIPLIER 75 OHMS (5 OHMS PER VOLT); 150 VOLT SCALE HAS A RED MARK AT 120 VOLTS, INTERNAL *CAY DWG T-7605997-25 SUB 13. 3/13/41 (CAY) MA NOV. 43	PR TO 6/1/43	22331	FA & FB	17 I 12 KILOVOLT METER - DC SCALE 0 TO 15 KV DC; 1000 OHMS PER VOLT; 3-1/2" FLUSH; FULL SCALE DEFLECTION 1 MA DC; INCLUDES A NAVY TYPE -631026 (15 MEGOHM) EXTERNAL MULTIPLIER - FOR REPLACEMENT PURPOSES ONLY. 4/24/41 (CV) 301 NOV. 43	PR TO 6/1/43	22332	TCC	17 I 12 AMMETER AC. SCALE 0 TO 1200; 6" RECTANGULAR. FOR INCLUDES AN EXTERNAL 1200/5 AMP CURRENT TRANSFORMER TYPE -30685. *CAD-6 CAT94X117) & (PLUS SCALE MARKING) 5/1/41 CG NOV. 43 *SEE ABOVE	PR TO 6/1/43			

RESTRICTED

NAVSHIPS 900,109

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
22337 TCG AMMETER RF SCALE 0 TO 125 AMPS RF FULL SCALE DEFLECTION 13 MV AT 0.4 MA DC; INCLUDES A TYPE -22346 EXTERNAL THERMOCOUPLE AND TYPE -47173 CURRENT TRANSFORMER; 7" REC- TANGULAR, SEMI FLUSH TYPE, CALIBRATED FOR USE WITH 19 FEET OF CONDUCTOR. 5/1/41 CG:8007V-Y495 NOV. 43		17 1 12 PR TO 6/1/43	22344 TCK MILLIAMMETER DC 0 TO 750 MA DC; 2-1/2" FLUSH.  *CG:P-7763233-5 REV 1. 6/5/41 CG:800-41 NOV. 43		17 1 12 PR TO 6/1/43	CG-22351 FD ELEVATION METER 0 TO ± 1 MA DC, RECTANGULAR PNEUMATIC FRONT 4 X 4-1/2 INCHES WITH ILLUMINATED DIAL, CASE DIAMETER 2.8". IDENTICAL WITH -22341 EXCEPT FOR SCALE MARKINGS.  *CG:K-413331 REV 2. 7/25/41 80061 NOV. 43		17 1 12 PR TO 6/1/43
22338 TCG AMMETER RF SCALE 0 TO 200 AMPS RF; FULL SCALE DE- FLECTION 13 MV AT 0.4 MA DC; INCLUDES A TYPE -22346 EXTERNAL THERMOCOUPLE AND TYPE -47174 CURRENT TRANSFORMER; 7" REC- TANGULAR, SEMI-FLUSH TYPE; CALIBRATED FOR USE WITH 15 FEET OF CONDUCTOR. 5/1/41 (CG)8007V-Y496 NOV. 43		17 1 12 PR TO 6/1/43	22345 TCX MILLIAMMETER DC 0 TO 250 MA DC; 2-1/2" FLUSH.  *CG:P-7763233- REV 6/6/41 CG:800-41 NOV. 43		17 1 12 PR TO 6/1/43	22352 GENERAL USE AMMETER, RF SCALE 0 TO 15 AMP RF, 2-1/2" FLUSH.  8/11/41 NOV. 43		17 1 12 PR TO 6/1/43
22339 TCG AMMETER RF SCALE 40 AMP RF; INCLUDES A NON-INTER- CHANGEABLE EXTERNAL THERMOCOUPLE; 3-1/2" FLUSH CASE.  5/1/41 CG:80044A-Y48 NOV. 43		17 1 12 PR TO 6/1/43	CG-22346 TCO THERMOCOUPLE INTERCHANGEABLE THERMOCOUPLE. INPUT: 5 AMPS RF. OUTPUT: 0.4 MA AT 13 MV DC.  *CG:K-1284093 REV 6. 6/5/41 CG:FORM 27 NOV. 43		17 1 12 PR TO 6/1/43	22352-A TCK AMMETER, R. F.; SCALE 0 TO 15 AMP RF, 2-1/2" FLUSH. SAME AS TYPE -22352 EXCEPT HAS BLACK BACKGROUND WITH WHITE POINTERS.  8/11/41 CG:80W44 ADR CG:P-7761557-17 NOV. 43 REV 15		17 1 12 PR TO 6/1/43
22340 FB VOLT-AMMETER (TRIPLE SCALE) PR TO 6/1/43 0 TO 300 VOLTS DC; INCLUDES (1) NAVY TYPE -631039-1 (300,000 OHMS) EXTERNAL RESISTOR. 0 TO 800 VOLTS DC; INCLUDES (2) NAVY TYPE -631039-1 (300,000 OHMS) EXTERNAL RESISTORS. 0 TO 150 MA DC; INCLUDING A 1500 OHMS SERIES RESISTOR 5/15/41 CV:501 NOV. 43		17 1 12 PR TO 6/1/43	22347 FC AMMETER - AC. 0 TO 5 AMP, 2-1/2" FLUSH METAL CASE, WITH THIRD TERMINAL CONNECTED TO MOVE- MENT.  *(WITH GROUND TERMINAL.) 6/9/41 CV:517 NOV. 43 *SEE ABOVE		17 1 12 PR TO 6/1/43	22353 *SEE BELOW DECIBEL (OUTPUT) METER PR TO 6/1/43 SCALE -10 TO +5 DB, RESPONSIVENESS 0.6 SEC. OR LESS, DAMPING FACTOR BETWEEN 16 AND 200. SENSITIVITY: ZERO LEVEL = 72 MICROWATTS, 10.6 VOLTS. IMPEDANCE: 5000 OHMS -6 +10% AT 0.6 VOLTS, 1000 * R2A, R2B, R2C. 9/26/41 (CV) 506 CRV:K-964314 NOV. 43 WIDE FLANGE SUB 1.		17 1 12b PR TO 6/1/43
ACROSS A TEN OHM RESISTOR- 22340 NOT ACCURATE - GENERAL INDICATION ONLY.			CV-22348 FC AC VOLTMETER, SPECIAL; 0 TO 25 VOLTS AC, 2-1/2" FLUSH METAL FLANGE METAL CASE.  6/16/41 CV:517 CV:64034 NOV. 43 METAL CASE		17 1 12 PR TO 6/1/43	22353 CYCLES. 2-1/2" METAL CASE. 22353 2-1/64" DEEP OVERALL. SAME AS CV-22257A EXCEPT HAS A YELLOW SCALE.		
CG-22341 FA TRAIN-METER (ZERO CENTER) PR TO 6/1/43 0 TO ± 1 MA DC, RECTANGULAR PNEUMATIC FRONT 4 X 4-1/2" WITH ILLUMINATED DIAL, CASE DIA. 2.8". SAME TO -22409 EXCEPT FOR DAMPING & SCALE MARKING. CG:SU-679553 13806 2, AND CG DWG K-413331 REV. 2. 5/15/41 800-58A-Y62 @ SEE ABOVE NOV. 43		17 1 12 PR TO 6/1/43	CG-22349 OS RECORDER UNIT (ZERO CENTER) RECORDING MILLIAMMETER FULL SCALE DE- FLECTION 2.5-0-2.5 MILLIAMPS DC, TWO SPEED TYPE 1" PER MINUTE & 1" PER HOUR. INCLUDES AUTOMATIC CONTROL TO PROVIDE MAX. SPEED WHEN DEFLECTION EXCEEDS A PREDETERMINED AMOUNT, AUTOMATICALLY 6/30/41 CG:5986076G1 SEPT 43		17 1 12b PR TO 6/1/43	22354 *SEE BELOW VOLTMETER, DC PR TO 6/1/43 SCALE 0 TO 250 VOLTS, 200 OHMS PER VOLT, 2-1/2" FLUSH TYPE. SAME AS -22124 EXCEPT HAS A YELLOW SCALE INSTEAD.  * R2A, R2B, R2C. 9/26/41 (CV) 506 CRV:M-421740-2 NOV. 43 WIDE FLANGE SUB 1.		17 1 12b PR TO 6/1/43
22342 YC-1 & YD-1 MICROAMMETER DC - ZERO CENTER. 100-0-100 MICRO AMPS DC, 154 OHMS DC. 3-1/2" FLUSH.  *S#1159525 MOD SCALE. 5/20/41 CAY:HX-55 CRV:M-131112 MAR. 45 *SEE ABOVE CHANGE 0		17 1 12 PR TO 6/1/43	CG-22349 EXPANDS SCALE AS MANY TIMES AS NECES- SARY WHEN DEFLECTION EXCEEDS FULL SCALE. HAS ADJUSTABLE SENSITIVITY, THE USES OF THIS NAVY TYPE DESIGNATION IS DISCON- TINUED. ALL UNITS WERE MODIFIED BY REMOVAL OF FLUXMETER SHUNT. IDENTICAL TO CG-22357.		17 1 12 B PR TO 6/1/43	22355 R2B, R2C DECIBEL (INPUT) METER PR TO 6/1/43 MOVEMENT 0 TO 1 VOLT DC, 1000 OHMS PER VOLT. SCALE IS YELLOW AND MARKED 10, 20, 40, 60, 80, 120 DB ABOVE ONE MICROVOLT PER METER. INCLUDES A 1000 OHM MAX FILLED RESISTOR BUILT INTO BACK OF CASE. 9/26/41 (CV) 506 CRV:M-421740-1 NOV. 43 WIDE FLANGE SUB 1		17 1 12 B PR TO 6/1/43
CAY 22343 *SEE BELOW EXTERNAL THERMOCOUPLE; RANGE 0 TO 25 AMP RF, FOR USE WITH RF AMMETER CAY-22304. MAX INPUT 25 AMP, OUTPUT 3.1 MA AT 12.4 MV DC. FOR FULL SCALE DEFLECTION.  * TBU, TBU-1, 2, 3; 5/28/41 S:878650 CAY:M-7407926 NOV. 43 SUB 0		17 1 12 PR TO 6/1/43	22350 YB MICRO-AMMETER, ZERO CENTER. 0 TO ±150 MICRO-AMP. DC. 2-1/2" FLUSH METAL CASE.  7/21/41 CAY:3X-33 NOV. 43		17 1 12 PR TO 6/1/43	CRV 22356 AYA, AYA-1 ALTITUDE INDICATOR; SIMILAR TO CRV-22323 (2C-1) EXCEPT INCLUDES THE FINAL DETECTOR AND HAS A "WRAP-AROUND" CASE.  9/29/41 620437-501 CRV:K-868179 MAR. 43 SUB 0		17 1 12 PR TO 6/1/43

