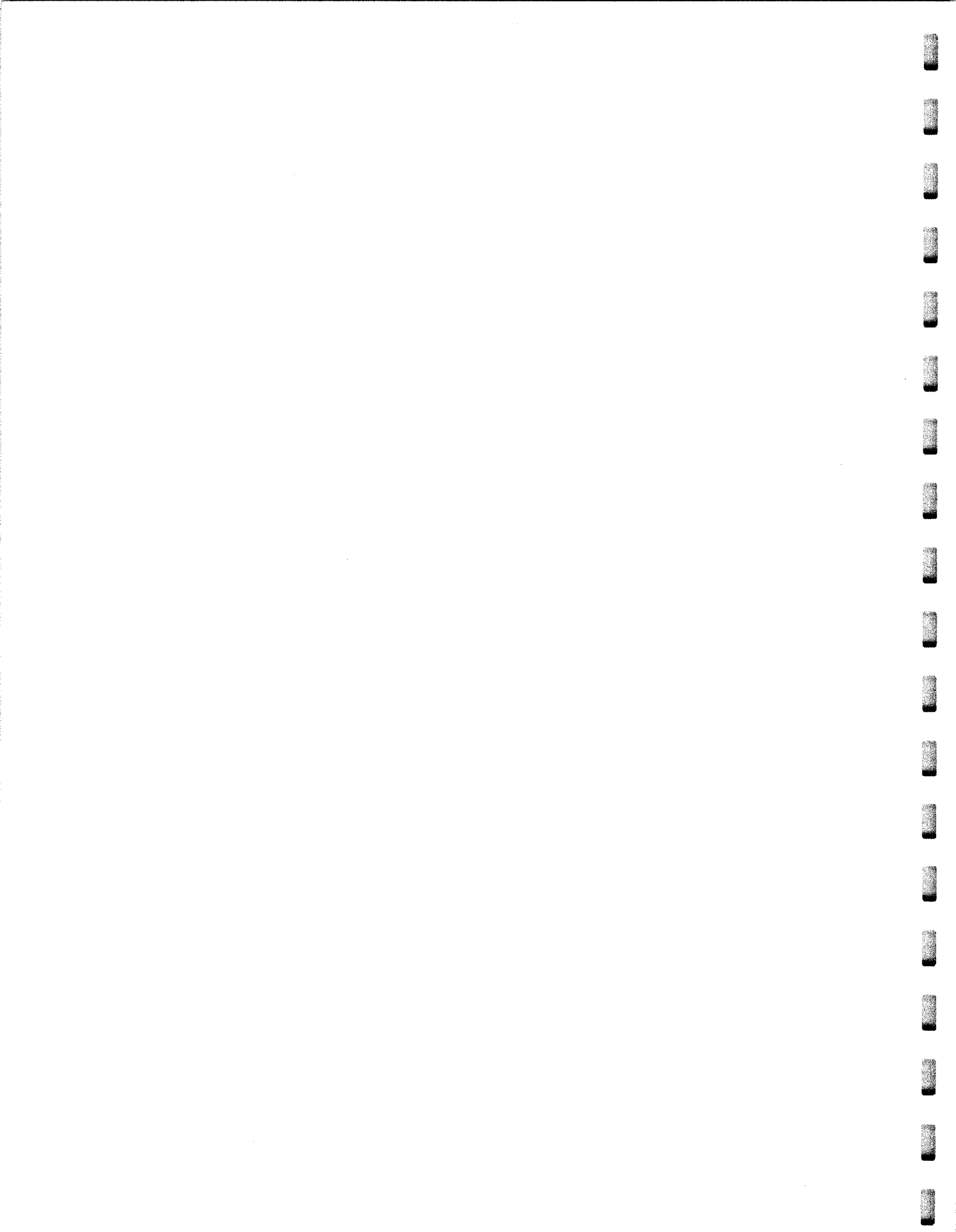


Class 51—Microphones—Hydrophones—Combination Handsets

CLASS 51
MICROPHONES
HYDROPHONES
ELECTRICAL PICK-UP DEVICE
COMBINATION HANDSETS

RESTRICTED

NAVSHIPS 900,109



Class 51—Microphones—Hydrophones—Combination Handsets

3.51-1

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
CDC 51000 MICROPHONE	GM		CTE 51004A T8P MICROPHONE: CARBON BUTTON TYPE. FOR OPERATION FROM 4 TO 8 VOLTS DC. WEIGHT 3 OUNCES. EQUIPPED WITH A PUSH-TO-TALK BUTTON.			CRV 51007 HANDSET TELEPHONE UNIT 500 OHMS AT 100 CYCLES. SINGLE BUTTON MICROPHONE; HAS A SINGLE CIRCUIT PUSH-TO-TALK SWITCH. CASE OF HIGH IMPACT MATERIAL.		
3/22/32 NOV. 41			QNAF 213264-5 REV 7 & T-386; CAY:P-7407399 SUB 2. 11/16/39 RS-38		Ø SEE ABOVE	Ø SUB 7 LESS PT. 28. 8/13/40 NOV. 41		P-720305-503 Ø SEE ABOVE
CBM 51001 MICROPHONE FOR SURFACE SHIPS.	JL		CTE 51004-B T8Y MICROPHONE: CARBON BUTTON TYPE FOR OPERATION FROM 4 TO 8 VOLTS DC. WEIGHT 3 OUNCES, EQUIPPED WITH A PUSH-TO-TALK BUTTON. SAME AS NAVY TYPE CTE-51004A EXCEPT HAS GREATER SENSITIVITY AT LOW VOICE LEVELS. (ANTI-NOISE BAFFLE REMOVED). 6/12/40 RS-38B		Ø SEE PLATE 2	CQE-51008 HAND TELEPHONE ASSEMBLY CONSISTING (ONE EACH) OF NAVY TYPES CRV-49118 CORD; CRV-51007 HANDSET AND CRV-51009 MOUNTING HOOK.		
3/26/32 #617 NOV. 41		SK. 2356	Ø CAY:P-7407399 SUB 2; NAF:213264-5 REV 7 & T-388 MOD.			Ø P-720305-503 SUB 5; M-420665-501 SUB 1 8/13/40 MI-8816 & MAY 45 MI-8903		Ø SEE ABOVE
CBM 51002 MAGNETOPHONE FOR SUBMARINES.	JL-1 & JL-2		51004-B			CRV-51008-A GEN. USE HAND TELEPHONE ASSEMBLY SAME AS -51008 EXCEPT (1) AUTOMATIC ELECTRIC #41 CARBON MICROPHONE IS USED INSTEAD OF #35 A7 (2) RCA SOUND POWERED RECEIVER USED INSTEAD OF AUTOMATIC ELECTRIC MAGNETIC DIAPHRAGM TYPE (3) HANDSET MADE OF HIGH IMPACT MATERIAL (4) SWITCH 8/3/44 MI-2476 DEC. 44		
3/26/32 #517-A NOV. 41		SK. #2356	Ø CAY:P-7407399 SUB 2; NAF:213264-5 REV 7 & T-388 MOD.			CRV 51009 HANDSET MOUNTING HOOK FOR USE WITH -51007 HANDSET.		
CBM 51002-A MAGNETOPHONE SAME AS -51002 EXCEPT CABLE LEAD IS SHIELDED.	JL-5	55RES1J1005A	51004C CXBU-1 MICROPHONE ASSEMBLY: CARBON BUTTON TYPE, FOR OPERATION FROM 4 TO 8 VOLTS DC. WEIGHT 3 OUNCES, EQUIPPED WITH NON-LOCKING PUSH-TO-TALK BUTTON. HAS ANTI-NOISE BAFFLE. INCLUDES TYPE -61042 MICROPHONE.			CRV51008-A ASSEMBLY MADE OF MOLDED PHENOLIC INSTEAD OF BRASS (5) OTHER MINOR CHANGES IN MATERIAL & FINISH.		
11/22/37 517F NOV. 41			7/24/42 CTE:RS-38A NOV. 43 CVA:9044		NAF:213264-6 REV 7, T-38C *	8/13/40 MI-8903 NOV. 41		M-420665-501 SUB 1
CBM 51002-B MAGNETOPHONE ELECTRO-DYNAMIC, MOVING COIL TYPE. FIELD COIL ENERGIZED BY 1.1 AMP AT 75.5 VOLTS DC. SAME AS NAVY TYPE CBM-51002A EXCEPT THE FIELD COIL INCLUDES A SHELL OF COBALT STEEL FOR THE PURPOSE OF RETAINING SUFFICIENT MAGNETISM TO PERMIT	JL-9		CN-51005 * SEE BELOW CHEST MICROPHONE SINGLE BUTTON, CARBON, INCLUDING D-97068 TRANSMITTER; 2A CHEST PLATE; D-97103 CONNECTING BLOCK; D-96489, 10-1/2" CORD; KS7537 CORDAGE; D-97069, 4 CORD, & #221 PLUG. * TBM, 1, 2 & TBN, 1, 2, 3. 2/26/35 D-97068 NOV. 41			CAU 51010 MICROPHONE SAME AS CAU-51006 & CAU-51016 EXCEPT FOR CASE & OMISSION OF PUSH TO TALK SWITCH. RESISTANCE APPROXIMATELY 35 OHMS, & REQUIRES APPROXIMATELY 55 MA DC.		
9/5/40 517X NOV. 41		60020 ALT 0	Ø CAU 51006 T8O MICROPHONE 30 OHMS; 200 TO 3000 CYCLES. Ø PHENOLIC CASE & TWO MOUNTING EARS. 12/29/36 35A7 EXCEPT NOV. 41 Ø SEE ABOVE		P-7761768 REV 2	Ø CRV:M-420998 LESS CORD & PLUGS. 8/13/40 28509 NOV. 41		Ø SEE ABOVE
ITS USE UNDER EMERGENCY CONDITIONS WITHOUT EXTERNAL POLARIZING POWER.		51002-B	CAU 51006A T8X-2 HAND MICROPHONE: PUSH-TO-TALK SWITCH, NON-LOCKING. OPERATES FROM 12.6 VOLTS ±10% DC SOURCE WITH SUITABLE RESISTOR. WHEN NORMAL MICROPHONE CURRENT WILL BE APPROX 120 MA, WILL DELIVER .35 TO 4 VOLTS RMS INTO AN OPEN CIRCUIT AT A SOUND PRESSURE OF 30			CRV 51011 CHEST MICROPHONE ASSEMBLY CONSISTING (ONE EACH) OF NAVY TYPES CN-49034 PLUG, CRV-49119 CORD, CAU-51010 MICROPHONE & CHEST ASSEMBLY.		
4/3/33 NOV. 41			5/18/42 CAU- INCLUDES MAR: 43 TYPE 41 CELL		P-7761768 REV 4	8/13/40 MI-8705 NOV. 41		P-717165-503 SUB 3
51004 MICROPHONE	GP	NAF #T-38	CAU 51006A			51012 CANCELLED - NEVER USED.		
8/4/34 NOV. 41			BARS OVER A FREQUENCY RANGE OF 200 TO 3000 CYCLES. MICROPHONE RESISTANCE 30 OHMS ± 25%. SAME AS -51006 EXCEPT CELL IS TYPE 41. DOES NOT INCLUDE CORD AND PLUG.					

