

LOW FREQUENCY SHIFT CONVERTER

PURCHASED ITEM	MATERIAL LIST				MODEL	PROJ. NO.										LIST NO.	SHEETS		
	QUANTITY REQ.	L P Z	PART NO.	REV	DWG	ISSUE										SHEET 1	OF	SHEETS	
					SIZE	A	B	C	D	E	F	G							
						DESCRIPTION										REF	SYMBOLS		
	1		CM-107-1			Capacitor, Fixed, Mica										See:S182,216	C11		
	2		CP69B4EF504L			Capacitor, Fixed: paper dielectric											(C1-C2);(C9-C10)		
	6		CN-100-3			Capacitor, Fixed: paper											C3,4,6,7,38,8		
	3		CN-100-21			Capacitor, Fixed: paper											C5,23,40		
	1		CM-107-2			Capacitor, Fixed: mica										See:S182,216	C13		
	1		CM-107-3			Capacitor, Fixed: mica										See:S182,216	C14		
	4		CN-100-9			Capacitor, Fixed: paper dielectric											C17,18,24,26		
	1		CN-100-10			Capacitor, Fixed: paper											C19		
	1		CN-100-17			Capacitor, Fixed: paper											C32		
	1		CP69B1EF104K			Capacitor, Fixed: paper dielectric											C21		
	2		CN-100-13			Capacitor, Fixed: paper											C25,39		
	2		CM20A102K			Capacitor, Fixed: mica											C27,30		
	2		CM20A201K			Capacitor, Fixed: mica											C28,29		
	5		CP41B1FF405K			Capacitor, Fixed: paper dielectric											C33,34,35,36,37		
	1		TM-100-9			Board, Terminal											E1		
	1		FU-100-2			Fuse, Cartridge											F1		
	1		BI-101-44			Lamp, Incandescent											I1		
	1		TF-5000	A		Reactor, Filter Choke											L1		
	4		TF-5004	D		Reactor, Fixed (Use ML-A-413)											L2,3,4,5		
	1		TF-5002	A		Reactor, Fixed											L6		
	1		JJ-100			Connector, Assembly											P1 Was: JJ-101		
	14		RC20GF474K			Resistor, Fixed										R1,3,5,6,16	17,19,21,36,42,44,49,62,75		
	1		CM-107-4			Capacitor, Fixed: mica											C16 - See:S182,S216		
	6		RC20GF105K			Resistor, Fixed											R2,18,53,71,72,73		
	3		RC20GF222K			Resistor, Fixed											R4,20,91		
	3		RC20GF104K			Resistor, Fixed											R7,23,85		
	5		RC20GF103K			Resistor, Fixed											R8,22,40,86,87,89		
	9		RC20GF224K			Resistor, Fixed											R9,10,24,25,64,78,79,61,65		
	3		RC20GF102K			Resistor, Fixed											R11,26,52		
	2		RC32GF392K			Resistor, Fixed											R12,27		
	6		RC32GF474J			Resistor, Fixed											R13,29,92,93,15,30		
	1		RV4NAYSA255AYY			Resistor, Variable											R98		
	1		IM-150			T.B. #9 Insulation													
	1		RV4NAYSH104AYY			Resistor, Variable											R32		
	8		RC20GF225K			Resistor, Fixed											R33,47,58,66,67,70,84,48		
	3		RC20GF106K			Resistor, Fixed											R38,41,83		
	2		RC32GF823K			Resistor, Fixed											R43,50		
	4		RV4NAYSA105AYY			Resistor, Variable											R45,68,69,74		
	2		IM-151			T.B. #6 Insulation													
	1		IM-152			T.B. #8 Insulation													