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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3.22-20

Class 22—Indicating Instruments

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
22371	TCB-1	17 1 12	22379	SC	17 1 12	22387	YA-1	17 1 12
KILOVOLT METER, DC; PR TO 6/1/43			MILLIAMMETER, DC; PR TO 6/1/43			AMMETER RF: 0 TO 7.5		PR TO 6/1/43
0 TO 3 KV DC, 1000 OHMS PER VOLT, 3" SQUARE FLANGE, FULL SCALE DEFLECTION 1 MA DC, INCLUDES ONE NAVY TYPE 63825 3 MEGOHM STYLE MFB EXTERNAL MULTIPLIER.			15 - 0 - 15 MILLIAMPERES DC, 3-1/2" FLUSH PHENOLIC CASE.			AMPERES RF. 3-1/2" FLUSH.		
* (CV) 301, (COL PART) 458N024CN			1/6/42	CG:D0-41		5/15/42	CV:425	
12/23/41 *SEE ABOVE			NOV. 43			NOV. 43		
22372	TCC-3	17 1 12	22380	RBW-1.2	17 1 12	22388	YA-1	17 1 12
KILOVOLT METER, DC; PR TO 6/1/43			VOLTMETER DC: SCALE 0-15 PR TO 6/1/43			DECIBEL METER-RECTIFIER PR TO 6/1/43		
0 TO 4 KV DC, 1000 OHMS PER VOLT, 3" SQUARE FLANGE, FULL SCALE DEFLECT. 1 MA DC, INCLUDES ONE NAVY TYPE 63815 4 MEGOHM STYLE MFA EXTERNAL MULTIPLIER.			VOLTS, 200 OHMS/VOLT, SAME AS NAVY TYPE 22094 EXCEPT THAT IT IS PROTECTED AGAINST EXPOSURE TO HIGH HUMIDITIES. HAS NON-GLARE DIAL GLASS, WITH WHITE FIGURES AND MARKINGS ON BLACK BACKGROUND 2-1/2" FLUSH CASE.			TYPE: RANGE -10 TO +6 DB; 0 DB CENTER SCALE, FULL SCALE 3.8 VOLTS AC, INSTRUMENT RESISTANCE 5000 OHMS, REFERENCE LEVEL 6 MILLIWATTS IN 600 OHMS IS ZERO DB. MEDIUM SPEED MOVEMENT; DAMPING FACTOR 1.6 TO 2.2; RESPONSIVENESS 0.5 TO		
* (CV) 301, (COL PART) 458N022CN			4/13/42	CAY:BX-33	CAY:P-7708328-1	5/15/42	CV:301	
12/23/41 *SEE ABOVE			NOV. 43		SUB 4	NOV. 43	TYPE 21	
22373	TCB-1	17 1 12	22381	SA		22388		
VOLTMETER, AC, DOUBLE PR TO 6/1/43			THERMOCOUPLE VACUUM:			0.7 SECS. 1.9 VOLTS AC EQUALS ZERO DB. 45% TO 62% OVERTHROW, 3-1/2" FLUSH, PHENOLIC CASE, SAME AS -22300 EXCEPT HAS MEDIUM SPEED MOVEMENT.		
SCALE:			HEATER 10 MA. 38 OHMS, COUPLE 16.2 MY					
0 TO 15 V AC AND 0 TO 150 V AC, THREE BINDING POSTS, 3" SQUARE FLANGE, INTERNAL MULTIPLIERS.			12 OHMS ± 2% OHMS, APPROXIMATELY 1-1/8" LONG, 9/16" DIAMETER, FOR USE WITH NAVY TYPE -22382.					
Ø (CV) 476, (COL PART) 453N062CN			4/13/42	CAT#91X533	CRV:K-875358			
12/23/41 Ø SEE ABOVE			NOV. 43	SEPI. 42 CG:KA	SUB 0			
22374	TCC-3	17 1 12	22382	SA	17 1 12	CAY 22389	ASB-5	17-1-12
VOLTMETER, AC, DOUBLE PR TO 6/1/43			MICROAMMETER DC: PR TO 6/1/43			VOLTMETER AC: PR TO 6/1/43		
SCALE:			0-500, 3-1/2" FLUSH PHENOLIC CASE, 50 SCALE DIVISIONS CALIBRATED 0-100, DC RESISTANCE 10 OHMS ± 10%, NON-GLARE GLASS MODEL 8 D041.			0-150 VOLTS AC, 600-1400 CYCLES, MOVING VANE TYPE, TEST AT 115 VOLTS ±2% AT 800 CYCLES. FREQ. ERROR AT 600 CYCLES SHALL NOT EXCEED ±2%. FREQ. ERROR AT 1400 CYCLES SHALL NOT EXCEED ±4%.		
0 TO 15 V AC AND 0 TO 300 V AC, THREE BINDING POSTS, 3" SQUARE FLANGE, INTERNAL MULTIPLIERS.			4/13/42	CG:D041	CRV:M-422453-1	7/21/42	CAY:NA-33	CRR:C-58983C
* (CV) 476, (COL PART) 458N061CN			NOV. 43		SUB 0	NOV. 43		
12/23/41 *SEE ABOVE			22375	TCC-3	17 1 12	22383	GENERAL USE	17 1 12
TUBE LIFE METER; PR TO 6/1/43			250 V, 60 CYCLES, 0 TO 9999.9 HOURS WITH TENTH DIGIT IN RED, 3" SQUARE FLANGE.			VOLTMETER DC: 0-250 VOLTS, PR TO 6/1/43		
* (CV) 691, (COL PART) 453N093CM			12/23/41 *SEE ABOVE			1000 OHMS PER VOLT, 2-1/2" FLUSH WITH SELF-CONTAINED HIGH HUMIDITY RESISTING MULTIPLIER.		
MAR. 44			4/30/42	506 WF METAL	*RE 22A 103	4/30/42	506 WF METAL	*RE 22A 103
22376	TCB-1, TCC-3	17 1 12	22376	TCB-1, TCC-3	17 1 12	22384	GENERAL USE	17 1 12
DECIBEL METER; PR TO 6/1/43			-10 TO +6 DECIBEL, 3" SQUARE FLANGE, REFERENCE LEVEL 6 MW IN CIRCUIT OF 500 OHMS, INTERNAL RESISTANCE 5000 OHMS, HIGH SPEED MOVEMENT, 1.75 V AT 0 DB.			VOLTMETER DC: 0-150 VOLTS RE 22A 103		
Ø (CV) 301, (COL PART) 455N2N			12/23/41 Ø SEE ABOVE			1000 OHMS PER VOLT, 3-1/2" FLUSH WITH SELF-CONTAINED, HIGH HUMIDITY RESISTING MULTIPLIER.		
NOV. 43			5/12/42		*PR TO 6/1/43	5/12/42		
22377	TCA-1	17 1 12	22377	TCA-1	17 1 12	22385	WEA-1	17 1 12
PERCENT MODULATION METER; PR TO 6/1/43			MOVEMENT 0 TO 1 MA DC, SCALE MARKED 0, 25, 50, 75, 100, 3-1/2" FLUSH CASE FOR FLUSH MOUNTING.			MILLIAMMETER DC: 5-0-5 PR TO 6/1/43		
* (CV) 301, (COL PART) 458N0711			Ø COL:362A-4 MARKED COPY DATED 12/24/41			MILLIAMPERES DC (ZERO CENTER TYPE), 3-1/2" FLUSH.		
12/31/41 *SEE ABOVE			NOV. 43			5/14/42	CAY:NX-35	CRV:M-422619-1
22378	TCA-1	17 1 12	22378	TCA-1	17 1 12	22386	YA-1	17 1 12
CHANNEL INDICATOR METER; PR TO 6/1/43			MOVEMENT 0 TO 50 V DC AT 2000 OHMS PER VOLT, SCALE MARKED "OFF", 1 TO 10 INCLUSIVE, 3" SQUARE FLANGE.			MILLIAMMETER DC: 0 TO 20 PR TO 6/1/43		
Ø (CV) 301, (COL PART) 454N8N, COL PART 453035350, COL:350A-2			12/31/41 Ø SEE ABOVE			MA DC, 3-1/2" FLUSH.		
DEC. 44			5/15/42	CV:301		5/15/42	CV:301	
22379	TCB-1	17 1 12	22379	TCB-1	17 1 12	22387	YA-1	17 1 12
KILOVOLT METER, DC; PR TO 6/1/43			0 TO 3 KV DC, 1000 OHMS PER VOLT, 3" SQUARE FLANGE, FULL SCALE DEFLECTION 1 MA DC, INCLUDES ONE NAVY TYPE 63825 3 MEGOHM STYLE MFB EXTERNAL MULTIPLIER.			AMMETER RF: 0 TO 7.5		PR TO 6/1/43
* (CV) 301, (COL PART) 458N024CN			12/23/41 *SEE ABOVE			AMPERES RF. 3-1/2" FLUSH.		
12/23/41 *SEE ABOVE			NOV. 43			5/15/42	CV:425	
22380	RBW-1.2	17 1 12	22380	RBW-1.2	17 1 12	22388	YA-1	17 1 12
VOLTMETER DC: SCALE 0-15 PR TO 6/1/43			VOLTS, 200 OHMS/VOLT, SAME AS NAVY TYPE 22094 EXCEPT THAT IT IS PROTECTED AGAINST EXPOSURE TO HIGH HUMIDITIES. HAS NON-GLARE DIAL GLASS, WITH WHITE FIGURES AND MARKINGS ON BLACK BACKGROUND 2-1/2" FLUSH CASE.			DECIBEL METER-RECTIFIER PR TO 6/1/43		
4/13/42	CAY:BX-33	CAY:P-7708328-1	NOV. 43		SUB 4	TYPE: RANGE -10 TO +6 DB; 0 DB CENTER SCALE, FULL SCALE 3.8 VOLTS AC, INSTRUMENT RESISTANCE 5000 OHMS, REFERENCE LEVEL 6 MILLIWATTS IN 600 OHMS IS ZERO DB. MEDIUM SPEED MOVEMENT; DAMPING FACTOR 1.6 TO 2.2; RESPONSIVENESS 0.5 TO		
22381	SA		22381	SA		0.7 SECS. 1.9 VOLTS AC EQUALS ZERO DB. 45% TO 62% OVERTHROW, 3-1/2" FLUSH, PHENOLIC CASE, SAME AS -22300 EXCEPT HAS MEDIUM SPEED MOVEMENT.		
THERMOCOUPLE VACUUM:			HEATER 10 MA. 38 OHMS, COUPLE 16.2 MY					
12 OHMS ± 2% OHMS, APPROXIMATELY 1-1/8" LONG, 9/16" DIAMETER, FOR USE WITH NAVY TYPE -22382.			4/13/42	CAT#91X533	CRV:K-875358			
4/13/42	CAT#91X533	CRV:K-875358	NOV. 43	SEPI. 42 CG:KA	SUB 0			
22382	SA	17 1 12	22382	SA	17 1 12	CAY 22389	ASB-5	17-1-12
MICROAMMETER DC: PR TO 6/1/43			0-500, 3-1/2" FLUSH PHENOLIC CASE, 50 SCALE DIVISIONS CALIBRATED 0-100, DC RESISTANCE 10 OHMS ± 10%, NON-GLARE GLASS MODEL 8 D041.			VOLTMETER AC: PR TO 6/1/43		
4/13/42	CG:D041	CRV:M-422453-1	NOV. 43		SUB 0	0-150 VOLTS AC, 600-1400 CYCLES, MOVING VANE TYPE, TEST AT 115 VOLTS ±2% AT 800 CYCLES. FREQ. ERROR AT 600 CYCLES SHALL NOT EXCEED ±2%. FREQ. ERROR AT 1400 CYCLES SHALL NOT EXCEED ±4%.		
22383	GENERAL USE	17 1 12	22383	GENERAL USE	17 1 12	22383	GENERAL USE	17 1 12
VOLTMETER DC: 0-250 VOLTS, PR TO 6/1/43			1000 OHMS PER VOLT, 2-1/2" FLUSH WITH SELF-CONTAINED HIGH HUMIDITY RESISTING MULTIPLIER.			TOTAL ERROR AT 600 CYCLES SHALL NOT EXCEED ±4%, TOTAL ERROR AT 1400 CYCLES SHALL NOT EXCEED ±6%, 2-1/2" FLUSH TYPE.		
4/30/42	506 WF METAL	*RE 22A 103	4/30/42	506 WF METAL	*RE 22A 103			
NOV. 43			NOV. 43					
22384	GENERAL USE	17 1 12	22384	GENERAL USE	17 1 12	22390	RAO-2	
VOLTMETER DC: 0-150 VOLTS RE 22A 103			1000 OHMS PER VOLT, 3-1/2" FLUSH WITH SELF-CONTAINED, HIGH HUMIDITY RESISTING MULTIPLIER.			MILLIAMMETER DC:		
5/12/42		*PR TO 6/1/43	5/12/42		*PR TO 6/1/43	MOVEMENT 0 TO 1 MA DC, METAL CASE 2-1/16 DIAM., FOR FLUSH MOUNTING USING MOUNTING RING, SCALE MARKED 1 TO 9 IN "S" UNITS, AND 10, 20, 30, 40 DB ABOVE "S9", MARKER FOR S9 (AND FOR DB ABOVE S9) IS IN MIDDLE OF SCALE.		
NOV. 43			8/3/42	52-RH	CNA:D-837	8/3/42		6/26/42
22385	WEA-1	17 1 12	22385	WEA-1	17 1 12	22391	QBF	17 1 12
MILLIAMMETER DC: 5-0-5 PR TO 6/1/43			MILLIAMPERES DC (ZERO CENTER TYPE), 3-1/2" FLUSH.			VOLT MILLIAMMETER: PR TO 6/1/43		
5/14/42	CAY:NX-35	CRV:M-422619-1	NOV. 43		SUB 0	3-1/2" FLUSH, SCALE READINGS 0 TO 150 UPPER AND 0 TO 750 LOWER, PERMANENT MAGNET, MOVING COIL TYPE, FULL SCALE SENSITIVITY 1 MA DC, RESISTANCE 215 OHMS ± 1%. INCLUDES EXTERNAL MULTIPLIERS.		
22386	YA-1	17 1 12	22386	YA-1	17 1 12	22392	*SEE BELOW	
MILLIAMMETER DC: 0 TO 20 PR TO 6/1/43			MA DC, 3-1/2" FLUSH.			KILOVOLT METER DC:		
5/15/42	CV:301		5/15/42	CV:301		0-1.5 KV, 3-1/2" F.O.B. 1000 OHMS PER VOLT, INCLUDE NAVY STYLE MFB (NAVY TYPE NUMBER-63755) 1-1/2 MEGOHM, EXTERNAL MULTIPLIER, SAME AS -22105 EXCEPT HIGH SENSITIVITY, FOR REPLACEMENT USE ONLY. *NAVY YARD N.Y. REQ. 60/43		
NOV. 43			NOV. 43			8/21/42		OCT. 42

