

MATERIAL LIST

REV

A B C D E F G H J K L M

MODEL AX-250

SHEET 1 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION ELECTRI CAL/MECHANI CAL	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
1	BB-106-3		1	Bearing, Thrust		ID-247	1	
2	BB-120-3		1	Bearing, Racer		AS-117	2	
1	CO-106-1000-30C		2	Capacitor, Fixed, Vacuum		A-2064	1	C949
1	CY-106		1	Counter, Rotating, Blank		AC-108	1	
1	DT-106		2	Wheel, Detent, 60°		A-2065	1	
2	GR-116		1	Gear, Bevel		A-2065 AC-108	1 1	
1	GR-145		1	Gear, Bevel, 3/8 I.D., 1" P.O.				
1	GR-155		1	Gear, Bevel, 1/2" I.D., 1" P.O.				
1	JJ-137		1	Connector, Receptacle			1	J905
1	JJ-172		1	Connector, Receptacle, R.F.		CA-532	1	J906
1	LD-682-1			Lettering, Wheel #1		AC-108	1	} Modify CY-106 Blank Wheel
1	LD-682-2			Lettering, Wheel #2		AC-108	1	
1	LD-682-3			Lettering, Wheel #3		AC-108	1	

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SHEET 2 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION ELECTRICAL/MECHANICAL	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
6	MS-202-3-13.25		2	Strap, Contact		A-1142	1	
2	MS-202-5-5.62		2	Lead, Connecting (1-R911 to R912) (1-R912 to R913)		A-2064	2	
1	MS-202-36-4.62		2	Lead, Connecting (C949 to C928 P.A. Load)		A-2064	1	
1	MS-202-24-7.25		2	Lead, Connecting(S903(Oper.)to C916 Output		A-2064	1	
1	MS-202-27-2.50		2	Lead, Connecting (S903 to CL-166)				
1	MS-1567		2	Bracket, Detent Bandswitch	LD-833	A-2065	1	
6	MS-1601-1		2	Contact, Switch, Short		AX-129	2	
6	MS-1601-2		2	Contact, Switch, Short		AX-129	2	
6	MS-1601-3		2	Contact, Switch, Short		AX-129	2	
6	MS-1601-4		2	Contact, Switch, Short		AX-129	2	
6	MS-1601-5		2	Contact, Switch, Short		AX-129	2	
2	MS-1601-6		2	Contact, Switch, Long		AX-128	2	
2	MS-1601-7		2	Contact, Switch, Long		AX-128	2	
2	MS-1601-8		2	Contact, Switch, Long		AX-128	2	
2	MS-1601-9		2	Contact, Switch, Long		AX-128	2	
2	MS-1601-10		2	Contact, Switch, Long		AX-128	2	
2	MS-1602		1	Contact, Switch, Spring Type		AX-128	2	
4	MS-1861		1	Bracket, Coil Mtg.		A-2064	4	
1	MS-2129		8	Plate, Mounting, Load Resistor	LD-832	A-2064	1	
2	MS-2157		1	Bracket, Capacitor Mtg.		A-2064	2	

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SHEET 3 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION ELECTRICAL/MECHANICAL	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
1	MS-2315		2	Bracket, Connector, Emerg. Output				
1	MS-2319		2	Bracket, Mtg., Load Resistor		A-2064	1	
24	MS-2323		1	Clip, Resistor		A-2064	24	
1	MS-2338		2	Plate, Cover, Bowl Hole		ID-247	1	
1	MS-2535		2	Strap, 40K, R.F. Input				
1	MS3057-12		1	Clamp, Connector		CA-532	1	For P900
1	MS3106B20-27S		1	Connector, Plug, Male		CA-532	1	P900
1	MS3420-10A		1	Bushing, Cable		CA-532	1	For P900
2	NS3W0332		2	Insulator, Pillar, Round		CL-179	1	
1	PL-169		1	Connector, Plug		CA-532	1	P901
6	PM-375		1	Strap, Contact, End		A-1142	1	
6	PM-378		1	Strap, Contact, End		A-1142	1	
1	PM-538		1	Holder, Shaft		AS-117	1	
4	PM-570		1	Bar, Contact		AS-117	4	
1	PM-634		2	Rotor Switch, Mode Selector		AS-117	1	
1	PM-637		1	Shaft, Bearing		AS-117	1	
1	PM-638		1	Coupler, Shaft, Vertical		AS-117	1	
1	PM-639		1	Shaft, Vertical, Mode Switch				
1	PM-657		1	Shaft, Horiz, Mode Switch				
1	PM-658		1	Coupler, Shaft, Horiz				
1	PM-691-6.12SS.		1	Shaft, Flattened, Aux. Switch		A-2065	1	
1	PM-572		1	Bushing, Shaft		ID-247	1	