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PURCHASED ITEM	MATERIAL LIST				MODEL	PROJ. NO.							LIST NO.	SHEETS					
	QUANTITY REQ.	N P L	PART NO.	REV	DWG SIZE	DESCRIPTION	REF	SYMBOLS	CFA-1LB							2	OF	7	SHEETS
									CFA-1LB08										
									ISSUE										
									A	B	C	D	E	F	G				
2			MS-154-1			Straddle Plate													
1			RC20GF223K			Resistor, Fixed												R51	
1			RC42GF563K			Resistor, Fixed												R55	
1			RC42GF273K			Resistor, Fixed												R56	
1			RC42GF223K			Resistor, Fixed												R57	
1			RV4LAYS504A			Resistor, Variable: locking type												R59	
1			RC20GF395K			Resistor, Fixed												R60	
1			RC20GF303K			Resistor, Fixed												R86	
1			RC32GF224K			Resistor, Fixed												R63	
1			RV4NAYS504AYY			Resistor, Variable												R76	
1			RA75ASA252AK25			Resistor, Variable												R77	
1			RC42GF102K			Resistor, Fixed												R80	
2			RW-109-30			Resistor, Fixed												R81,82	
1			NIN3732BC16			Nut, Hex													
1			RC20GF475K			Resistor, Fixed												R88	
1			RC20GF473K			Resistor, Fixed												R90	
2			ST-22K			Switch, Toggle												S1,3	
2			ST-22N			Switch, Toggle												S2,4	
1			SW-112	A		Switch, Rotary												S6 Was: AES010	
1			TF-106	F		Transformer												T1	
1			TF-104			Transformer												T2	
2			TF-112	A		Transformer												T3,4 Was: TL001	
2			TF-115	D		Transformer												T5,6 Was: TI001	
4			6AU6			Tube, Electron												V1,4,9,10	
3			6J6			Tube, Electron												V2,5,12	
3			12AU7			Tube, Electron												V3,11,13	
4			6AL5			Tube, Electron												V6,7,8,22	
1			6Y6G			Tube, Electron												V14	
1			5Y3GT			Tube, Electron												V15	
1			6X4			Tube, Electron												V16	
3			OB2			Tube, Electron												V17,20,19	
1			0A2			Tube, Electron												V18	
1			LNI37E8C			Washer, Lock; Int.													
1			2BP1			Tube, Cathode Ray												V21	
1			FH-100-2			Holder, Fuse												XF1	
1			TS-106-1			Light, Indicator												XI1	
1			IM-153			T.B. #7 Insulation													
16			TS-102-P01			Socket, Tube												XV1,2,4,5,6,7,8,9,10,12,16,17,18,19,20,22	
2			IM-154			T.B. #5 Insulation													
1			PX-337-9	B		Insulation, Term. Strip													

PURCHASED ITEM	MATERIAL LIST				MODEL CFA-1LB		PROJ. NO.							LIST NO. CFA-1LB			
	QUANTITY REQ.	L P N	PART NO.	REV	DWG SIZE	DESCRIPTION	REF	SYMBOLS	ISSUE							SHEET 3 OF 7 SHEETS	
									A	B	C	D	E	F	G		
1			NP-132			Nameplate (For Field Conversion ONLY)											
3			TS-103-P01			Socket, Tube										XV3,11,13	
2			TS-165-P01			Socket, Tube (Use Cinch No. 51B13405)										XV14,15	
1			TS-112			Socket, Tube										XV21	
1			MP-102-2	*	B	Knob											
1			NP-134	*		Nameplate, Patent											
1			HB-101-2			Plug Button											
1			MS-265		A	Cover, Top				.051 x .7	Sq. In.					Was: AMS110	
1			MS-266		ND	Cover, Bottom				.051 x 1	" "					See: A-393	
1			<del>MS-267</del>			<del>Shim, Sub Chassis</del>				1/8 x .004	" "					Was: AMS075	
1			MS-268		B	Cross Brace				1/8 x .09	" "					Was: AMS074	
1			MS-269		ND	Bracket, Rear Cond.				.051 x .06	" "					Was: AMS073	See: A-411
1			MS-270		ND	Bracket, Front. Cond.				.051 x .06	" "					Was: AMS072	See: A-412
1			MS-271			Sub Chassis				.051 x .09	" "					Was: AMS071	
1			MS-274		A	Bracket, Term. Bd.				.051 x .003	" "					Was: AMS253	
1			MS-275		A	Bracket, Tube				.051 x .04	" "					Was: AMS249	
2			MS-276			Cover, Sides				.051 x .8	" "					Was: BMS024	
1			MS-277			Front Panel				3/16 x .46	" "					Was: CMS041	
1			MS-278		ND	Chassis, Center				.064 x 1.1	" "					Was: CMS040	See: A-406
1			MS-279		ND	Chassis, Left				.064 x .42	" "					Was: CMS039	See: A-407
1			MS-280			Chassis, Right				.064 x .84	" "					Was: CMS038	
1			MS-281		ND	Chassis, Front				.051 x .5	" "					Was: CMS036	See: A-408
1			MS-282		ND	Chassis, Rear				.064 x .5	" "					Was: CMS037	See: A-409
1			MS-283			Bracket, Pot				.051 x .05	" "					Was: AMS070	
1			MS-284			Bracket, Mtg.				.051 x .002	" "					Was: AMS081	
1			PX-146		ND	Term. Bd. #8				1/8 x .07	" "					See: A-394	
2			PX-147		ND	Term. Bd. #6				1/8 x .01	" "					See: A-395	
2			PX-148		ND	Term. Bd. #3 & #4				1/8 x .16	" "					See: A-396	
1			PX-151		ND	Term. Bd. #2				1/8 x .035	" "					See: A-400	
1			PX-152		ND	Term. Bd. #1				1/8 x .02	" "					See: A-401	
2			PX-153		ND	Term. Bd. #5				1/8 x .01	" "					See: A-402	
1			PX-154		ND	Term. Bd. #7				1/8 x .05	" "					See: A-403	
1			RG20GF153K		ND	Resistor, Fixed				1/8 x .14	" "					R46 A-404	
1			IM-108			Insulation, Bottom Cover										Was: AMS248	
1			BX-102-1			Can											
1			CA-103 -72		B	Cable, Power											
1			CI-105	*		Core										p/o A-359	
1			CU-100-3			Clamp, Tube											
1			CU-100-5			Clamp, Tube											
1			TS-110-2			Shield, MU-Metal (Bezel)											