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CG-22414 SM			CG-22422 SM	17 1 12		CG-22429	*SEE BELOW	
VOLTMETER, DC: RATED 0 TO 500 V DC, 500,000 OHMS, SCALE 50 DIVISIONS, FOR VERTICAL MOUNTING ON 1/8" STEEL PANEL, 3 1/2" FLUSH TYPE.			MILLIAMMETER DC: 0 TO 5 MA DC, 3 1/2" FLUSH, 7 OHMS DC RESISTANCE, FOR MOUNTING ON 1/8" STEEL PANEL.			VOLT METER AC SCALE 0 TO 25 VOLTS AC, RECTIFIER TYPE, 3 1/2" FLUSH, ACCURACY WITHIN 5% (F.S.) AT CALIBRATION FREQUENCY (3000 CPS), FREQUENCY ERROR IS 1% PER 1000 CPS FROM 3000 CPS, HAS RED LINE AT 12.5 VOLTS. *RADIO FAN MARKERS (CODE 976) 11/18/43 00-46 NOV. 43		
4/3/43 CG:DO-41		CG:K-43J268	7/14/43 CG:BDP41AEE26		CG:K44J44			
MAY 43		REV 1	NOV. 43		REV 0			
CG-22415 SM			CV-22423 YL			CG-22430	*SEE BELOW	
MILLIAMMETER, DC: MOVEMENT: 0 TO 1 MADC, APPROXIMATELY 100 OHMS RESISTANCE, 40 SCALE DIVISIONS, CALIBRATED 0 TO 2 MADC, MARKED *FOR USE WITH EXTERNAL SHUNT, FOR VERTICAL MOUNTING ON 1/8" STEEL PANEL, 3 1/2" FLUSH TYPE.			OUTPUT (DB) METER: 2 1/2" FLUSH, -10 TO +6DB, ZERO POWER LEVEL INTO 600 OHMS IS 6MW, 1.9 VOLTS, ACTUAL LEVEL AT 0 ON SCALE FROM ZERO POWER LEVEL IS 0, WHEN SCALE INDICATES ZERO THE INSTRUMENT RESISTANCE IS 5000 OHMS, POINTER OVERSWING IS 2 TO 6% AND 7/28/43 MOD 506 TYPE 61 CV:92543 SEPT 43			VOLT METER AC SCALE 0 TO 150 VOLTS AC, RECTIFIER TYPE, 3 1/2" FLUSH, ACCURACY WITHIN 5% (FS) AT CALIBRATION FREQUENCY (3000 CPS), FREQUENCY ERROR IS 1% PER 1000 CPS FROM 3000 CPS. *RADIO FAN MARKERS (CODE 976) 11/18/43 DO-46 FEB. 44		
4/3/42 CG:DO-41		CG:K-43J526						
MAY 43		REV 0						
CG-22416 SM			CV:22423			CV-22431 SP		
AMMETER: RATED 0 TO 1 AMP DC, 0.05 OHMS RESISTANCE, SCALE, 50 DIVISIONS, FOR VERTICAL MOUNTING ON 1/8" STEEL PANEL, 3 1/2" FLUSH TYPE.			DAMPING FACTOR IS 16-50, RESPONSE IS 0.28 TO 0.36 SEC, DEFLECTION TIME TO 99% READING ON FIRST SWING IS 0.12 TO 0.16 SEC. (HAS NOT BEEN TYPE TESTED)			HEIGHT METER CONSISTS OF A 20 MA DC AMMETER WITH FACE GRADUATED 0-50 THOUSAND FEET AND 50,000 TO 0 OHMS, RESISTANCE OF METER 1050 OHMS ±20%, MEETS PERFORMANCE REQUIREMENT OF 17 1 12.		
4/3/43 CG:DO-41		CG-43J264				12/13/43 741 MC		CG:K-52J269
MAY 43		REV 1						REV 2
CBM-22417 QCS-1 QCT-1			CV-22424 YL			22432	GENERAL USE 17 1 12	
BEARING REPEATER UNIT: CONSISTS OF A BEARING REPEATER ASSEMBLY INCLUDING NEITHER A STEP-BY-STEP MOTOR OR A SYNCHRONOUS GENERATOR, OTHERWISE SIMILAR TO -22360 AND 22397.			MICROAMMETER-DC: 3 1/2" FLUSH, 0 TO 100 MICROAMPS DC.			KILOVOLT METER, D.C. RANGE: 0 TO 3.5 KILOVOLTS DC; 1000 OHMS PER VOLT; 3 1/2" FLUSH PHENOLIC CASE, 1 5/8" DEEP PLUS 27/32" STUO. FULL SCALE DEFLECTION 1 MA DC, INCLUDES 3.5 MEGOHM EXTERNAL MULTIPLIER (STYLE MFB), SAME AS -22311 EXCEPT FOR TYPE OF EXTERNAL 1/20/44 CAT:HX-35 FEB. 44		
5/24/43 811F		CBM:50079	7/28/43 CV:301		CV:C.D.93884			
AUG. 44		ALT 0	SEPT 43		SUB A			
CG-22418 SG			CG-22425 MK-12			22432		
MILLIAMMETER, DC: RATED 0 TO 1 MA DC, WITH SCALE CALIBRATED 0-50 MA, 3 1/2" FLUSH, WITH ROUND BAKELITE CASE, NON-GLARE GLASS, FOR MOUNTING ON 1/8" STEEL PANEL, METER INTERNAL RESISTANCE IS APPROX. 60 OHMS.			TUBE LIFE METER 110 VOLTS, SINGLE PHASE, 60 CYCLES 3 1/2" FLUSH, 3"(APPROX)DEEP OVERALL RECORDS 99,999 HOURS WITH 5 WHEEL VEEDER COUNTER, LOWEST CALIBRAT. IS ONE HOUR, INCLUDES 115/1/60, 2W TELECRON MOTOR, SIMILAR TO TYPE -22289 EXCEPT LESS TERMINAL PLATE, 8/23/43 94X918 CW:BA-10014-1 NOV. 43			MULTIPLIER. 22432		
6/18/43 CG:DO-41 ANK		CG:K4121298						
NOV. 43		REV 4						
CG-22419 SM			22426 MK-12	17 1 12		CV-22433 UF		
MILLIAMMETER, DC: RATED 0 TO 1 MA DC, 3 1/2" FLUSH, FOR MOUNTING ON 1/8" STEEL PANEL, SPECIAL SCALE MARKINGS CALIBRATED FROM 0 TO 1 MA AND 1 TO 4 STANDING WAVE VOLTAGE RATIO, INTERNAL RESISTANCE 25 OHMS, BAKELITE CASE.			D.C. VOLTMETER 200-0-200 D.C. 3 1/2" FLUSH, MOLDED CASE, INTERNAL MULTIPLIER, 400,000 OHMS RESISTANCE, 1000 OHMS PER VOLT.			MILLIAMMETER: MOVING COIL, PERMANENT MAGNET TYPE DC MILLIAMMETER, AC VOLTMETER, SINGLE SCALE 100-0-100, 40 DIVISIONS, 1 MA DC ACROSS TERMINALS 4 AND 2 OR 4 AND 1 FOR FULL SCALE DEFLECTION 3V AC RMS ACROSS TERMINALS 5 AND 6 WITH TERMINALS 1 AND 7 4/4/44 D-165573 BA-101008 MAY 45		
7/3/43 CG:DO-41		CG:K-4121298	9/25/43 CG:80041Y-Y130		CW:689518-2			
NOV. 43		REV 4	NOV. 43		ISSUE 4			
CG-22420 SQ			-22427 RCK	17 1 12		CV-22433		
VOLT METER-AC: 0-150 V AC, 2 1/2" FLUSH, 16300 OHMS RESISTANCE, FRONT IS SPLASH PROOF AND DIAL GLASS IS ANTIGLARE, CALIBRATED FOR USE ON 1/8" STEEL PANEL.			DB METER: SCALE - 10/0/20 db, 2 1/2" FLUSH, SAME AS ASA TYPE MR25 W124 SPEC EXCEPT FOR SCALE RANGE.			STRAPPED FOR DEFLECTION TO 60 ON RIGHT HAND SIDE.		
7/14/43 CG:8AH41VAX26M		CG:K-35J277-2	⊖(CV)506 RECTIFIER TYPE					
NOV. 43		REV 1	9/28/43 (CADR)2DU-347		CNA:H344			
			JUN. 45		U5EE 80VE			
CG-22421 SQ			CG-22428 MK-12	17 1 12		CG-22434 UF		
MILLIAMMETER DC: 0 TO 1 MA DC 2 1/2" FLUSH, 450 OHMS RESISTANCE, FRONT IS SPLASH PROOF AND DIAL GLASS IS ANTIGLARE, CALIBRATED FOR USE ON 1/8" STEEL PANEL.			KILOVOLT METER, D.C. RATED 0 TO 6.0 KV, 3 1/2" FLUSH, INCLUDES TWO (2) NAVY STYLE MFB (N.T.NO.-63325) EXTERNAL RESISTORS, 3 MEGOHMS EACH, CALIBRATED FOR MOUNTING ON .09" STEEL PANEL.			DB METER: MOVING COIL, PERMANENT TYPE SCALE 0-100, 50 DIVISIONS WILL MEASURE 3.88V LINE VOLTAGE AT TOP SCALE IN FREQUENCY RANGE OF 595 TO 1955 CYCLES, RESISTANCE ACROSS TERMINALS 5000 OHMS, FULL SCALE SENSITIVITY 260 MICRO AMPS AC AT 1000 CYCLES 4/4/44 D-168947 ESA-651591 MAR. 45		
7/14/43 CG:DW-41AAH210		CG:K-35J278-2	10/4/43 D-164686		CW:ESA-656478			
NOV. 43		REV 1	NOV. 43					





NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION			
CG- 22450	MK 20 MOD 1		CAY- 22456	TBY 17112		CAY- 22462	TEB				
<p>MICROAMMETER, DC                      RANGE: ZERO CENTER SPECIAL MARKINGS,                      FULL SCALE DEFLECTING ± 500 MICRO AMPS                      DC. 3 1/2" INCH ROUND PHENOLIC CASE                      FLUSH MOUNTED, WITH ILLUMINATING SCALE,                      8000 OHMS DC RES., CALIBRATED FOR USE ON                      0.09 INCH STEEL PANEL.                      11/9/44 D-169118 BA-103904-2                      FEB. 45 ISS 1</p>			<p>MILLIAMMETER, RF:                      SPECIAL METER. SCALE BLANK EXCEPT FOR                      LUMINOUS 1/8" WIDE MARK AT MIDSCALE AND                      AT ZERO ADJUSTMENT. BLACK BACKGROUND.                      3 1/2" ROUND PLUSH METAL CASE. SCALE IS                      ARBITRARY.                      12/18/44 NX-33 CAY:7606437-67                      JAN. 45 REV. 12</p>			<p>MILLIAMMETER, DC:                      RANGE 0-750 MA DC 4 7/32 X 3 31/32 REC-                      TANGULAR FLUSH MOUNTING. SCALE DIVIDED                      AT 250-500-750 MA WITH SUB-DIVISIONS AT                      EACH 10 MA. MOLDARTA CASE.                      12/26/44 QX37 SKETCH                      MAR. 45 S#1160153</p>					
CASA- 22451	AM/TPS-1B		CASA- 22457	SO-7M & SO-7N		CAY- 22463	TEB				
<p>FREQUENCY METER:                      RATED 100 TO 130 VOLTS, 1.75 WATTS, 70                      OHMS PER VOLT AT 400 CYCLES. NINE VI-                      BRATING REEDS, 5 CYCLE INCREMENT 380                      TO 420 CYCLES PER SECONO. 3 1/4" FLUSH                      PANEL MOUNTING.                      11/28/44 33-F CAT. SHEET                      DEC. 44 VF-43-1A</p>			<p>VOLTMETER (AC):                      0-150V, 60- 13,500Ω RESISTANCE.                      MAGNETIC VANE MOVEMENT 13,500Ω.                      0.7Ω RESISTANCE. CALIBRATED IN STEPS OF                      50-100-115-120-150. RED MARK AT 115V.                      CALIBRATED FOR NON-MAGNETIC MFG. 2%                      ACCURACY AT FULL SCALE DEFLECTION.                      12/20/44 CRP:45-5012                      MAR. 45 REV. 0</p>			<p>AMMETER DC:                      RANGE 0-3 AMPS DC 4 7/32 X 3 31/32 REC-                      TANGULAR FLUSH MOUNTING. SCALE DIVIDED                      AT 0.5-1.0-1.5-2.0-2.5-3.0 WITH SUB-                      DIVISIONS AT EVERY .05 AMPS. MOLDARTA                      CASE. D'ARSONVAL MOVEMENT.                      12/26/44 QX37 SKETCH                      MAR. 45 S#1160060</p>					
CV- 22452	NK-3.7		CASA- 22457	3 1/4" FLUSH, ROUND BRASS CASE.		CAY- 22464	TEB				
<p>D.C. VOLTMETER:                      RANGE: 0-10 VOLTS. LINEAR SCALE, BLACK                      ON WHITE, 1/2 VOLT PER DIVISION, WITH                      RED MARK AT 5 VOLTS AND 6 VOLTS. 2 1/2"                      FLUSH ROUND METAL CASE, NARROW FLANGE.                      NON-GLARE GLASS; TROPICAL TREATMENT.                      SENSITIVITY 125 OHMS/VOLT.                      11/29/44 CV:506                      DEC. 44 CBM:808-448</p>			<p>CASA- 22458</p>			<p>SO-7M, SO-7N                      FREQUENCY METER:                      VIBRATING REED TYPE AC 55 TO 65 CYCLES.                      WORKING VOLTS 100-150. PERMANENT MAGNET                      TRANSMITS IMPULSES TO SERIES OF 9 TO 11                      REEDS WHERE VIBRATION APPEARS ON SCALE.                      CALIBRATED IN STEPS OF 1 CYCLE. CALI-                      *CRP:L-45-5011 REV 0                      12/20/44 33-F CAY:45-5011                      MAR. 45 REV. 0 *</p>			<p>VOLTMETER, AC:                      RANGE 0-15 VOLTS AC 4 7/32 X 3 31/32 REC-                      TANGULAR FLUSH MOUNTING. SCALE DIVIDED                      EVERY 3 VOLTS WITH SUBDIVISIONS AT EACH                      0.5 VOLTS. MOLDARTA CASE.                      12/26/44 QA37 SKETCH                      MAR. 45 S#1160707</p>		
CAY- 22453	NK-8	17112(INT)	CASA- 22458	SO-7M, SO-7N		CAY- 22465	TEB				
<p>D.C. VOLTMETER:                      RANGE: 0-15 VOLTS. LINEAR SCALE WITH RED                      MARKS AT 11 VOLTS AND 12 VOLTS. 2 1/2"                      FLUSH ROUND PHENOLIC CASE, NARROW FLANGE.                      NON-GLARE GLASS; TROPICAL TREATMENT.                      SENSITIVITY 250 OHMS/VOLT.                      11/29/44 YX-33 CBM:1000F-17                      DEC. 44 ALT 0</p>			<p>BRAVED FOR NON-MAGNETIC PANEL MOUNTING                      0.3% ACCURACY AT FULL SCALE DEFLECTION                      3 1/4" FLUSH, ROUND METAL CASE.                      12/20/44 33-F CAY:45-5011                      MAR. 45 REV. 0 *</p>			<p>VOLTMETER AC:                      RANGE 0-300 VOLTS DC. RECTIFIER TYPE.                      4 7/32 X 3 31/32 RECTANGULAR PLUSH MOUN-                      ING. SCALE DIVIDED AT EVERY 50 VOLTS                      WITH SUBDIVISIONS AT EACH 10 VOLTS.                      MOLDARTA CASE. 2000 OHMS PER VOLT.                      12/26/44 QC-37 SKETCH                      MAR. 45 S#116029L</p>					
CG- 22453	A NK-8	17112(INT)	CASA- 22458	SO-7M, SO-7N		CAY- 22466	TEB				
<p>D.C. VOLTMETER:                      RANGE: 0-15 VOLTS. LINEAR SCALE IN 50                      STEPS WITH RED MARKS AT 11 VOLTS AND 12                      VOLTS. 2 1/2" FLUSH ROUND PHENOLIC CASE,                      NARROW FLANGE. NON-GLARE GLASS; TROPICAL                      TREATMENT. SENSITIVITY 250 OHMS/VOLT.                      SAME AS NAVY TYPE -22453 EXCEPT FOR                      11/29/44 DW-40 CBM-1000F-16                      DEC. 44 ALT 0</p>			<p>BRAVED FOR NON-MAGNETIC PANEL MOUNTING                      0.3% ACCURACY AT FULL SCALE DEFLECTION                      3 1/4" FLUSH, ROUND METAL CASE.                      12/20/44 33-F CAY:45-5011                      MAR. 45 REV. 0 *</p>			<p>KILOVOLT METER, DC:                      RECTIFIER TYPE. RANGE: 0-1 MA DC WITH                      0-5 KV SCALE. USED WITH EXTERNAL MULTI-                      PLIER. CALIBRATED AT SOURCE. SCALE                      DIVIDED AT EVERY KILOVOLT, WITH SUB-                      DIVISIONS AT EACH 0.1 KV. MOLDARTA CASE                      4 7/32 X 3 31/32 RECTANGULAR PLUSH                      12/27/44 QX-37 SKETCH                      MAR. 45 S#1160095 MOD</p>					
CG- 22453	A		CAY- 22459	TEB		CAY- 22466	TEB				
<p>13/64" SMALLER DEPTH.</p>			<p>MILLIAMMETER, DC:                      0-300 MA DC SCALE DIVIDED AT EVERY 100                      MA WITH SUB-DIVISIONS EVERY 5 MA. REC-                      TANGULAR 4 7/32" X 3 31/32". FLUSH                      MOUNTING. MOLDARTA CASE. D'ARSONVAL                      MOVEMENT.                      12/26/44 QX37 SKETCH                      MAR. 45 S#1160149</p>			<p>MOUNTING.</p>					
CV- 22454	NJ-4		CAY- 22460	TEB		CAY- 22467	TEB				
<p>D.C. MILLIAMMETER:                      RANGE: 1-50 MA. 2 1/2" FLUSH ROUND                      METAL CASE; NARROW FLANGE. FURNISHED                      WITH CLAMP FOR PANEL MOUNTING. METER                      RESISTANCE IS 1.0 OHM.                      11/30/44 CV:506 CV:CATALOG                      FEB. 45 CBM:801-13</p>			<p>MILLIAMMETER, DC:                      RANGE 0-200 MA DC. RECTANGULAR PLUSH                      MOUNTING 4 7/32 X 3 31/32. SCALE CAL-                      IBRATED EVERY 50 MA WITH SUBDIVISIONS                      EVERY 5 MA. MOLDARTA CASE. D'ARSONVAL                      MOVEMENT.                      12/26/44 QX37 SKETCH                      MAR. 45 S#1160147</p>			<p>KILOVOLT METER, DC:                      RANGE: 0-1 MA. DC WITH 0-15 KV SCALE FOR                      USE WITH EXTERNAL MULTIPLIER. SCALE                      DIVIDED AT EVERY 3 KV. WITH SUBDIVISIONS                      AT EACH 0.5 KV. MOLDARTA CASE. 4 7/32 X                      3 31/32 RECTANGULAR FLUSH MOUNTING.                      12/27/44 QX-37 SKETCH                      MAR. 45 S#1160094 MOD</p>					
CV- 22455	NJ-3,4,7,9.		CAY- 22461	TEB		CAY- 22468	TEB				
<p>A.C. VOLTMETER:                      RANGE: 0-150 VOLTS. 2 1/2" FLUSH ROUND                      METAL CASE; NARROW FLANGE. PROVIDED                      WITH CLAMP FOR MOUNTING. SENSITIVITY 110                      OHMS/VOLT.                      11/30/44 517 CV:CATALOG                      DEC. 44</p>			<p>MILLIAMMETER, DC:                      RANGE 0-500 MA DC 4 7/32 X 3 31/32 REC-                      TANGULAR FLUSH MOUNTING. SCALE DIVIDED                      AT EVERY 100 MA WITH SUBDIVISIONS AT                      EACH 10 MA. MOLDARTA CASE D'ARSONVAL                      MOVEMENT.                      12/26/44 QX37 SKETCH                      MAR. 45 S#1160151</p>			<p>AMMETER, RF:                      RANGE 0-10 AMPS RF. SCALE DIVIDED AT                      EVERY 2 AMPS WITH SUBDIVISIONS AT EACH                      0.2 AMPS. 4 7/32 X 3 31/32 RECTANGULAR                      FLUSH MOUNTING. MOLDARTA CASE.                      12/27/44 QT-37 SKETCH                      MAR. 45 #1160367</p>					



NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
STEEL PANEL.		CV-22485	CG-22492	SU SU-1 17-1-12		CG-22499	TCZ 17-1-12 INT	
			VOLTMETER AC; 0-150 VOLTS AC 3 1/2" FLUSH CIRCULAR BAKELITE CASE. MAGNETIC VANE MOVEMENT. 15,000 OHMS RESISTANCE. BLACKDIAL LUMINOUS MARKINGS CALIBRATED 75 DIVI- SIONS FOR 3/32" STEEL PANEL. EXPANDED SCALE. 3/17/45 CG:8A0-22VAX28S40 CG:K-4121142 MAR. 45 CBM:975-2 REV 17			MILLIAMMETER, R.F. 0-250 MA. 2 1/2" FLUSH ROUND PHENOLIC CASE FOR NON-MAGNETIC PANEL. D'ARSONVAL MOVEMENT WITH INTERNAL THERMOCOUPLE. EX- PANDED SCALE; BLACK BACKGROUND WITH YEL- LOW MARKINGS. INSULATED FOR 500 VOLTS. SAME AS -22500 EXCEPT FOR SIZE. 3/27/45 8DW44AY47 COL:451000100-1 MAR. 45 REV D 6401		
CAVK-22486	SO. 50a		CAY-22493	TCS SERIES 17-1-12 INT		CAY-22500	TCZ 17-1-12 INT	
VOLTMETER, A.C. RANGE 0 TO 150 VOLTS; 2 1/2" FLUSH ROUND BAKELITE CASE; D'ARSONVAL MOVEMENT. EX- PANDED SCALE CALIBRATED IN STEPS OF 10 FROM 0 TO 20 AND IN STEPS OF 5 FROM 20 TO 150, WITH RED MARK AT 115. BLACK MARKINGS ON WHITE. RESISTANCE OF METER 2/28/45 22A CRP:45-5013 MAR. 45 SUB			MILLIAMMETER, DC 0-200 MA DC. 2 1/2" FLUSH ROUND BAKELITE CASE. D'ARSONVAL MOVEMENT. LINEAR SCALE, WHITE ON BLACK. STEPS OF 5 MA WITH RED BLOCKS IN RANGE 80 TO 90 AND 175 TO 180 MA. WORD "VOICE" CENTERED AT 85 MA. AHO LETTERS "CW" CENTERED AT 175 MA. IN- 3/20/45 NX-33 COL:458 0710 40 APR. 45 S#1,164,005 REV 2			MILLIAMMETER, R.F. 0-250 MA. 2 1/2" FLUSH ROUND PHENOLIC CASE FOR NON-MAGNETIC PANEL. D'ARSONVAL MOVEMENT WITH INTERNAL THERMOCOUPLE. EX- PANDED SCALE; BLACK BACKGROUND WITH YEL- LOW MARKINGS. INSULATED FOR 500 VOLTS. SAME AS -22499 EXCEPT FOR SIZE. 3/27/45 NT-33 COL:451 0001 00-2 APR. 45 S#1,164,003A REV D 6401		
CAVK-22486			CAY-22493			CG-22501	TCZ 17-1-12 INT	
IS 2070 OHMS; SENSITIVITY IS 1500 OHMS/ VOLT. FOR USE ON 1/16" STEEL PANEL.			INTERNAL RESISTANCE IS 0.34 OHMS. SIMILAR TO -22410 EXCEPT FOR SIZE.			MILLIAMMETER, DC 0-1 MA. 2 1/2" FLUSH ROUND BAKELITE CASE FOR NON-MAGNETIC PANEL. D'ARSONVAL MOVE- MENT. INTERNAL RESISTANCE 42 OHMS. ONE SPECIAL SCALE AND 2 INDICATOR LEVELS. YELLOW MARKINGS ON BLACK BACKGROUND. BATTERY INDICATOR HAS 50,000 OHM RESIS- 3/27/45 8DW41AY78 COL:450 4125 00-1 APR. 45 REV D 6400		
CV-22487	MBM		CAY-22494	TCS SERIES 17-1-12 INT		CG-22501		
VOLTMETER, AC RANGE 0-250V AC. 3 1/2" ROUND FLUSH BAKELITE CASE. MOVEABLE IRON TYPE.			AMMETER, R.F. 0-3 AMPS. 2 1/2" FLUSH ROUND BAKELITE CASE. D'ARSONVAL MOVEMENT. EXPANDED SCALE, WHITE ON BLACK. STEPS OF ONE AMP. POWER CONSUMPTION NOT MORE THAN 1.2 WATTS. SIMILAR TO -22458 EXCEPT FOR SIZE. 3/20/45 NT-33 COL:457 1240 00 APR. 45 S#1,164,002 REV 4			TOR; PA GRID HAS 24,000 OHM RESISTOR, AND PA PLATE HAS 4020 OHM RESISTOR. SAME AS -22502 EXCEPT FOR SIZE.		
3/3/45 476 MAR. 45								
CG-22488	SP-1M		CG-22495	LX-1		CAY-22502	TCZ 17-1-12 INT	
MILLIAMETER, DC 0-200 MA. 2 63/64 X 3 1/8" FLUSH ROUND CASE WITH RECTANGULAR FLANGE. FOR MOUNT- ING ON 1/16" MAGNETIC PANEL. LINEAR SCALE; BLACK MARKINGS ON WHITE. RESIS- TANCE OF METER IS 300 OHMS. 3/5/45 80053AAF207 CG:K-4158122 MAR. 45			MICROAMMETER, DC 0-200 MICROAMPS. 3 1/2". FLUSH, FAN SHAPED BLACK BAKELITE CASE. NON-MAGNETIC PANEL. D'ARSONVAL MOVEMENT. 3/20/45 CG:8D049XMR-200 CFD:183-0-1A APR. 45			MILLIAMMETER, DC 0-1 MA. 2 1/2" FLUSH ROUND BAKELITE CASE FOR NON-MAGNETIC PANEL. D'ARSONVAL MOVE- MENT. INTERNAL RESISTANCE 42 OHMS. ONE SPECIAL SCALE AND 2 INDICATOR LEVELS. YELLOW MARKINGS ON BLACK BACKGROUND. BATTERY INDICATOR HAS 50,000 OHM RESIS- 3/27/45 NX-33 COL:450 4125 00-2 APR. 45 S#1,164,004A REV D 6400		
CAY-22489	NXSR-83353	17-1-12	CG-22496	LX-1		CAY-22502		
METER, DC; -18 DB TO +3 DB. 3" X 3 1/8" FLUSH ROUND CASE WITH RECTANGULAR FLANGE FOR MOUNTING. D'ARSONVAL MOVEMENT. DIFFERS FROM CAY RC-35 ONLY IN SCALE AND RANGE AS SHOWN. FULL SCALE DEFLECTION 60 VOLTS. 3/14/45 CAY:RC-35 CKB:41-400A98-2 MAR. 45 MODIFIED REV 0			VOLTMETER, AC 0-7.5 VOLTS AC. 3 1/2". FLUSH, FAN SHAPED, BAKELITE CASE. NON-MAGNETIC PA- NEL. INTERNAL MULTIPLIER FOR 7.5 VOLTS. 1000 OHMS DC RES. PER VOLT. 3/20/45 CG:8D049ADE-200 CFD:185-0-1A APR. 45			TOR, PA GRID HAS 24,000 OHM RESISTOR, AND PA PLATE HAS 4020 OHM RESISTOR. SAME AS -22501 EXCEPT FOR SIZE.		
CAY-22490	YG	17-1-12	CG-22497	TBS-8		CG-22503	SJ-1	
MICROAMMETER, DC; 0-200 MICROAMPS. 2 1/2" FLUSH ROUND METAL CASE. D'ARSONVAL MOVEMENT. STAND- ARD LINEAR SCALE CALIBRATED IN STEPS OF 5 MICROAMPS. FOR MOUNTING ON NON-MAG- NETIC PANEL. RESISTANCE 154 OHMS ± 10%. 3/16/45 BX-33 STYLE CRV:M-422603-1 MAR. 45 PH-41591-1 SUB 2			DECIBEL METER (MILLIAMMETER) 0 TO 100 DB. 0 TO 3 MA. 2 1/2". FLUSH ROUND BAKELITE CASE. SCALE CALIBRATED IN STEPS OF 10 DB; FULL SCALE DEFLECTION AT 3.0 MA; 10 DB AT 2.0 MA, 60 DB AT 1.0 MA, 100 DB AT 0.2 MA. 3/23/45 DW-4X CRV:K-850862-1 APR. 45 REV 5			VOLTMETER, AC 0-150 VOLTS. RECTANGULAR CASE OF MOLDED TEXTOLITE. MAGNETIC VANE MOVEMENT. RE- SISTANCE 100 OHMS PER VOLT. SCALE 2.2" LONG IN 75 DIVISIONS. 2% ACCURACY AT FULL-SCALE DEFLECTION. 3/28/45 93X474 CW:WM-8118221 APR. 45		
CG-22491	SU, SU-1	17-1-12	CG-22498	TBS-8		CG-22504	MAR	
MILLIAMMETER, DC; 0 TO 25 MILLIAMPS DC 3 1/2". FLUSH, CIR- CULAR BAKELITE CASE. D'ARSONVAL MOVEMENT. CALIBRATED FOR 3/32 STEEL PANEL. BLACK DIAL WITH LUMINOUS MARKINGS. 3.68 OHMS RESISTANCE. 3/17/45 CG:8D0-41AAY225 CG:K-4121298 MAR. 45 CBM:975-3 REV 7			DECIBEL METER (AC VOLTMETER) -16 TO +3 DB. 5.47 TO 48.8 VOLTS AC. 2 1/2" ROUND FLUSH BAKELITE CASE. RESIS- TANCE 500 OHMS PER VOLT. SCALE CALI- BRATED FOR -16, -12, -10, -8, -6, -4, -2, -1, 0, +1, +2, +3 DB. 3/23/45 DW-4X CRV:K-850855-1 APR. 45 REV 7			MILLIAMMETER FULL SCALE AMPS 0.001 ± 2%; 100 OHMS DC RES; BLACK PHENOLIC CASE. 1 3/4" X 1 3/4" X 1 23/64" DEEP. FOUR 0.125 MTG. HOLES. *CG-K-4155866, REV 2 3/28/45 8DN-1 CRV:M-450715 APR. 45 REV 0 *		