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
								NOV. 41		

RESTRICTED

NAVSHIPS 900,109

3.51-2

Class 51—Microphones—Hydrophones—Combination Handsets

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
CAU 51012-A TBR & TBR-1 CHEST MICROPHONE ASSEMBLY CONSISTS OF A CAU-49007 PLUG, A -51016 MICROPHONE, A MICROPHONE CORD, A SWITCH AND SWITCH CORD AND CHEST ASSEMBLY.	6/16/38 NOV. 41	ES-76-5628 (CC) P-7761782 REV 1	CRY 51015-A (5) ALL PARTS COMMON TO SOUND POWERED TELEPHONES USED.			CRY 51019-A GEN USE HANDSET ASSEMBLY SAME AS BASIC NO. EXCEPT (1) MICROPHONE & MOUTHPIECE REPLACED BY TYPE 41, MICRO AND A SPRING CLIP MOUNTING FOR IT (2) MATERIAL USED IN HANDSET SHELL & EAR CAP IS HIGH IMPACT GRADE (3) RECEIVER EARPHONE UNIT IS MI-2042A (4) RECEIVER END 4/3/44 AUG. 44		P-172 169-501
CAU 51012-B TCD CHEST MICROPHONE ASSEMBLY CONSISTS OF A CHEST PLATE WITH ADJUSTABLE HALTER, A 20 FT. MICROPHONE CORD A 9" SWITCH CORD (3-CONDUCTOR, RUBBER COVERED), A TYPE CAU-24071 PRESS-TO-TALK HAND SWITCH, A CAU-49007 PLUG AND A CAU-51016 MICROPHONE.	11/26/39 NOV. 41	(CC) P-7762407 REV 0	CAU 51016 * SEE BELOW MICROPHONE: SAME AS CAU-51006 AND 51010 EXCEPT CASE, AND FOR OMISSION OF PUSH-TO-TALK SWITCH. INCLUDES TYPE #35A7 CELL. * CAU-51012A(TBR,1) 6/16/38 2-3363 NOV. 41		CO:P-7761782 REV. 1	CRY 51019-A OF HANDSET IS EQUIPPED WITH SPRINGS (5) 1/2 WATT CARBON RESISTOR OF APPROX. 1000 OHMS SHUNTED ACROSS TERMINALS OF RECEIVER UNIT.		
CAU 51012C TBX & TCK CHEST MICROPHONE ASSEMBLY: CONSISTS OF A CHESTPLATE WITH ADJUSTABLE HALTER, A 20 FOOT MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR, RUBBER COVERED), A TYPE CAU-24071 PRESS-TO-TALK HAND SWITCH, A CAU-49007A PLUG AND A CAU-51016A MICROPHONE. SAME AS -51012B EX-10/5/42 H-70750-1 MAR. 43	10/5/42 MAR. 43	H-70740 CO:P-7764898 REV 0	CAU 51016A TBX & TCK MICROPHONE: SAME AS -51016 EXCEPT HAS TYPE #41 CELL INSTEAD OF TYPE #35A7 CELL. THE INTERNAL DIMENSIONS ARE MACHINED TO FIT THE TYPE 41 CELL INSTEAD OF THE LARGER 35A7 CELL. 10/5/42 H-70740 MAR. 43		CO:P-7764898 REV 0	CTE 51020 TBP HEADPHONE AND MICROPHONE ASSEMBLY: CONSISTS OF A -51004A MICROPHONE, TWO -49016 HEADPHONES, TWO -49104 RUBBER EAR CUSHIONS, TELEPHONE CORD AND PLUG AND ADJUSTABLE HEAD STRAPS. TYPE CTE-49103. 11/10/39 NOV. 41		CAY:P-7707159 Sub 0
CAU 51012C TBX & TCK CHEST MICROPHONE ASSEMBLY: CONSISTS OF A CHESTPLATE WITH ADJUSTABLE HALTER, A 20 FOOT MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR, RUBBER COVERED), A TYPE CAU-24071 PRESS-TO-TALK HAND SWITCH, A CAU-49007A PLUG AND A CAU-51016A MICROPHONE. SAME AS -51012B EX-10/5/42 H-70750-1 MAR. 43			CAU 51017 CXAB, CXAC HANDSET: MICROPHONE 35 OHMS DC RESISTANCE, 125 MA DC MAX. RECEIVER: 600 OHMS IMPEDANCE; SWITCH, 2 MOMENTARY CONTACTS, NORMALLY OPEN; CORD, 6-FOOT, 4-CONDUCTOR, RUBBER COVERED. 3/23/39 2-6173 NOV. 41			CTE 51020-A HEADPHONE & MICROPHONE ASSEMBLY. CANCELLED. NOV. 41		
CAU 51012C TBX & TCK CHEST MICROPHONE ASSEMBLY: CONSISTS OF A CHESTPLATE WITH ADJUSTABLE HALTER, A 20 FOOT MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR, RUBBER COVERED), A TYPE CAU-24071 PRESS-TO-TALK HAND SWITCH, A CAU-49007A PLUG AND A CAU-51016A MICROPHONE. SAME AS -51012B EX-10/5/42 H-70750-1 MAR. 43			CAU 51018 TBS CHEST MICROPHONE ASSEMBLY: CONSISTING OF A 40 OHM MICROPHONE, CHEST ASSEMBLY, JACK FOR HEADPHONES, CORD AND PLUG. 4/22/39 MI-8728 NOV. 41		CRY:P-720304 REV 0	RM 51021 XAK-3, XAK-4 RWSIF106A HYDROPHONE: COMBINED SC TUBES AND SOUND POWERED MAGNETIC PICK-UP WITH CONNECTING CABLE. 4/11/40 NOV. 41		
CAU 51012C TBX & TCK CHEST MICROPHONE ASSEMBLY: CONSISTS OF A CHESTPLATE WITH ADJUSTABLE HALTER, A 20 FOOT MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR, RUBBER COVERED), A TYPE CAU-24071 PRESS-TO-TALK HAND SWITCH, A CAU-49007A PLUG AND A CAU-51016A MICROPHONE. SAME AS -51012B EX-10/5/42 H-70750-1 MAR. 43			CAU 51018-A GEN USE CHEST MICROPHONE ASSEMBLY SAME AS BASIC NUMBER EXCEPT (1) 35A7 MICROPHONE IS REPLACED BY TYPE 41 (2) CABLE BETWEEN MICROPHONE & JUNCTION BOX CHANGED TO TYPE TCOP-1/2T (1) (3) BRASS THUMB NUTS ON CHEST PLATE ASSEMBLY REPLACED BY PHENOLIC NUTS (4) TRANSMITTER 4/3/44 MI-2474 AUG. 44		P-720304-503 REV 21	CTE 51022 TBY HEADPHONE AND MICROPHONE ASSEMBLY: CONSISTS OF A CTE-51004B MICROPHONE, TWO CTE-49016 HEADPHONES, ONE CTE-49103 ADJUSTABLE HEAD STRAP TWO CMO-49104 RUBBER EAR CUSHIONS AND ONE TELEPHONE CORD AND PLUG. SAME AS CTE-51020 EXCEPT MICROPHONE HAS GREATER 7/3/40 NOV. 41		CAY:P-7707359
CAU 51012C TBX & TCK CHEST MICROPHONE ASSEMBLY: CONSISTS OF A CHESTPLATE WITH ADJUSTABLE HALTER, A 20 FOOT MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR, RUBBER COVERED), A TYPE CAU-24071 PRESS-TO-TALK HAND SWITCH, A CAU-49007A PLUG AND A CAU-51016A MICROPHONE. SAME AS -51012B EX-10/5/42 H-70750-1 MAR. 43			CRY 51018-A ARM ASSEMBLY IS REDESIGNED (5) ALL PARTS COMMON TO SOUND POWERED TELEPHONES USED. 4/22/39 MI-8728 NOV. 41		P-720305 REV 0	CTE 51022 SENSITIVITY ON LOW VOICE LEVELS AND PLUG IS KEPT TO PREVENT INSERTION IN KEY JACK. 3/16/43 FEB. 44		E-52059 REV 8