PURCHASED ITEM	MATERIAL LIST				MODEL CFA-1LB		PROJ. NO.										LIST NO. CFA-1LB										
	QUANTITY REQ.	L P Z	PART NO.	REV	DWG SIZE	DESCRIPTION	REF	SYMBOLS	ISSUE		A		B		C		D		E		F		G		SHEET	OF	SHEETS
									4	7																	
1			TE-102-2			Terminal, Turret																					
2			CU-102-5			Clamp, Cable																					
7			EY-100-3			Eyelet, Flat Flange																					
6			EY-102-5			Grommet, Elastic																					
1			MP-100-4	D		Knob																					
1			NP-103-3			Nameplate																					
4			TE-104-2			Lug, Solder																					
173			TE-105-4			Lug, Terminal																				p/o Term. Bd. Assemblies	
20			TE-108-1			Standoff																					
12			TE-109-3			Lug, Terminal																					
1			TS-110-1			Shield, C.R. Tube																					
4			TS-102-U01			Shield, Tube																					
7			TS-102-U02			Shield, Tube																					
5			TS-102-U03			Shield, Tube																					
3			TS-103-U02			Shield, Tube																					
2			SC-106-1			Bolt, Spade																					
4			SFB0256S N3			Screw, Thread Cutting																					
6			SCBP0440BN4			Screw, Machine																					
2			SCBP0440BN6			Screw, Machine																					
4			SCBP0440BN8			Screw, Machine																					
4			SCFP0440BN4			Screw, Machine																					
40			SCRPO440BN4			Screw, Machine																					
38			SCBP0632BN4			Screw, Machine																					
26			SCBP0632BN5			Screw, Machine																					
34			SCBP0632BN6			Screw, Machine																					
6			SCFP0632BN5			Screw, Machine																					
2			SCFP0632BN6			Screw, Machine																					
10			SCBP0832BN6			Screw, Machine																					
12			SCFP-832BN8			Screw, Machine																					
16			NT-101-3			Nut, Strap																					
3			NT-101-5			Nut, Strap																					
16			NT-108			Nut, Lock																					
16			NTH0440BN6			Nut, Hex																					
20			NTH0440BN8			Nut, Hex																					
16			NTH0632BN8			Nut, Hex																					
10			NTH0632BN10			Nut, Hex																					
12			NTH0832BN11			Nut, Hex																					
16			SM-111-D206			Nut, Clinch																					
36			IWS04MRN			Lockwasher, Split																					
1			EY-102-4			Grommet, Elastic																					

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**MATERIAL LIST /  
NUMERICAL PARTS LIST**

REV.

F G

MODEL:

CFA-1LB

SHEET 5 OF 7

PART NO.	DESCRIPTION	ITEM LOCATION			QTY. PER UNIT	REFERENCE SYMBOLS	REMARKS
		USED ON ASSEMBLY	USED TO MOUNT	QTY. PER USED TO MOUNT			
LWI50LRN	Lockwasher, Int.				5		
LWS06MRN	Lockwasher, Split				26		
LWS08MRN	Lockwasher, Split				12		
PX-104-X-034	Insulation, Sleeving				10'		
PX-104-X-022	Insulation, Sleeving				6'		
MWC20(7)U1	Cable, Insulated				4'1"		
MWC20(7)U2	Cable, Insulated				2'5"		
MWC20(7)U4	Cable, Insulated				4'3"		
MWC20(7)U6	Cable, Insulated				1'4"		
MWC20(7)U8	Cable, Insulated				3'6"		
MWC20(7)U9	Cable, Insulated				4'1"		
MWC20(7)UPINK	Cable, Insulated				1'3"		
MWC22(7)U0	Cable, Insulated				4'5"		
MWC22(7)U1	Cable, Insulated				10'7"		
MWC22(7)U2	Cable, Insulated				3'1"		
MWC22(7)U3	Cable, Insulated				2'11"		
MWC22(7)U4	Cable, Insulated				13'3"		
MWC22(7)U5	Cable, Insulated				9'1"		
MWC22(7)U6	Cable, Insulated				13'8"		
MWC22(7)U7	Cable, Insulated				3'6"		
MWC22(7)U8	Cable, Insulated				4'8"		
MWC22(7)UTAN	Cable, Insulated				2'8"		
MWC22(7)UPINK	Cable, Insulated				4'2"		
MWC22(7)U94	Cable, Insulated				5'2"		
MWC22(7)U95	Cable, Insulated				2'3"		
MWC22(7)U96	Cable, Insulated				6'7"		
MWC22(7)U7	Cable, Insulated				7"		
MWC22(7)U91	Cable, Insulated				9"		
MWC22(7)U92	Cable, Insulated				5'11"		
MWC22(7)U93	Cable, Insulated				13'8"		
MWC22(7)U94	Cable, Insulated				8'5"		
MWC22(7)U97	Cable, Insulated				11"		
MWC22(7)U01	Cable, Insulated				4'7"		
WI-100-1	Cable, Shielded				10'		
WI-101-2	Cable, Shield Flex.				11'1"		
WI-102-11	Wire, #34 SCC				20'	p/o A-410	
WL-100-6	Wire, Buss Bar				20'		
WL-100-7	Wire, Buss Bar				20'		
WL-100-8	Wire, Buss Bar				20'		