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**CAY- 22505 SF**  
 MILLIAMMETER, DC  
 0-1 AND 0-10 MA. RECTANGULAR, FLUSH, PHENOLIC CASE D'ARSONVAL MOVEMENT. LINEAR SCALE IN 50 DIVISIONS; BLACK MARKINGS ON WHITE. RESISTANCE OF METER 45 AND 60 OHMS.  
 \*SECTION 45-350 P. 1 ISS. JULY 22, 1940  
 3/29/45 RX-35 CAY CATALOG  
 APR. 46 \* SEE ABOVE

**CATX- 22506 CTK-60044-A**  
 MICROAMMETER, DC  
 0-200 MICROAMPS. RECTANGULAR. PROJECTION MTG. BAKELITE CASE FOR NON-MAGNETIC PANEL. D'ARSONVAL MOVEMENT TWO SCALES. BLACK ON WHITE FOR 0 TO 1000 MEGOHMS AND 0 TO 3 VOLTS DC. ONE SCALE RED ON WHITE FOR 0 TO 30 VOLTS AC. SENSITIVITY OF DC 3/30/45 CATX: 45 CG:  
 APR. 45 CRV:STOCK 43923

**CTAX-22506**  
 VOLT SCALE 3 2/3 MEGOHM PER VOLT; SENSITIVITY OF AC VOLTS SCALES 1000 OHMS PER VOLT.

**CSV- 22507 SP-1M**  
 MICROAMMETER DC:  
 0-400 MICROAMPS. RECTANGULAR, SEMI-FLUSH FRONT OF BOARD MTG. BAKELITE CASE FOR NON-MAGNETIC PANEL. D'ARSONVAL MOVEMENT. SCALE IN STEPS OF 50. BLACK MARKINGS ON WHITE. RESISTANCE OF METER 200 OHMS.  
 4/2/45 M29-S CASE CG:FRONT OF FILE  
 MAY 45 STOCK #12-110

**CG- 22508 SX**  
 TUBE LIFE METER:  
 0 TO 99,999 HOURS. 3 1/2" FLUSH. ANTI-GLARE GLASS. BLACK DIAL WITH WHITE MARKINGS MUST BE SUITABLE FOR OPERATION AT AMBIENT TEMPERATURE BETWEEN 0°C TO 50°C AND FOR ANY VALUE OF RELATIVE HUMIDITY UP TO 95%. FOR 110/1/60 OPERATION.  
 4/3/45 8KT8E3 M-7468163-1  
 MAY 45 REV. 0

**CG- 22509 WFA 17112 (INT)**  
 MILLIAMMETER, DC:  
 0.5-0-0.5 MA. SPECIAL, FLUSH METAL CASE. NON-GLARE GLASS. ILLUMINATED DIAL WITH GE MAZDA 322 LAMP. SCALE CALIBRATED IN STEPS OF 0.1 MA; BLACK BACKGROUND WITH GRADE 38 N RADIUM MARKINGS. HAS WORD "BOTTOMSIDE" ON DIAL PLATE.  
 4/6/45 DW-53 CBM-1000F-4  
 MAY 45 ALT I