CAU 51012C TBX & TCK CHEST MICROPHONE ASSEMBLY: CONSISTS OF A CHESTPLATE WITH ADJUSTABLE HALTER, A 20 FOOT MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR, RUBBER COVERED), A TYPE CAU-24071 PRESS-TO-TALK HAND SWITCH, A CAU-49007A PLUG AND A CAU-51016A MICROPHONE. SAME AS -51012B EX-10/5/42 H-70750-1 MAR. 43			CRY 51019 TBS HANDSET ASSEMBLY: CONSISTING OF A 40-OHM MICROPHONE (SAME AS IN -51018), A RECEIVER UNIT 600 OHMS IMPEDANCE AT 1000 CY. CORD AND PLUG. 4/22/39 MI-8728 NOV. 41		P-720305 REV 0	CTE 51022-A TBY-4 HEADPHONE & MICROPHONE ASSEMBLY: CONSISTS OF A CTE-51004-B MICROPHONES, 2 CTE-49016 HEADPHONES ONE CTE-49103 ADJUSTABLE HEAD STRAP, TWO -49104-A AMERIPOL EAR CUSHIONS AND ONE TELEPHONE CORD AND PLUG. SAME AS CTE-51020 EXCEPT MICROPHONE HAS GREATER 3/16/43 FEB. 44		E-52059 REV 8
CRY 51013 TBT HANDSET ASSEMBLY CONSISTS OF A NAVY TYPE CRY-51007 HANDSET, A 20 FOOT 5 CONDUCTOR CORD AND A FIVE CONTACT PLUG. 10/9/40 NOV. 41		P-720305-504 SUB 5	CRY 51018-A GEN USE CHEST MICROPHONE ASSEMBLY SAME AS BASIC NUMBER EXCEPT (1) 35A7 MICROPHONE IS REPLACED BY TYPE 41 (2) CABLE BETWEEN MICROPHONE & JUNCTION BOX CHANGED TO TYPE TCOP-1/2T (1) (3) BRASS THUMB NUTS ON CHEST PLATE ASSEMBLY REPLACED BY PHENOLIC NUTS (4) TRANSMITTER 4/3/44 MI-2474 AUG. 44		P-720304-2 SEE ABOVE	CTE 51022-A TBY-4 HEADPHONE & MICROPHONE ASSEMBLY: CONSISTS OF A CTE-51004-B MICROPHONES, 2 CTE-49016 HEADPHONES ONE CTE-49103 ADJUSTABLE HEAD STRAP TWO CMO-49104 RUBBER EAR CUSHIONS AND ONE TELEPHONE CORD AND PLUG. SAME AS CTE-51020 EXCEPT MICROPHONE HAS GREATER 7/3/40 NOV. 41		CAY:P-7707359
CRY 51013 TBT HANDSET ASSEMBLY CONSISTS OF A NAVY TYPE CRY-51007 HANDSET, A 20 FOOT 5 CONDUCTOR CORD AND A FIVE CONTACT PLUG. 10/9/40 NOV. 41		P-720304-2 SEE ABOVE	CRY 51018-A GEN USE CHEST MICROPHONE ASSEMBLY SAME AS BASIC NUMBER EXCEPT (1) 35A7 MICROPHONE IS REPLACED BY TYPE 41 (2) CABLE BETWEEN MICROPHONE & JUNCTION BOX CHANGED TO TYPE TCOP-1/2T (1) (3) BRASS THUMB NUTS ON CHEST PLATE ASSEMBLY REPLACED BY PHENOLIC NUTS (4) TRANSMITTER 4/3/44 MI-2474 AUG. 44		P-720304-2 SEE ABOVE	CTE 51022-A TBY-4 HEADPHONE & MICROPHONE ASSEMBLY: CONSISTS OF A CTE-51004-B MICROPHONES, 2 CTE-49016 HEADPHONES ONE CTE-49103 ADJUSTABLE HEAD STRAP TWO CMO-49104 RUBBER EAR CUSHIONS AND ONE TELEPHONE CORD AND PLUG. SAME AS CTE-51020 EXCEPT MICROPHONE HAS GREATER 7/3/40 NOV. 41		CAY:P-7707359
CRY 51013 TBT HANDSET ASSEMBLY CONSISTS OF A NAVY TYPE CRY-51007 HANDSET, A 20 FOOT 5 CONDUCTOR CORD AND A FIVE CONTACT PLUG. 10/9/40 NOV. 41		P-720304-2 SEE ABOVE	CRY 51018-A GEN USE CHEST MICROPHONE ASSEMBLY SAME AS BASIC NUMBER EXCEPT (1) 35A7 MICROPHONE IS REPLACED BY TYPE 41 (2) CABLE BETWEEN MICROPHONE & JUNCTION BOX CHANGED TO TYPE TCOP-1/2T (1) (3) BRASS THUMB NUTS ON CHEST PLATE ASSEMBLY REPLACED BY PHENOLIC NUTS (4) TRANSMITTER 4/3/44 MI-2474 AUG. 44		P-720304-2 SEE ABOVE	CTE 51022-A TBY-4 HEADPHONE & MICROPHONE ASSEMBLY: CONSISTS OF A CTE-51004-B MICROPHONES, 2 CTE-49016 HEADPHONES ONE CTE-49103 ADJUSTABLE HEAD STRAP TWO CMO-49104 RUBBER EAR CUSHIONS AND ONE TELEPHONE CORD AND PLUG. SAME AS CTE-51020 EXCEPT MICROPHONE HAS GREATER 7/3/40 NOV. 41		CAY:P-7707359
CRY 51015 TBT CHEST MICROPHONE ASSEMBLY CONSISTS OF A NAVY TYPE CAU-51014 MICROPHONE, A CHEST ASSEMBLY, A JACK FOR HEADPHONES, A FIVE CONDUCTOR CORD AND A FIVE CONTACT PLUG. 10/10/40 NOV. 41		P-720304-502 SUB 5	CRY 51019 TBS HANDSET ASSEMBLY: CONSISTING OF A 40-OHM MICROPHONE (SAME AS IN -51018), A RECEIVER UNIT 600 OHMS IMPEDANCE AT 1000 CY. CORD AND PLUG. 4/22/39 MI-8728 NOV. 41		P-720305 REV 0	CTE 51022-A TBY-4 HEADPHONE & MICROPHONE ASSEMBLY: CONSISTS OF A CTE-51004-B MICROPHONES, 2 CTE-49016 HEADPHONES ONE CTE-49103 ADJUSTABLE HEAD STRAP, TWO -49104-A AMERIPOL EAR CUSHIONS AND ONE TELEPHONE CORD AND PLUG. SAME AS CTE-51020 EXCEPT MICROPHONE HAS GREATER 3/16/43 FEB. 44		E-52059 REV 8
CRY 51015-A GEN USE CHEST MICROPHONE ASSEMBLY SAME AS BASIC NO. EXCEPT (1) MICROPHONE IS TYPE 41 (2) CABLE BETWEEN MICROPHONE & JUNCTION BOX CHANGED TO TYPE TCOP-1/2T (1) (3) BRASS THUMB NUTS ON CHEST PLATE ASSEMBLY REPLACED BY PHENOLIC NUTS (4) TRANSMITTER ARM ASSEMBLY IS REDESIGNED 4/3/44 AUG. 44		P-720304-504 REV 21	CRY 51019 TBS HANDSET ASSEMBLY: CONSISTING OF A 40-OHM MICROPHONE (SAME AS IN -51018), A RECEIVER UNIT 600 OHMS IMPEDANCE AT 1000 CY. CORD AND PLUG. 4/22/39 MI-8728 NOV. 41		P-720305 REV 0	CTE 51022-A TBY-4 HEADPHONE & MICROPHONE ASSEMBLY: CONSISTS OF A CTE-51004-B MICROPHONES, 2 CTE-49016 HEADPHONES ONE CTE-49103 ADJUSTABLE HEAD STRAP, TWO -49104-A AMERIPOL EAR CUSHIONS AND ONE TELEPHONE CORD AND PLUG. SAME AS CTE-51020 EXCEPT MICROPHONE HAS GREATER 3/16/43 FEB. 44		E-52059 REV 8