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SHEET 4 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION ELECTRICAL/MECHANICAL	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
2	PO-176		2	Bracket, "T"		AS-117	2	
2	PO-185-4S		1	Bracket, Capacitor Mtg.		A-2064	2	
1	PO-199		2	Detent Ass'y., Arm & Bracket		A-2065	1	
1	PX-536		2	Brace, Load Resistor, Front	LD-829	A-2064	1	Crate #19
3	PX-540-1		2	Spacer, Mode Switch, 2-5/8" Long		AS-117	3	
3	PX-540-2		2	Spacer, Mode Switch, 3" Long		AS-117	3	
3	PX-540-3		2	Spacer, Mode Switch, 3-5/8" Long		AS-117	3	
1	PX-542		4	Plate, Load Resistor, Side	LD-831	A-2064	1	Crate #19
1	PX-543		2	Brace, Load Resistor, Center		A-2064	1	
1	PX-545		2	Shaft, Load Resistor, Insulated		AS-117	1	
1	PX-567		1	Insulator, Switch, Wafer		A-2065	1	
2	PX-625		2	Plate, Mounting, Capacitor	LD-982	A-2064 A-2064	1 1	Crate #19
3	RR-117-140		2	Resistor, Glass, 900 W		A-2064	3	R911,912,913
4	SC-127-1		1	Stud, Threaded		CL-179	2	

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MODEL AX-250

SHEET 5 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION ELECTRICAL/MECHANICAL	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
1	SM0348BP1.625			Rod, Threaded, 3-48 x 1-5/8" Long		AS-117	1	
4	SM0348BP1.125		2	Rod, Threaded, 3-48 x 1-1/8" Long		AS-117	4	
3	SM0348BP1.500		2	Rod, Threaded, 3-48 x 1-1/2" Long		AS-117	3	
3	SM1024BP1.625		2	Rod, Threaded, 10-24 x 1-5/8" Long		AS-117	3	
3	SM1024BP1.875		2	Rod, Threaded, 10-24 x 1-7/8" Long		AS-117	3	
4	SM1032BP1.937		2	Rod, Threaded, 10-32 x 1-15/16" Long		AS-117	4	
2	SM2520BN1.250		2	Rod, Threaded, 10-32 x 1-1/4" Long		CL-166	2	
1	SW-169		1	Switch, Plunger		A-2065	1	S902
2	SW-230		1	Switch, Interlock			2	S905,906
1	TH-100-20		1	Thermocouple		A-2064	1	TC900
1	WS-105-2		1	Wafer, Ceramic		AS-117	1	
1	WS-109		1	Wafer, Switch, Rotary		A-2065	1	

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MODEL AX-250

SHEET 6 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION HARDWARE	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
4	AN565D6H4		1	Setscrew, 6-32 x 1/4" Long		AS-117	4	
6	AN565D8H3		1	Setscrew, 8-32 x 3/16" Long		A-2065	4	
4	AN565D8H4		1	Setscrew, 8-32 x 1/4" Long		GR-116 Mtg.	2	
						GR-145 Mtg.	2	
						GR-155 Mtg.	2	
3	CU-102-3		1	Clamp, Cable		CA-532 Mtg.	3	
1	EY-102-8		2	Grommet, Rubber		CA-532	1	
4	FW10HBN		1	Washer, Flat		CL-179	2	
4	FW25HBN		1	Washer, Flat		CL-166	4	
2	KY-102-2-0.75SS		N.D	Key, Square, 3/4" Long				
2	KY-102-2-1.25SS		N.D	Key, Square, 1-1/8" Long		AS-117	2	
6	LWE04MRN		1	Lockwasher, Ext.		A-2064	2	
						A-2065	4	
27	LWE06MRN		1	Lockwasher, Ext.		A-2064	24	
						CU-102 Mtg.	3	
47	LWE08MRN		1	Lockwasher, Ext.		A-2064	30	
						A-2065	4	
						AS-117	1	
						MS-2338 Mtg.	12	

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SHEET 7 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION HARDWARE	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
31	LWE10MRN		1	Lockwasher, Ext. Lockwasher, Ext.		A-2064 A-2065 AS-117 JJ-137 Mtg. MS-2315 Mtg.	20 2 3 4 2	
4	LWI10MRN		1	Lockwasher, Int.		A-2064	4	
14	LWS25MRN		1	Lockwasher, Split		A-2064 A-2064 Mtg. AS-117 MS-2535 Mtg.	5 4 4 1	
1	NT-129-420-6		2	Nut, Swage		MS-2129	1	
5	NT-129-1032-4		1	Nut, Swage		MS-2319	5	
8	NT-129-1032-6		1	Nut, Swage		MS-2129	8	
4	NT-139-SF1-20			Insert, Screw Thread		PX-542	4	
16	NTH0348BN6			Nut, Hex.		AS-117	16	
6	NTH0440BN6			Nut, Hex.		A-2064	2	
						A-2065	4	
						AS-117		
39	NTH0632BN8		1	Nut, Hex		A-2064	36	
						CU-102 Mtg.	3	
45	NTH0832BN10		1	Nut, Hex		A-2064	30	
						A-2065	2	
						AS-117	1	
						MS-2338 Mtg.	12	