**CG- 22509-A WFA 17112 (INT)**  
 MILLIAMMETER, DC:  
 0.5-0-0.5 MA. SPECIAL, FLUSH METAL CASE. NON-GLARE GLASS. ILLUMINATED DIAL WITH GE MAZDA 322 LAMP. SCALE CALIBRATED IN STEPS OF 0.1 MA; BLACK BACKGROUND WITH GRADE 38 N RADIUM MARKINGS. SAME AS -22509 EXCEPT HAS WORD "TOPSIDE" ON  
 4/6/45 DW-53 CBM-1000F-3  
 MAY 45 ALT I

**CG-22509-A**  
 DIAL PLATE.

**CV- 22510 TS-268/U 17112**  
 MILLIAMMETER, DC:  
 DUAL SCALE: 0-1 MA. INFINITY TO 0 OHMS. 3 1/8" X 3" FLUSH, RECTANGULAR, BAKELITE CASE. D'ARSONVAL MOVEMENT. SCALE HAS SPECIAL GREEN AND RED SECTORS CALIBRATED GOOD AND BAD, 100 OHMS INTERNAL RESISTANCE.  
 4/9/45 CV:301 CAOR:H-1229-A  
 MAY 45 RECTANGULAR CHANGE A

**CV- 22511 OAX**  
 DECIBEL METER:  
 -20 TO +3 DB, AUXILIARY SCALE 0 TO 100. 4" X 4 1/4" RECTANGULAR BAKELITE CASE. DESIGNED TO INDICATE POWER LEVEL IN CIRCUIT OF 600 OHMS IMPEDANCE AT 20 KC. ZERO DB AT 0.659V AC. FULL SCALE 1.225V AC. REFERENCE LEVEL 6 MILLIWATTS. DC  
 4/9/45 862-358 DWG IN FILE  
 MAY 45

**CV- 22511**  
 METER RES. 2000 OHMS. TO BE USED WITH 3600 OHMS EXTERNAL SERIES RES. CASE INTERNALLY ILLUMINATED WITH 2 #47 MAZDA 6-8 V LAMPS. CASE DUST PROOF AND NOISURE PROOF.

**CV- 22512 WAB**  
 THERMOCOUPLE:  
 RES. 0.053 OHMS ±15%. 40" LEADS HAVING RES. OF 0.017 OHMS. FOR USE WITH NAVY TYPE -22282 R.F. AMMETER.  
 4/18/45 102456 CBM-769-2  
 MAY 45 ALT 0

**CAY- 22513 TEC**  
 VOLTMETER DC:  
 RANGE 0-500V DC, 3 1/2" FLUSH, RECTANGULAR BAKELITE CASE. SCALE MAIN DIVISIONS EVERY 100V, SUBDIVISIONS EVERY 50V. INSULATION RATING 750V.

4/24/45 QX37 DWG IN FILE  
 MAY 45 #1160498

**CAY- 22514 TEC**  
 AMMETER:  
 RANGE 0-5 AMPS DC, 3 1/2" FLUSH, RECTANGULAR BAKELITE CASE. SCALE MAIN DIVISIONS EVERY 1 AMP. SUBDIVISION EVERY 0.1 AMP. INSULATION RATING 750V.

4/25/45 QX37 DWG IN FILE  
 MAY 45 #1160062

**CAY- 22515 TEC**  
 VOLTMETER (RECTIFIER TYPE):  
 RANGE 0-25V AC, 3 1/2" FLUSH, RECTANGULAR BAKELITE CASE. SCALE MAIN DIVISIONS EVERY 5V SUBDIVISIONS EVERY 0.5V. 1000Ω/V DC RES. INSULATION RATING 750V.

4/25/45 QC37 DWG IN FILE  
 MAY 45 S/NY-71399-8

**CAY- 22516 TEC**  
 AMMETER, DC:  
 RANGE 0-1.5 AMPS DC, 3 1/2" FLUSH RECTANGULAR BAKELITE CASE. SCALE MAIN DIVISIONS EVERY 0.3 AMP. SUBDIVISIONS EVERY 0.05 AMP. INSULATION RATING 750V.

4/25/45 QX37 DWG IN FILE  
 MAY 45 S#1160057

**CAY- 22517 TEC**  
 AMMETER R.F.:  
 RANGE 0-15 AMPS, 3 1/2" FLUSH RECTANGULAR BAKELITE CASE. SCALE: MAIN DIVISIONS EVERY 3 AMPS, SUBDIVISIONS EVERY 0.5 AMPS. INSULATION RATING 750V. DESIGNED FOR UHF USE.  
 4/25/45 QT37 DWG IN FILE  
 MAY 45 S#1160368

**CW- 22518 MARK 22**  
 METER (VOLT-MILLIAMMETER):  
 RANGE: 0-3 VOLTS OR MA DC 3 1/2" ROUND FLUSH BAKELITE CASE. PERMANENT MAGNET MOVEMENT. LINEAR SCALE WITH 60 DIVISIONS. FULL SCALE DEFLECTION AT 100 MICROAMPS. CENTER PIVOT. 770 OHMS DC RES ACROSS TERMINALS.  
 4/25/45 D167433 CW:ESA-651591-2  
 MAY 45 ISS. 6

**CAY- 22519 QCN-4 17112A**  
 AMMETER, DC:  
 RANGE: 0-15 AMPS, 3 1/2" FRONT OF BOARD ROUND BAKELITE CASE. PERMANENT MAGNET MOVING COIL TYPE. LINEAR SCALE IN STEPS OF 1 AMP, BLACK ON WHITE. NON-GLARE GLASS TROPICALLY TREATED. INSULATION RATING 750 VOLTS.  
 4/24/45 SX-35 CBM-571-498  
 MAY 45

**CW- 22520 SV**  
 MILLIAMMETER DC:  
 DOUBLE SCALE: 0 TO 1.5 MILLIAMPS (15 DIVISIONS) AND 0 TO 22.5 MILLIWATTS (24 DIVISIONS). 3 1/2" ROUND FLUSH PHENOLIC CASE. FULL SCALE DEFLECTION IS 1.5 MILLIAMPS DC AND ACCURACY IS WITHIN 2% OF FULL RANGE. REQUIRES EXTERNAL CIR-5/4/45 D-170136 ESA-651591-6  
 MAY 45 ISS. 8

**CW-22520**  
 CUIT FOR MILLIWATT SCALE. DC RES. OF METER IS 75 OHMS. CALIBRATED FOR USE IN HORIZONTAL POSITION.

**CW- 22521 SY**  
 KILOVOLT METER, DC  
 3 RANGES: 0 TO 400 VOLTS, 0 TO 160 VOLTS 0 TO 8 KILOVOLTS (40 DIVISIONS). 3 1/2" ROUND FLUSH PHENOLIC CASE. FULL SCALE DEFLECTION IS 500 MICROAMPS. 500 OHMS ±2% ACROSS TERMINALS; 400 VOLT RANGE 400,000 OHMS APPROX. 160 VOLT RANGE 5/4/45 0-170282 ESA-651591-7  
 MAY 45 ISS 8

**CW-22521**  
 160,000 OHMS APPROX. AND 8 KV RANGE 8 MEGOHMS APPROX. 8 KV RANGE SCALE IS IN RED.

**CW- 22522 SV**  
 MICROAMMETER, DC  
 RANGE: 0 TO 200 MICROAMPS (40 DIVISIONS). 3 1/2" ROUND FLUSH PHENOLIC CASE. FULL SCALE DEFLECTION 200 MICROAMPS; ACCURACY WITHIN 2%. 65 OHMS DC RES. ACROSS TERMINALS. CALIBRATED FOR USE IN HORIZONTAL POSITION.  
 6/4/45 D-170286 ESA-651591-8  
 MAY 45 ISS 8