Class 51—Microphones—Hydrophones—Combination Handsets

3.51-3

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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CTE 51022-A
SENSITIVITY ON VOICE LEVELS AND PLUG IS KEYS TO PREVENT INSERTION IN KEY JACK.

CRM 51026 TCP
HAND TELEPHONE ASSEMBLY:
WESTERN ELECTRIC E3 HANDSET WITH PUSH-TO-TALK SWITCH IN HANDLE, AND G3 SWITCH HOOK ASSEMBLY.

CBD 51031 -B JM-4
HYDROPHONE
FREQUENCY RANGE: 500 TO 20,000 CPS. CAPACITIVE IMPEDANCE APPROXIMATELY 150 AT 1000 CYCLES. SAME AS -51031-A EXCEPT (1) CABLE STRAIN WIRES ARE ANCHORED TO A SPECIAL FILLER PLUG BY MEANS OF A SET SCREW (2) RUBBER CAP MODIFIED TO GIVE
8/20/43 C-23-3 500034
NOV. 43 8/12/43

CTE 51022-B TBY-6,7,8
HEADPHONE & MICROPHONE
ASSEMBLY: CONSISTS OF A -51004-B MICROPHONE, 2 TYPE -49016 HEADPHONES, ONE TYPE -49103 ADJUSTABLE HEAD STRAP, TWO TYPE -49104-A EAR CUSHIONS AND ONE TELEPHONE CORD AND PLUG. SAME AS -51022-A EXCEPT CORD IS NEOPRENE INSTEAD OF RUBBER.
12/27/43
FEB. 44

CRM 51027 TCR
HAND TELEPHONE ASSEMBLY:
INCLUDES A WESTERN ELECTRIC CO. F3AW3 HANDSET WITH PUSH TO TALK SWITCH IN HANDLE, WITH H1 DESK STAND AS MODIFIED BY RADIOMARINE.

CBD 51031-B
GREATER CONTACT SURFACE BETWEEN CAP & CABLE (3) RUBBER SLEEVE MODIFIED TO INCLUDE DARK RED SECTION.

5/6/41 K-185 SUB 1
MAR. 43

CTE 51022-B
ER COVERED.

RW 51028 OR
HYDROPHONE AND 100 FT. CABLE: CONSISTS OF A WESTERN ELECTRIC TYPE 633A HIGH FIDELITY MICROPHONE ENCLOSED IN A RUBBER CASE AND 100 FEET DOUBLE CONDUCTOR SIMPLEX SHIELDED 5/8" OD UNDERWATER SOUND PROJECTOR CABLE AND SUITABLE PLUG.
5/19/41 CW:633A
NOV. 41 MODIFIED

CW 51032 MN
HANDSET:
INCLUDES A PUSH-TO-TALK SWITCH. TRANSMITTER CHARACTERISTIC IS ESSENTIALLY FLAT OVER SPEECH RANGE. RECEIVER OUTPUT FLAT TO WITHIN ±3 DB FROM 150 TO 2750 CYCLES. SHARP ATTENUATION AT HIGHER FREQUENCIES. SUPPLIED WITH 20 FT. OF WATER-PROOF CORD
5/9/42 CW:F3AW3 CFL:1410-12A
OCT. 42

CTE 51022-C TBY-6,7,8
HEADPHONE & MICROPHONE
ASSEMBLY: CONSISTS OF A -51004-B MICROPHONE 2 TYPE -49016 HEADPHONES, ONE TYPE -49103 ADJUSTABLE HEAD STRAP, TWO TYPE -49495 EAR CUSHIONS AND ONE TELEPHONE CORD AND PLUG. SAME AS -51022-A EXCEPT CORD IS NEOPRENE INSTEAD OF RUBBER.
12/27/43
FEB. 44

RW 51029 OR
HYDROPHONE & 400 FT CABLE:
CONSISTS OF WE 633A HIGH FIDELITY MICROPHONE ENCLOSED IN A RUBBER CASE AND 400 FEET OF DOUBLE CONDUCTOR SIMPLEX SHIELDED 5/8"OD UNDERWATER SOUND PROJECTOR CABLE. IDENTICAL TO RW-51028 EXCEPT FOR CABLE LENGTH.
5/19/41 CW
NOV. 41

CW 51032
AND A PLUG.

CTE 51022-C
ER COVERED AND EAR CUSHIONS HAVE BEEN CHANGED.

CBD 51030 CX80
HYDROPHONE:

CFL 51033 MN
HANDSET MOUNTING HOOK:
MOUNTING FOR TYPE -51032 HANDSET. EMPLOY'S SPRING CLIP SO THAT HANDSET IS HELD FIRMLY IN POSITION IN SPITE OF SEVERE ROLLING AND VIBRATION.

2/20/42
APR. 42

5/9/42 CFL:1410-12A
OCT. 42

RA 51023 OL RA 54F 101
CRYSTAL PICKUP:
QUARTZ CRYSTAL PICKUP

CBD 51031 JM-1
HYDROPHONE:

CFL 51033-A MN-5
HANDSET MOUNTING HOOK
SAME AS -51033 EXCEPT USES STEEL SPRING WIRE INSTEAD OF BRONZE.