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PURCHASED ITEM	MATERIAL LIST			MODEL	CFA-11B							PROJ. NO.	LIST NO.	CFA-11B 08						
	QUANTITY REQ.	L P N	PART NO.	REV	DWG SIZE	DESCRIPTION	REF	SYMBOLS	ISSUE							SHEET	6	OF	9	SHEETS
									A	B	C	D	E	F	G					
			A-580	A		Modification, CFA-11B														
			A-359	B*		Transformer, Audio	T7											Was: AEW006 p/o CK-150		
			A-393	A		Cover, Bottom												Was: AMS109		
			A-394	A		Term. Bd. #8 Assembly												Was: AMS080		
			A-395	C		Term. Bd. #6 Assembly												Was: AMS079		
			A-396 -1,2	A		Term. Bd. #3 & #4 Assembly												Was: AMS078		
			A-399	D		Can, Osc. Cover												Was: AMS252		
			A-400	A		Term. Bd. #2 Assembly												Was: AMS251		
			A-401	B		Term. Bd. #1 Assembly												Was: AMS250		
			A-402	A		Term. Bd. #5 Assembly												Was: AMS247		
			A-403	A		Term. Bd. #7 Assembly												Was: AMS246		
			A-404	A		Term. Bd. #9 Assembly												Was: BMS026		
			A-406			Center Chassis Assembly												Was: CMS040		
			A-407	C		Left Chassis Assembly												Was: CMS039		
			A-408			Front Chassis Assembly												Was: CMS036		
			A-409			Rear Chassis Assembly												Was: CMS037		
			A-410	A		Oscillator Sub-Assembly												Was: AMS255		
			A-411			Bracket, Rear Condenser												Was: AMS071		
			A-412			Bracket, Front Condenser												Was: AMS072		
			CA-157	C		Cable, Left Chassis												Was: CEM002		
			CA-158	E		Cable, Power												Was: DEM001		
			CA-159	B		Cable, Center Chassis												Was: CEM001		
			CK-192	B		Schematic Diagram												Was: CES016		
			CK-150	*		Wiring Diagram, Osc. Assembly												Was: AEW005 p/o A-410		
			CK-151			Wiring Diagram, V-21												Was: BEM007		
			S-216			CFA-11B, Specification														
			CK-153			Wiring Diagram, Term. Bd. #7												Was: BEM003		
			CK-154			Wiring Diagram, Term. Bd. #8												Was: BEM005		
			CK-156			Component Layout, R & L Chassis												Was: BMS060		
			CK-157			Wiring Diagram, Rear Panel												Was: BEM016		
			CK-158			Component Layout, Center Chassis												Was: CMS062		
			CK-159			Component Layout, Rear Chassis												Was: CMS063		
			LD-142-1 Thru 7			Silk Screening, Term. Bd.												Was: BMM004		
			LD-143	C		Engraving, Front Panel												Was: CMM021		
			CK-216			Front Panel Wiring Diagram												Was: BEM015		
			CK-217			Block Diagram												Was: BEB004		
			CK155			Wiring Diagram, Term. Bd No. 9														

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PURCHASED ITEM	MATERIAL LIST			MODEL	CFS-1LB								PROJ. NO.	LIST NO.	CFA-1LB008							
	QUANTITY REQ.	NPL	PART NO.	REV	DWG SIZE	DESCRIPTION	REF	SYMBOLS	ISSUE	E	F	G						SHEET	7	OF	7	SHEETS
			S-182 S985			<u>SPECIFICATIONS</u>  Test Procedure CFA-1 To CFA-1LB CONVERSION																

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