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
CV-22523 SV VOLTMETER, DC 3 RANGES: 0 TO 500 VOLTS, 0 TO 1000 VOLTS, 0 TO 2500 VOLTS (50 DIVISIONS). 3 1/2" ROUND FLUSH PHEENOLIC CASE, CALIBRATED FOR USE ON 0.09" THICK STEEL PANEL; 1.0 MILLIAMPS FOR FULL SCALE DEFLECTION; ACCU-ACY WITHIN 2%. 277 OHMS 5/4/45 0-170 130 ESA:551591-10 MAY 45 ISS 8			CG-22529 AN/CPN-6 VOLTMETER, AC RANGE: 0-150 VOLTS, 50 TO 70 CPS. 3 1/2" ROUND FLUSH BAKELITE CASE WITH NON-GLARE GLASS, D'ARSONVAL MOVEMENT, 1% ACCURACY, 60 SCALE DIVISIONS, BLACK ON WHITE WITH RED MARK AT 115 VOLTS. 5/11/45 A022 CGG:52C101065 MAY 45 ISS 8			-22535 TDH THERMOAMMETER, RF RANGE: 0-10 AMPS AC, 3 5/64" ROUND BAKE-LITE CASE FOR SURFACE MTG. FREQ. 2 MC TO 18.1 MC. D'ARSONVAL MOVEMENT WITH INTERNAL THERMOCOUPLE, EXPANDED SCALE, 50 DIVISIONS. POWER CONSUMPTION NOT MORE THAN 2 WATTS. FREQ. ERROR NOT MORE THAN 2% UP 5/18/45 CG:30043A-Y31 COL:451 2101 00 MAY 45 CAT. #95X137 REV 0		
CV-22523 ACROSS TERMINALS. METER SENSITIVITY 1000 OHMS PER VOLT.			CV-22530 MBA 17 I 12(INT) MILLIAMMETER, THERMO RANGE: 0 TO 500 MA AC, 60 CPS. 3 1/2" ROUND FLUSH BAKELITE CASE, EXPANDED SCALE, CALIBRATED IN STEPS OF 10 MA, BLACK ON WHITE; 2% ACCURACY. RES. OF METER 1.3 OHMS. USED WITH EXTERNAL THERMOCOUPLE CV TYPE 102.457. 5/15/45 425 C2M:PT. #803-58 MAY 45			-22535 TO 3000 KC.		
CV-22524 PM MILLIAMMETER, DC RANGE 0.5-0-0.5 MA. DC. 3 1/2" FLUSH, CIRCULAR, PHEENOL-PLASTIC CASE, MOVING COIL, PERMANENT MAGNET TYPE FOR USE ON 0.09" STEEL PANEL. ACCURACY 2% OF FULL SCALE DEFLECTION, 25 OHMS DC RES. ACROSS TERMINALS. 5/4/45 D-164386 ESA-651591-9 MAY 45 ISS 8			-22531 TDH 17 I 12(INT) MILLIAMMETER, DC DUAL SCALE: 0-5 MA AND 0-50 MA, 3" RECTANGULAR FLANGE FOR FLUSH MTG. BAKELITE CASE, LINEAR SCALE, 50 DIVISIONS. FULL SCALE DEFLECTION 5 VOLTS DC. RES. OF METER 5000 OHMS ±1%. D'ARSONVAL MOVEMENT. *COL:458 0010 00, REV 1 5/18/45 CV:301 COL:508 1077 20 MAY 45 REV 0739 *			-22536 TDH THERMOAMMETER, RF RANGE: 0-5 AMP, 2 MC TO 18.1 MC. 3 5/64" ROUND BAKELITE CASE, SURFACE MTG. D'ARSONVAL MOVEMENT; INTERNAL THERMOCOUPLE, EXPANDED SCALE, 50 DIVISIONS. POWER CONSUMPTION NOT MORE THAN 1 WATT. FREQ. ERROR ZERO AT 60 CPS, +5% AT 10 5/18/45 CG:30043A3202 COL:451 2510 00 MAY 45 CAT. #95X134 REV 9601		
CV-22525 UN VOLTMETER, AC SINGLE SCALE 0-1 VOLT, RECTIFIER TYPE, 3 1/2" FLUSH, CIRCULAR, BLACK BAKELITE CASE. FOR USE ON 7/32" STEEL PANEL; INTERNAL RESISTANCE, 3000 OHMS, ERROR NOT TO EXCEED ±5% OF FULL SCALE. FOR USE WITH FREQUENCIES BETWEEN 255 & 3145 CPS. 5/5/45 301 SPECIAL CW:ESL-327391 MAY 45 CW:KS-8336 ISS 1 ISS 4			-22531 EXTERNAL SHUNT. SAME AS -22532 EXCEPT FOR CASE.			-22536 MC; +17% AT 20 MC.		
CDJ-22526 SG-6, SO-6 MILLIAMMETER, DC RANGE: 0-1 MA DC, 2 1/2" FLUSH, CIRCULAR, BAKELITE CASE. INTERNAL RESISTANCE 100 OHMS. FULL SCALE ACCURACY ±2%. SHATTER PROOF GLASS. SPECIAL SCALE IS DIVIDED INTO 3 SECTIONS: LEFT THIRD IS MARKED "LOW" AND COLORED WHITE, CENTER THIRD IS 5/8/45 S-210 CRP:45-5021P1 MAY 45 ISSUE 1			-22532 TDH 17 I 12(INT) MILLIAMMETER, DC DUAL SCALE: 0-5 MA AND 0-50 MA; 3" RECTANGULAR FLANGE FOR FLUSH MTG. BAKELITE CASE, LINEAR SCALE, 50 DIVISIONS. FULL SCALE DEFLECTION 5 VOLTS DC. RES. OF METER 5000 OHMS ±1%. D'ARSONVAL MOVEMENT. *COL:458 0010 00, REV 1 5/18/45 CG:30055A-Y243 COL:508 1077 20 MAY 45 REV 9739 *			-22537 TDH KILOVOLTMETER, DC RANGE: 0-7.5 KV, 3" SQUARE BAKELITE CASE, FLUSH MTG. D'ARSONVAL MOVEMENT. LINEAR SCALE, 75 DIVISIONS. FULL SCALE DEFLECTION 0-1 MA DC, FULL SCALE DEFLECTION 110%. RES. OF METER 105 OHMS ±1%. SENSITIVITY 1000 OHMS PER VOLT. EXTERNAL 5/18/45 CV:301 COL:458 0233 50 MAY 45 REV 0		
CDJ-22526 MARKED "NORMAL" AND COLORED GREEN AND RIGHT THIRD IS MARKED "DANGER" AND COLORED RED.			-22532 MENT, EXTERNAL SHUNT. SAME AS -22531 EXCEPT FOR CASE.			-22537 MULTIPLIER.		
CG-22527 AN/CPN-6 MILLIAMMETER, DC RANGE: 0-50 MA DC, 3 1/2" ROUND FLUSH BAKELITE CASE, D'ARSONVAL MOVEMENT. METER RESISTANCE 50 OHMS. FULL SCALE DEFLECTION AT 10 MA. REQUIRES 12.5 OHMS EXTERNAL SHUNT FOR 50 MA OPERATION. LINEAR SCALE, BLACK ON WHITE. 5/11/45 00-41 CGG:52C103126 MAY 45 ISS 1			-22533 TDH 17 I 12(INT) MILLIAMMETER, DC RANGE: 0-500 MA DC, 3" RECTANGULAR FLANGE FOR FLUSH MTG. BAKELITE CASE. LINEAR SCALE, 50 DIVISIONS, D'ARSONVAL MOVEMENT. RES. OF METER IS 0.2 OHMS. 5/18/45 CV:301 COL:450 3500 50 MAY 45 REV 0			CEV-22538 OBC D.C. RECORDING MILLIAMMETER: RANGE: 0.5-0-0.5. SCALE 0-300. FLUSH MOUNTED; RECTANGULAR. EQUIPPED WITH A TYPE 1ST CHART DRIVE. AN EXTERNAL 115V DC MOTOR WITH QUICK TRIP COIL ATTACHED TO AND PART OF METER. MOTOR DRIVES GEARS WHICH PROVIDE SPEED OF 3/4" PER SECOND 5/24/45 AM CM:BA-438881-1 MAY 45 ISS. 1		
CG-22528 AN/CPN-6 KILOVOLTMETER, DC RANGE: 0-20 KV DC, 3 1/2" ROUND FLUSH BAKELITE CASE. FULL SCALE DEFLECTION AT 600 MICROAMPS ±2%. D'ARSONVAL MOVEMENT, 2% ACCURACY, LINEAR SCALE, BLACK ON WHITE. 5/11/45 00-41 CGG:52C102447 MAY 45 ISS 8			-22534 TDH 17 I 12(INT) MMETER, DC RANGE: 0-2 AMPS DC, 3" SQUARE FLANGE FOR FLUSH MTG. BAKELITE CASE, D'ARSONVAL MOVEMENT. LINEAR SCALE, 40 DIVISIONS. RES. OF METER IS 0.025 OHMS ±10%. FULL SCALE DEFLECTION 2000 MA; FULL SCALE VOLTAGE DROP IS 50 MILLIVOLTS ±5%. 5/18/45 CV:301 COL:458 0833 50 MAY 45 REV 0			CEV-22538 TO CHART.		

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED
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Class 22—Indicating Instruments

3.22-29

NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION	NAVY TYPE DESIGNATION	FIRST ASSIGNED FOR	NAVY DRAWING OR SPECIFICATION
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CV-22539 OBC  
 VOLTMETER, AC:  
 RANGE: 0-150 VOLTS (30 DIVISIONS), RECTANGULAR, CALIBRATED FOR USE ON NON-MAGNETIC PANEL, AND IS ACCURATE TO WITHIN 2% FULL SCALE REFLECTION, RES. ACROSS TERMINALS IS 16,500 OHMS, OPERATING FREQUENCIES IS 25-125 CPS.  
 5/24/45 734 CW:3A-43883-1  
 MAY 45 ISS. 1

CV-22540 OBC  
 MILLIAMMETER, DC:  
 SINGLE SCALE, RECTANGULAR, RANGE: 0-5 MA (50 DIVISIONS), CALIBRATED FOR USE ON A NON-MAGNETIC PANEL, AND IS ACCURATE TO WITHIN 2% OF FULL SCALE DEFLECTION, RES ACROSS TERMINALS IS 5.8 OHMS.  
 5/24/45 731 CW:3A-43884-1  
 MAY 45 ISS 1

CW-22541 MK 3 MOD 2  
 MILLIAMMETER, DC:  
 RANGE: 25-0-25 MA 3 1/2" FLUSH ROUND PHEOLIC CASE, D'ARSONVAL MOVEMENT, METER RES. 220 OHMS ±10%, 50 SCALE DIVISIONS, 2% ACCURACY, FOR USE ON NON-MAGNETIC PANEL.  
 5/25/45 D-170223 ESA-651591-11  
 MAY 45 ISS 8

CG-22542 MK 34 MOD 3&4  
 METER, TIME:  
 RATED 115V AC, 60 CPS, 2 WATTS, 5 DIAL VEEDER TYPE COUNTER, RANGE 0 TO 9,999. 9 HOURS, LOWEST CALIBRATION 0.1 HR. 3 1/2" ROUND CASE FOR FLUSH PANEL MTG. SYNCHRONOUS MOTOR DRIVE.  
 5/23/45 94X922 CW:3A-10014-2  
 MAY 45 ISS. 4

CSV-22543 SF  
 MILLIAMMETER, DC:  
 0 TO 1.0 MA, 3" X 3 1/8" RECTANGULAR FLUSH BAKELITE CASE TO MOUNT IN ROUND HOLE, BODY OIAM. 2 3/4" D'ARSONVAL MOVEMENT, LINEAR SCALE CALIBRATED IN STEPS OF 0.2 MA.  
 5/30/45 27 CATALOG  
 MAY 45 CBN-921-141

DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER	ASSIGNED ISSUED	DATE	MANUFACTURER'S DESIGNATION	MANUFACTURER'S DRAWING NUMBER
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