10/16/42
OCT. 42

4/1/42 C-23
JUNE 42
CBD:13700
REV 0

4/6/44 1634-1 1634-1A
AUG. 44

RA-51024 OL 54F101
SOUND PICK UP ASSEMBLY
INCLUDES A TYPE RA-51023 QUARTZ CRYSTAL PICK UP AND A TYPE RA-50072 PREAMPLIFIER IN A STEEL CASE.

CBD 51031-A JM-1
HYDROPHONE:
FREQ RANGE: 500 TO 20,000 CPS; CAPACITIVE IMPEDANCE APPROXIMATELY 150 OHMS AT 1000 CY. SAME AS BASIC NUMBER EXCEPT
1. RUBBER IS CHANGED FROM SOUND RUBBER TO "TIRE" RUBBER. 2. CABLE CLEVIS CORNERS ROUNDED OFF. AND 3. CLAMPING BAND
10/20/42 CBD:C-23-2
AUG. 43
CBD:13331
9-14-42

CTQ 51034 PO
DESK MICROPHONE:
MOVING COIL TYPE. FREQUENCY RESPONSE IS UNIFORM FROM 200 TO 4000 CYCLES WITH 60B TOLERANCE. 50 OHMS IMPEDANCE MOUNTED ON A DESK STAND WHICH HAS A "PUSH TO TALK" SWITCH WHICH STARTS RECORDING MOTORS AND TIMING UNIT OF TRANSCRIBING SYSTEM AND
5/22/42 MODEL 220
MAR. 43

10/30/40
DEC. 44

RA 51025 OP
PICKUP:
FREQ. RANGE 150 TO 12000 CYCLES, PERMANENT MAGNET TYPE. DC RESISTANCE 150 OHMS INDUCTANCE 420 MH AT 1000 CYCLES.

CBD 51031-A
CHANGED FROM PHOSPHOR BRONZE TO STAINLESS STEEL AND 4. A PROTECTIVE PAINT ADDED TO THE STEEL FRAME.

CONNECTS MICROPHONE TO CTQ51034
AMPLIFIER INPUT. SUPPLIED WITH 20 FOOT OF 4 WIRE SHIELDED CABLE FOR AUDIO CURRENTS AND MOTOR CONTROL CURRENTS. SIMILAR TO NAVY TYPE CTQ-51049

11/12/40 NRL SKETCH
NOV. 41

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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RESTRICTED

NAVSHIPS 900,109

3.51-4

Class 51—Microphones—Hydrophones—Combination Handsets

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	
CBD 51035	JO	HYDROPHONE ASSEMBLY: CONSISTS OF TWO NAVY TYPE CBD-51036 HYDROPHONE UNITS ARRANGED TO GIVE APPROX COVERAGE OF 135 DEGREES, FROM 3 DEGREES ACROSS THE BOW TO 42 DEGREES ABOARD OF THE BEAR. ONE HYDROPHONE ASSEMBLY REQUIRED FOR EACH SIDE OF THE SHIP. 6/22/42 C35 MAR. 43	CBD 51038-B	*GEN USE HYDROPHONE: SAME AS -51038 EXCEPT CAP CHAMBER IS FILLED WITH WAX; ALL EXPOSED METAL PARTS PROTECTED FROM SEA WATER WITH TAPE. SUPERSEDES -51038. *FIRST PURCHASE: NXS-8288 4/5/43 AUG. 43	CCI 51041	MU, MV, MW, MX MICROPHONE AND COVER ASSEMBLY: INCLUDES NAVY TYPES -10134, -24159, -49212, -49213, -51042 COVER, OFF-ON SWITCH ANTENNA CORD, MICROPHONE CORD AND MICROPHONE RESPECTIVELY. ALSO INCLUDES ONE CINCH MFG. CO. 5 CONTACT AND ONE 11 CONTACT MALE RECEPTACLE AND 9/10/42 AUG. 43			
		CBD51035	CBD 51038-C	*GEN USE HYDROPHONE: SAME AS -51038-A EXCEPT CAP CHAMBER IS FILLED WITH WAX; ALL EXPOSED METAL PARTS PROTECTED FROM SEA WATER WITH TAPE. SUPERCEDES -51038-A. *FIRST PURCHASE: NXS-12417, 18317 4/5/43 AUG. 43	CCI 51041				
		INCLUDES HORNS TO PROVIDE DIRECTIONAL CHARACTERISTICS.				ASSOCIATED HARDWARE.			
CBD 51036	JO	HYDROPHONE UNIT: FREQUENCY RANGE 500 TO 20,000 CPS. 7/3/42 C36 MAR. 43	CBD 51038-D	GEN USE HYDROPHONE: SAME AS -51038-A EXCEPT FOR THE ADDITION OF A NEW TAIL PIECE WITH STABILIZING FINS AND A STREAMLINED NOSE PIECE. 6/3/43 C-37-4 AUG. 43	CTE 51042	MU, MV, MW, MX MICROPHONE: CARBON BUTTON TYPE FOR OPERATION FROM 4 TO 8 VOLTS DC. WEIGHT 3 OZ. EQUIPPED WITH NON-LOCKING PUSH-TO-TALK BUTTON. HAS ANTI-NOISE BAFFLE. DOES NOT INCLUDE CORD AND PLUG. SAME AS 51004C EXCEPT DOES NOT INCLUDE CORD AND PLUG. 9/10/42 RS38A LESS NOV. 43			
		13811 ALT X				RW 51043	OR-4 HYDROPHONE AND 200 FT. CABLE: CONSISTS OF A WE TYPE 633A HIGH FIDELITY MICROPHONE ENCLOSED IN A RUBBER CASE AND 200 FT. OF DOUBLE CONDUCTOR SIMPLEX SHIELDED 5/8" O.D.. UNDERWATER SOUND PROJECTOR CABLE AND SUITABLE PLUG SAME AS RW-51028 EXCEPT FOR CABLE LENGTH 9/24/42 OCT. 42		
COA 51037	MS	MICROPHONE ASSEMBLY: MICROPHONE COMPLETE WITH CORD AND PLUG. 7/21/42 AUG. 42	CBD 51038-E	*GEN USE HYDROPHONE: SAME AS -51038-D EXCEPT FOR THE OMISSION OF FINS AND THE SUBSTITUTION OF AN 18 FT TRAILING ROPE (3/4" DIAMETER). *FIRST PURCHASE; NXSS-26605, NXSS-28721 7/6/43 C-37-5 AUG. 43					
						CAU 51044	TCK-1 RE 8944 CHEST MICROPHONE ASSEMBLY CONSISTS OF A CHEST PLATE WITH ADJUSTABLE HALTER, A 20' MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR, RUBBER COVERED), A TYPE CAU-24071 PRESS-TO-TALK HANDSWITCH, A CAU-49007 PLUG AND A CAU-51016 MICROPHONE. SAME AS CAU-51012-8 10/24/42 JULY 44		
CBD 51038	* SEE PLATE 2	HYDROPHONE: LENGTH 55" DIA 2-1/2", FULL FILLED, 8 ROCHELLE SALT CRYSTALS IN PARALLEL. FREQ RESPONSE 500 TO 20,000 CYCLES. SENSITIVITY 400 MICROVOLTS PER DYNE PER SQUARE CENTI-METER AT SECONDARY TERMINALS OF GRID TRANSFORMER. RUBBER COVERING 1/4" THICK. 8/6/42 C-57 MAR. 43	CBD 51038-F	NXsr-36724 HYDROPHONE FREQUENCY RESPONSE 500 TO 20,000 CYCLES. SAME AS CBD-51038-C EXCEPT FOR SLIGHT CHANGES IN DESIGN TO GIVE IMPROVED CONSTRUCTION AND FACILITATE PRODUCTION. FOR USE WITH JR 9/28/43 C-37-6 NOV. 43					
		CBD51038				EXCEPT EMPLOYS AN "A" (SEE RE-8944) CIRCUIT.			
		* NXS-8288, EN28/168-42/SH#PS	CVL 51039	*SEE PLATE 2 MICROPHONE: MOVING COIL TYPE. OUTPUT LEVEL -15DB(10 DB = 1 MW INTO 500 OHM LINE), NORMAL SPEECH INPUT. FREQ RESPONSE SHARPLY RISING WITH MAX OUTPUT AT 3500 CY. WEIGHT 14 OZ. LESS CABLE. SIZE 2-1/2" X 3-1/4" X 2" THICK, DESIGNED TO FIT PALM OF HAND. SWITCH "PRESS-8/13/42 CVL:600C SIG. AUG. 42					
CBD 51038A	NXS-12417	HYDROPHONE: FREQ RESPONSE 500 TO 20,000 CYCLES. SAME AS BASIC NUMBER EXCEPT (1) RUBBER IS CHANGED FROM SPONGE RUBBER TO TIRE RUBBER, (2) CABLE CLEVIS PIN CORNERS ROUNDED OFF AND, (3) IDENTIFICATION BAND CHANGED FROM PHOSPHOR BRONZE TO STAINLESS STEEL AND A 11/2/42 C-37-1 MAR. 43				CAU 51044A	TCK-1 RE 8944 CHEST MICROPHONE ASSEMBLY: CONSISTS OF A CHESTPLATE WITH AN ADJUSTABLE HALTER, A 20 FT MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR RUBBER COVERED), A TYPE CAU-24071 PRESS-TO-TALK HANDSWITCH, A CAU-49007-A PLUG & A CAU-51016-A MICROPHONE. SAME AS CAU-51012-C 11/12/42 CAU:H-70750-1 AUG. 43		
		PROTECTIVE PAINT ADDED.				EXCEPT EMPLOYS AN "A" (SEE RE 8944) CIRCUIT. SAME AS CAU-51044 EXCEPT FOR MICROPHONE AND PLUG.			
		CBD51038A	TO-TALK" TYPE DESIGNED CVL51039 FOR SIMULTANEOUS ACTION WHICH SHUTS MICROPHONE AND CLOSES RELAY WHEN PRESSED WIPING CONTACTS. CASE MATERIAL ZAMAK #3. MOUNTING CLIP FOR DASH INSTALLATION. CABLE 9-1/2 FT. LOW CAPACITY, SHIELDED WITH 2 EXTERNAL RELAY LEADS UNDER OVER-ALL BRAID AND RUBBER JACKET. *NXS-10241, USE WITH ARMY SCR-299.						
			CAU 51040	MR HANDSET ASSEMBLY: INCLUDES HANDSET WITH CUPPED MOUTHPIECE PRESS-TO-TALK SWITCH AND CABLE, EARPIECE HAS 50 OHM DC RESISTANCE AND IMPEDANCE OF 140 OHMS AT 800 CYCLES. MICROPHONE RESISTANCE IS 40 OHMS AND IMPEDANCE IS 100 OHMS AT 800 CYCLES. 3/19/42 L-880-80 OCT. 42					