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MODEL AX-250

SHEET 8 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION HARDWARE	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
8	NTH1032BN10		1	Nut, Hex		AX-128	2	
						AX-129	2	
18	NTH1032BN12		1	Nut, Hex		A-2064	4	
						A-2065 Mtg.	2	
						CL-179	4	
						JJ-137 Mtg.	4	
						MS-2345 Mtg.	4	
8	NTH2520BN14		1	Nut, Hex		A-2064	1	
						CL-166	2	
						MS-2535	1	
						A-2064 Mtg.	4	
4	SC-131-0632BN5		1	Screw, Under Cut, F.H.		SW-230 Mtg.	4	
2	SCBP0440BN16		1	Screw, Machine		A-2065	2	
2	SCBP0440BN18		1	Screw, Machine		A-2064	2	
12	SCBP0632BN6		1	Screw, Machine		A-2064	12	
12	SCBP0832BN10		1	Screw, Machine		A-2064	12	
2	SCBP0632BN16		1	Screw, Machine		A-2064	2	
12	SCBP0632BN12		1	Screw, Machine		A-2064	12	
2	SCBP0832BN6		1	Screw, Machine		A-2065	2	
30	SCBP0832BN8		1	Screw, Machine		A-2064	18	
						MS-2338 Mtg.	12	
1	SCBP0832SS24		1	Screw, Machine		AS-117	1	
3	SCBP1024BN14		1	Screw, Machine		A-2064	3	
3	SCBP1024BN16		1	Screw, Machine		AS-117	3	
8	SCBP1032BN4		1	Screw, Machine		AX-128	2	
						AX-129	2	
8	SCBP1032BN6		1	Screw, Machine		AS-117	8	

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ABCDEFGHIJKLM

MODEL AX-250

SHEET 10 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION HARDWARE	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
4	TE-104-4		2	Lug, Terminal		CL-179	2	
2	TE-104-5		2	Lug, Terminal		CL-166	2	
2	TE-117-1		2	Spacer, Standoff		A-2065	2	
2	TE-117-26		2	Spacer, Standoff		A-2065	2	
4	TE-120-2		2	Lug, Solderless		CA-532	4	
5	TE-141-1		1	Lug, Solderless		CA-412-6	2	
						CA-412-14	2	
						CA-412-16	1	
4	TE-141-4		1	Lug, Solderless		CA-412-3	2	
						CA-412-6	2	
						CA-412-15	1	
1	TE-143-3		1	Lug, Solderless		CA-412-16	1	
2	TE-155-34170		2	Lug, Solderless		CA-409-37	1	
2	TE-155-34852		2	Lug, Solderless		CA-409-37	1	
2	TE-156-32953		2	Lug, Solderless		CA-532	2	
2	TE-156-34149		2	Lug, Solderless		CA-532	2	
2	TE-158-31134		2	Lug, Solderless		CA-532	2	
2	TE-159-34161		2	Lug, Solderless		CA-412-14	1	
4	TE2520AE26R		4	Spacer, Threaded		A-2064	4	
15	WA-109-5			Washer, Fiber		AS-117	15	
2	WA-109-17		2	Washer, Fiber		A-2065	2	
4	WA-109-54		2	Washer, Fiber		CL-179	2	
2	WA-109-55		2	Washer, Fiber		CL-166	2	

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SHEET 9 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION HARDWARE	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
12	SCBP1032BN8		1	Screw, Machine		A-2064	4	
			1	Screw, Machine		A-2065	2	
4	SCBP1032BN10		1	Screw, Machine		JJ-137 Mtg.	4	
9	SCBP1032BN12			Screw, Machine		MS-2315 Mtg.	2	
3	SCFP0632BN8		1	Screw, Machine		A-2064	4	
						A-2064	9	
						CU-102 Mtg.	3	
2	SCFP1032BN8		1	Screw, Machine		MS-2315 Mtg.	2	
4	SCHH2520BN8		1	Screw, Machine		AS-117	4	
4	SCHH2520BN24F		1	Screw, Machine		A-2064	4	
10	SLHC1032SS4		1	Screw, Machine		AS-117	8	
						PM-658 Mtg.	2	
8	SM-127-D-1032		1	Nut, Locking		AX-128	2	} For Sparts Only
						AX-129	2	
						AS-117	8	