Class 51—Microphones—Hydrophones—Combination Handsets

3.51-5

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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CAU 51045 TCN TCN
CHEST MICROPHONE ASSEMBLY:
CONSISTS OF A CHESTPLATE WITH ADJUSTABLE HALTER, A 7 FOOT MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR RUBBER COVERED) A TYPE CAU-24071 PRESS-TO-TALK HAND SWITCH, A CAU-49007-A PLUG AND A CAU-51016-A MICROPHONE. SAME AS -51012-C 12/18/42 CAU:H-70750-8 CG:P-7765043-1 AUG. 43 REV 1

CAU 51045
EXCEPT FOR CORD LENGTH.

CAU 51046 TCN TCN
CHEST MICROPHONE ASSEMBLY:
CONSISTS OF A CHESTPLATE WITH ADJUSTABLE HALTER, A 7 FOOT MICROPHONE CORD, A 9" SWITCH CORD (3 CONDUCTOR RUBBER COVERED) A TYPE CAU-24071 PRESS-TO-TALK HAND SWITCH, A CAU-49007-A PLUG AND A CAU-51016-A MICROPHONE. SAME AS 12/18/42 CAU:H-70750-9 CG:P-7765043-2 AUG. 43 REV 1

CAU 51046
CAU-51044-A EXCEPT FOR CORD LENGTH.

51047 TBX-3
MICROPHONE ASSEMBLY:
INCLUDES ONE NAVY TYPE -51005A MICROPHONE, ONE NAVY TYPE -49007-A TELEPHONE PLUG AND 5 FT CORD WIRED WITH "A" CIRCUIT OF RE-8944A.
12/28/42 RE-8944A
SEPT 43

51047-A TCK SERIES
MICROPHONE ASSEMBLY:
INCLUDES ONE NAVY TYPE -51006-A MICROPHONE, ONE NAVY TYPE -49007-A TELEPHONE PLUG AND 6' CORD WIRED WITH "A" CIRCUIT OF RE-8944.
4/14/43 RE-8944
SEPT 43

CCI 51048 MAB
MICROPHONE AND COVER ASSEMBLY: INCLUDES NAVY TYPES -10163, -24159, -49212, -49213, -51042. (COVER, OFF-ON SWITCH, ANTENNA CORD, MICROPHONE CORD AND MICROPHONE RESPECTIVELY). ALSO INCLUDES ONE CIMCH MFG CO 5 CONTACT AND ONE 11 CONTACT MALE RECEPTACLES AND 1/2/43 CCI:145-4C-502 MAR. 44 REV A

CCI 51048
ASSOCIATED HARDWARE.

CTQ 51049 PD-1
DESK MICROPHONE:
MOVING COIL TYPE. FREQUENCY RESPONSE UNIFORM FROM 200 TO 400 CYCLES WITH 60B TOLERANCE, 25 MILLIVOLTS AT A 10 BAR SIGNAL AT 1000 CY REFERENCE. 50 OHMS IMPEDANCE. MOUNTED ON A DESK STAND AND INCLUDES A "PUSH-TO-TALK" SWITCH WHICH 1/5/43 CCS:8-372A CCS:14.14 SEPT 43 CTQ:SPEC 196

CTQ 51049
STARTS RECORDING MOTORS AND TIMING UNIT OF TRANSCRIBING SYSTEM AND CONNECTS MICROPHONE TO AMPLIFIER INPUT. SUPPLIED WITH 20 FT OF 4 WIRE SHIELDED CABLE FOR AUDIO AND MOTOR CONTROL CURRENTS. SAME AS NAVY TYPE CTQ-51034 EXCEPT "PUSH-TO-TALK" SWITCH IS LOCATED IN TUBING AND NOT ON THE BASE.

CAU 51050 CAY-23304
HANDSET:
INCLUDES SINGLE-MAKE CONTACT PRESS-TO-TALK SWITCH. TRANSMITTER IMPEDANCE 30 OHMS. RECEIVER IMPEDANCE 200 OHMS (APPROX). CARBON GRANULE TYPE. FREQ RANGE 300 TO 3000 CPS. INCLUDES 5 FEET OF CORD BUT NO PLUG. INCL A CORD COILER. 1/6/43 CAU:H-70590-1 CAY:P-7707248 SEPT 43 CORD CD-220366 SUB 6

CVX 51051 PE-1
DESK MICROPHONE:
OUTPUT -55 DECIBELS AT 38,000 OHMS. HAS BUILT-IN TRANSFORMER MATCHING VOICE COIL OF MICROPHONE TO INPUT OF AMPLIFIER. MICROPHONE MOUNTED ON STAND. DYNAMIC TYPE. (0DB=1 VOLT/BAR). INCLUDES 20 FT. OF CABLE TERMINATING IN A TELEPHONE PLUG 2/3/43 CVX:04T CMV:1950B SEPT 43 REV 0

CVX 51051
WEIGHT 39 OUNCES.

CBD 51052 JQ
HYDROPHONE:
PARABOLIC TYPE, ROCHELLE SALT RECEIVING UNIT MTD. AT FOCUS OF PARABOLA. FRONT OF PARABOLA IS COVERED BY A RUBBER CAP. INSIDE OF PARABOLA IS FREE FLOODING IN ORDER TO GIVE BETTER SOUND TRANSMISSION.
2/7/43 26255
AUG. 44 ALT H

COG 51053 JP-1
HYDROPHONE ASSEMBLY:
STRAIGHT TUBE MAGNETOSTRICTION HYDROPHONE (USES STRAIGHT NICKEL TUBE ABOUT 36" LONG). USES SOUND BAFFLE. HYDROPHONE LENGTH 40", WIDTH 6-7/8" AND HEIGHT 3-7/8". WEIGHT IS APPROX. 49-1/2 POUNDS. FREQ RANGE IS NON-LINEAR FROM 4/9/43 COG:51053 COG:51053 SEPT 43

COG 51053
100 TO 20,000 CYCLES. IMPEDANCE IS 50 OHMS AT 900 CYCLES. TYPE NUMBER INCLUDES MOUNTING BASE.

COG 51053-A JP-2 RQ51F108A
HYDROPHONE ASSEMBLY
STRAIGHT TUBE MAGNETOSTRICTION HYDROPHONE (USES STRAIGHT NICKEL TUBE ABOUT 36" LONG). USES SOUND BAFFLE. HYDROPHONE LENGTH 40", WIDTH 6-7/8" AND HEIGHT 3-7/8". WT. IS APPROX. 49 1/2 LBS. FREQ. RANGE IS NON-LINEAR FROM 100 3/21/44 DEC. 44

COG 51053-A
TO 20,000 CYCLES. IMPEDANCE IS 50 OHMS AT 900 CYCLES. TYPE NO. INCLUDES MOUNTING BASE. SAME AS -51053 EXCEPT MOUNTING HOLES ARE THREADED AND NOT THROUGH HOLES.

CAU 51054
CANCELLED

5/29/43
SEPT 43

RQ-51055 OAY
HYDROPHONE ASSEMBLY:
INCLUDES A HYDROPHONE BRUSH DEVELOPMENT TYPE AX58-A AND A BUILT-IN TWO STAGE PREAMPLIFIER OF 16DB GAIN AND A 4 CONDUCTOR SHIELDED CABLE 17 FEET LONG TERMINATED BY A WATERPROOF PLUG. SIZE OF HYDROPHONE APPROX 26" LONG, 2-1/2" DIA. 6/11/43 CBD:27091 REV 0 FEB. 45 RQ:RQ-51F127A

RQ-51055
FREQ RANGE 100 TO 15000 CYCLES WITHIN APPROX 5DB.

CVA 51056 MN-4
HEADPHONE AND MICROPHONE ASSEMBLY: CONSISTS OF (1) HEADSET WITH: IMPEDANCE OF 600 OHMS AT 1000 CYCLES; FREQ. RESPONSE OF 250 TO 1500 CYCLES ±2DB, 1500 TO 5500 + 2 -5 DB WITH 4000 CYCLE CUTOFF WITH REFERENCE AT *HEADSET 9032 MICROPHONE 9042 SWITCH 9026 6/23/43 CVA: *SEE ABOVE NAVY SPEC. H-15 SEPT 43

106 DB OUTPUT AT 1000 CYCLES (2) SIMILAR TO AND INTERCHANGEABLE WITH -51004 SERIES (3) SWITCH CONTROL WHICH IS HAND GRIP WITH SEPARABLE THREE WAY CVA 51056

CAU 51057 TDO
MICROPHONE:
PERMANENT MAGNET MICROPHONE WITH PUSH-TO-TALK SWITCH. OUTPUT IMPEDANCE IS 600 OHMS. INCLUDES 6 FOOT FOUR CONDUCTOR, UNSHIELDED CORD WITH AMPHENOL TYPE MC4M PLUG CONNECTOR.

7/9/43 CAU:GH-77020-1 COL:20N211
SEPT 43 REV 0

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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RESTRICTED

NAVSHIPS 900,109

3.51-6

Class 51—Microphones—Hydrophones—Combination Handsets

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
CQA 51058 JP HYDROPHONE ASSEMBLY: CONSISTS OF A MAGNETOSTRICTION HYDROPHONE, WITH A FREQUENCY RANGE OF 100 TO 30,000 CPS, MOUNTED IN A BAFFLE WHICH PERMITS DIRECTIONAL RECEPTION OF SOUND. 7/16/43 SEPT 43		D-5528 REV 4 CQA:C-5544 REV 0	CPK 51065 OAX-1 HYDROPHONE ASSEMBLY FREQ. RANGE: 15 TO 30 KC. INCLUDES MAGNETO STRUTION TYPE HYDROPHONE WITH 60 FT OF 2 WIRE SHIELDED CABLE, AND 75 FT. EXTENSION CABLE. OPERATION OF HYDROPHONE SATISFACTORY WITH CONTINUOUS POWER INPUT OF 1.0 WATT. SIMILAR TO -51061. 12/23/43 FEB. 44			CW-51071 GEN. USE RE 9340R MICROPHONE ASSEMBLY: PLUS ADD #A CONSISTS OF ONE TYPE -10312 FACE HARNESS ASSEMBLY AND ONE TYPE -51066 LIP MICROPHONE. 5/18/44 MAY 45	D-173359	CW:80-151383 ISS. 1
CW-51059 OBC HYDROPHONE CONSISTS OF TWO PAIRS OF INERTIA MICROPHONES MOUNTED IN QUADRATURE IN A METAL SPHERE WHICH IS ENCASED IN RUBBER. THE OUTPUT OF EACH PAIR OF MICROPHONES IS APPROXIMATELY PROPORTIONAL TO THE COSINE OF THE ANGLE OF INCIDENCE OF THE WAVE. 8/19/43 NOV. 43		CW:ESD-671068 ISSUE B(2)	CW-51066 GEN RADIO USE RE 9340A LIP MICROPHONE PLUS ADD #A NOISE CANCELLING, CARBON MICROPHONE, FREQUENCY RANGE 250 TO 4000 CYCLES. AVERAGE OUTPUT APPROX +47 DB FOR 1 MILLI-VOLT WHEN TESTED IN STANDARD URB CIRCUIT BUTTON CURRENT APPROX. 55 MA. WATERPROOF. USES TYPE CW-10312 FACE HARNESS ASSEMBLY. 1/4/44 MAY 45.	D-173260	CW:80-151387 ISS. 2	CW-51072 MAE-1 HANDSET: CONSISTS OF A W.E. TYPE F1 TRANSMITTER AND MA4 RECEIVER. INCLUDES PUSH-TO-TALK SWITCH ON INSIDE OF HANDLE. 5/25/44 OCT. 44	F3FW-3	CKV:L-63531 REV 2
CW-51059 FROM AN EXPLOSION AND INVERSELY PROPORTIONAL TO THE DISTANCE TO THE EXPLOSION. 21/51059 CQA 51067 JP HYDROPHONE ASSEMBLY CONSISTS OF MAGNETOSTRICTION HYDROPHONE CARTRIDGE MOUNTED IN A BAFFLE WHICH PERMITS DIRECTIONAL RECEPTION OF SOUND. FREQUENCY RANGE: 100 TO 30,000 CPS. COVER IS POLYSTYRENE. 1/25/44 MAR. 44		D-5685 REV 0	CQA 51067 JP HYDROPHONE ASSEMBLY CONSISTS OF MAGNETOSTRICTION HYDROPHONE CARTRIDGE MOUNTED IN A BAFFLE WHICH PERMITS DIRECTIONAL RECEPTION OF SOUND. FREQUENCY RANGE: 100 TO 30,000 CPS. COVER IS POLYSTYRENE. 1/25/44 MAR. 44		D-5685 REV 0	RQ-51073 OAY HYDROPHONE ASSEMBLY INCLUDES A HYDROPHONE BRUSH DEVELOPMENT TYPE AX120, A BUILT IN TWO-STAGE PREAMPLIFIER OF 16db GAIN, AND A 6 CONDUCTOR SHIELDED CABLE NAVY TYPE MCOS-16. 17 FT. LONG TERMINATED BY A WATERPROOF PLUG. SIZE OF HYDROPHONE APPROXIMATELY 26" 7/27/44 OCT. 44		
CW-51060 JS. CXEM HYDROPHONE 8/30/43 MAR. 44		CW:ESR-671970 ISSUE 1	CW-51068 UG, UH TELEPHONE SET UNIT CONSISTS OF A TELEPHONE HANDSET, MAGNETO-GENERATOR, RINGER. HAS COMPARTMENT FOR TWO FLASHLIGHT BATTERIES. ALSO HAS SWITCH FOR EMERGENCY SUBSTITUTION OF POWER FROM THE DRY CELLS IN PLACE OF THAT NORMALLY SUPPLIED BY THE RECTIFIER 3/17/44 MAR. 44			RQ-51073 LONG. 2 1/2" DIAMETER. FREQUENCY RANGE 100 TO 1500 CYCLES WITHIN APPROXIMATELY 5db. SIMILAR TO RQ-51055 EXCEPT THAT AN ADP CRYSTAL REPLACES ROCHELLE SALT CRYSTAL WHICH, WITH MINOR MODIFICATIONS OF PREAMPLIFIER, GIVES BETTER SIGNAL TO VOLTAGE RATIO. CWA-51074 JT HYDROPHONE MAGNETOSTRICTION HYDROPHONE, CONSISTING OF 10 PERMANENT MAGNET SECTIONS ARRANGED IN 2 SECTIONS BY MEANS OF SPLIT WINDING. D.C. RES. APPROX. 48 OHMS. IMPEDANCE AT 1000 CYCLE APPROX. 100 OHMS. FREQUENCY 8/4/44 OCT. 44		
CQJ 51061 OAX HYDROPHONE ASSEMBLY FREQ RANGE: 15 TO 30 KC. INCLUDES MAGNETOSTRICTION TYPE HYDROPHONE WITH 60 FT OF TWO WIRE SHIELDED CABLE. OPERATION OF HYDROPHONE SATISFACTORY WITH CONTINUOUS POWER INPUT OF 1.0 WATT. 10/1/43 DEC. 44		2567 REV 0	CW-51068 POWER SUPPLY. CQG 51069 JP-3 HYDROPHONE ASSEMBLY STRAIGHT TUBE MAGNETOSTRICTION HYDROPHONE (USES STRAIGHT NICKEL TUBE ABOUT 36" LONG). USES SOUND BAFFLE. HYDROPHONE LENGTH 40", WIDTH 6 7/8", AND HEIGHT 3 7/8". WEIGHT IS APPROX 49 1/2 POUNDS. FREQ. RANGE IN NON-LINEAR FROM 100 TO 3/25/44 MAY 44			CWA-51074 JT HYDROPHONE MAGNETOSTRICTION HYDROPHONE, CONSISTING OF 10 PERMANENT MAGNET SECTIONS ARRANGED IN 2 SECTIONS BY MEANS OF SPLIT WINDING. D.C. RES. APPROX. 48 OHMS. IMPEDANCE AT 1000 CYCLE APPROX. 100 OHMS. FREQUENCY 8/4/44 OCT. 44		
-51062 GENERAL USE HANDSET 11/4/43 NOV. 43			CWG 51069 JP-3 HYDROPHONE ASSEMBLY STRAIGHT TUBE MAGNETOSTRICTION HYDROPHONE (USES STRAIGHT NICKEL TUBE ABOUT 36" LONG). USES SOUND BAFFLE. HYDROPHONE LENGTH 40", WIDTH 6 7/8", AND HEIGHT 3 7/8". WEIGHT IS APPROX 49 1/2 POUNDS. FREQ. RANGE IN NON-LINEAR FROM 100 TO 3/25/44 MAY 44			CWA-51074 100 TO 60,000 CYCLES. HAS LOBE REDUCTION FEATURE. CRV-51075 JT HYDROPHONE ASSEMBLY CONSISTS OF A NAVY TYPE CWA-51074 HYDROPHONE IN A TYPE -10365 BAFFLE. BAFFLE CONSISTS OF A RUBBER BLANKET IN STAINLESS STEEL ON A SHOCK MOUNT. INCLUDES TYPE -10366 SOUND ABSORBING COUPLER UNIT. 8/4/44 OCT. 44		
51063 GENERAL USE HANDSET ASSEMBLY 11/4/43 NOV. 43			CW-51070 UF HEADSET ASSEMBLY: HAS PUSH-TO-TALK SWITCH WITH RUBBER JACKETED CORD. TREATED FOR ANTIFUNGUS. HAS 6 FT. CORD. 4/4/44 JULY 44	D-173323	F3H-3 TROPICALIZED	CW-51076 CANU-23423 HANDSET ASSEMBLY MICROPHONE WILL DELIVER BETWEEN 0.35 TO 4 VOLTS RMS INTO AN OPEN CIRCUIT AT A SOUND PRESSURE OF 100 DB OVER THE FREQUENCY RANGE 200 TO 3500 CYCLES PER SEC. CARBON GRANULE TYPE TRANSMITTER, PERMANENT MAGNET, 600Ω RECEIVER. SWITCH 8/11/44 OCT. 44	2592-X	CANU-S-660-3
11/4/43 NOV. 43								
		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

3.51-8

Class 51—Microphones—Hydrophones—Combination Handsets

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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CAF1- 51096
 VOLTAGE SENSITIVITY 74 DB BELOW 1 VOLT PER BAR OPEN CIRCUIT. OR 63.8 DB BELOW 6 MILLIWATTS FOR 10 BAR SIGNAL WHEN LOADED WITH 200-250 OHMS.

CAW- 51103 TDN-2
 HANDSET
 PERMANENT MAGNET TYPE RECEIVER AND TRANSMITTER. BOTH 900 OHMS IMPEDANCE AT 1000 CPS. TRANSMITTER GENERATES VOLTAGE OF 0.0055V. AV. (±7.5 db) FROM 1100 TO 2600 CPS. RECEIVER RESPONSE, FROM 300-2600 CPS. IS 32db ABOVE 1 DYNE/CM. CH. 5/29/45 22 ES-76-9462
 JUN. 45

CJS- 51097 PR
 ANNULAR DRIVE UNIT
 PART OF -491030, PERMANENT MAGNET TYPE. RATED 15 WATTS AVERAGE, 25 WATTS MAXIMUM WITH NORMAL VOICE OR MUSIC INPUT 16 OHM VOICE COIL, INTERNAL SCREW TERMINALS. DUSTPROOF. FUNGUS PROOFED.

CAU- 51103
 WITH VARIATION OF 7.5 db FROM AV. VOLUME. HAS PUSH-TO-TALK SWITCH. FOUR CONDUCTOR. INSULATED CORD IS 4'6" LONG.

5/5/45 CJS:U-201 CKB:41A00A095-1
 JUN. 45 CHANGE B

CTQ- 51098 YR
 MICROPHONE
 OUTPUT IMPEDANCE 500 OHMS. OUTPUT LEVEL 65 db BELOW 1V/500 OHMS. FREQUENCY RESPONSE 300-5000 CYCLES ±4db.

5/12/45 999 P.C. COE:82466A
 JUN. 45 REV 0

CTQ- 51099 YR
 MICROPHONE ASSEMBLY
 CONSISTS OF A -51098 MICROPHONE MOUNTED ON ASTATIC MODEL G NO 8 28171 MICROPHONE STAND.

5/12/45
 JUN. 45

CW- 51100 TDH
 TELEPHONE HANDSET
 INCLUDES PUSH TO TALK SWITCH, NORMALLY OPEN. IMPEDANCE OF RECEIVER UNIT 140 OHMS AT 1000 CPS. TRANSMITTER MATCHING IMPEDANCE 40 OHMS. TRANSMITTER RESISTANCE 24 OHMS. SAME AS -51032 EXCEPT HAS WITHOUT CORD OR PLUG
 5/18/45 F-3AW-3 COL:977 1800 00
 JUN. 45 OSEE ABOVE REV 1

CW- 51100
 NO CORD OR PLUG.

CW- 51101 TDH
 HANDSET MOUNTING
 HAS SPST CONTACTS, CLOSED WHEN HANDSET IS OFF HOOK. SUPPLIED WITHOUT MOUNTING BRACKET OR DIAL FILLER CAP.

5/18/45 G1 COL:977 3500 00
 JUN. 45 REV 0

CAU- 51102 TDH
 TELEPHONE DIAL
 11 POINT DELAYED IMPULSE. SPST INTERRUPTER SPRINGS NORMALLY CLOSED. SPOT SHUNT SPRINGS. ADJUSTED TO HAVE SPEED OF NOT LESS THAN 8 IMPULSES PER SECOND NOR MORE THAN 12 IMPULSES PER SECOND. NORMAL OPERATION FROM -20°C TO +50°C.
 5/18/45 H-70227 COL:978 1000 00
 JUN. 45 REV 0 7100

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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