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A B C D E F G H I J K L M

MODEL AX-250

SHEET 11 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION RAW MATERIALS	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
X	BS-100		1	Solder, Soft				
X	BS-101		1	Solder, Silver		A-1142		
7'	CD-101-1-MW		1	Cord, Lacing		CA-532	7'	
X	GL-103		1	Cement, Duco		CL-166		
X	GL-104-2		1	Insulex, U-85		CL-166		
X	GL-116		1	Silicone, Varnish		CL-179		
15"	MWC14(19)B90		2	Cable, Insulated, Fiberglass	WH/BLK.	CA-409-37	15"	
	MWC22(7)U2		2	Cable, Insulated	RED	CA-532		
	MWC22(7)U5		2	Cable, Insulated	GREEN	CA-532		
	MWC22(7)U6		2	Cable, Insulated	BLUE	CA-532		
	MWC22(7)U9		2	Cable, Insulated	WHITE	CA-532		
	MWC22(7)U90		2	Cable, Insulated	WH/BLK.	CA-532		
	MWC22(7)U91		2	Cable, Insulated	WH/BRN.	CA-532		
	MWC22(7)U94		2	Cable, Insulated	WH/YELL.	CA-532		
	MWC22(7)U95		2	Cable, Insulated	WH/GREEN	CA-532		
	MWC22(7)U96		2	Cable, Insulated	WH/BLUE	CA-532		
	MWC22(7)U97		2	Cable, Insulated	WH/VIO.	CA-532		

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MODEL AX-250

SHEET 12 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION RAW MATERIALS	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
63"	PX-100-1		1	Sleeving, Vinyl	BLACK	CA-532		
	PX-370-8-7		1	Sleeving, Teflon	NATURAL	CA-412-3	13"	
					NATURAL	CA-412-6	12"	
					NATURAL	CA-412-14	36"	
					NATURAL	CA-412-15	2"	
			NATURAL	CA-412-16	2"			
49"	RG-174/U		1	Cable, Coax., R.F.		CA-532		
	TU-100-2N		1	Tubing, Copper, 1/8"		CA-412-3	13"	
						CA-412-6	13"	
						CA-412-14	20"	
						CA-412-16	3"	
WI-103-3		1	Shield, Flexible		CA-532			
WI-125-2		1	Wire, Magnet		CL-166			

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SHEET 13 OF 14

QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION SUPPORTING DRAWINGS	CRATE NO. REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
6	A-1142		2	Contact Strap, Sub-Ass'y.	19	A-2064	6	
1	A-2064		8	Switch & Load Ass'y.	19			
1	A-2065		4	Detent Switch Ass'y.	20			
1	AC-108 (A-1821)		1	Counter, Mode Switch	16		1	MP-903
1	AS-117 (4-A-2066)		8	Switch Ass'y., R.F. Output, 10K	19	A-2064	1	
1	AX-128 (1A-1700)		1	Contact Ass'y., Long	19	AS-117	1	
3	AX-129 (1A-1701)		1	Contact Ass'y., Short	19	AS-117	3	
1	CA-409-37-6.00		4	Cable Ass'y., Jumper (TC-900 to L917) (1-TC-900 to L917)	19	A-2064	1	
1	CA409-37-9.00			Cable Ass'y., Jumper (TC900 to L916)	19	A2064	1	
1	CA-412-3-13.00		2	Cable Ass'y., Jumper (S903 Emerg. to J905)	19	A-2064	1	
1	CA-412-6-6.00		2	Cable Ass'y., Jumper (S903 Wiper to TC-900)	19	A-2064	1	
2	CA-412-14-19.50		2	Cable Ass'y., Jumper (1-L916 to C1019) (1-L917 to C1020)	19	A-2064	2	

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QUAN. PER UNIT	PART NO.	DWG. REV.	DWG. SIZE	DESCRIPTION	REF.	LOCATION		SYMBOLS
						USED ON	QUAN.	
				SUPPORTING DRAWINGS				
1	CA-412-6-5.50		2	Cable Ass'y., Jumper (S903 Tune to R911,912,913)	19	A-2064	1	
1	CA-412-16-2.75		2	Cable Ass'y., Jumper (TC-900 to C911)	19	A-2064	1	
1	CA-532		8	Cable, Interconnect, 10K to 40K	1	A-2064	1	W900
1	CL-166 (2A-1680)		1	Coil, Fixed, R.F. 35 uh	1	A-2064	1	L907
2	CL-179 (2A-1166)		1	Coil, Fixed, R.F. 38 uh	19	A-2064	2	L916,917
1	ID-247		8	Installation Ass'y., 10K PA Deck				
1	LD-829		1	Lettering, Brace, Load Resistor	PX-536	A-2064	1	
1	LD-831		1	Lettering, Plate, Load Resistor	PX-542	A-2064	1	
1	LD-832		1	Lettering, Plate, Load Resistor Mtg.	MS-2129	A-2064	1	
1	LD-833		1	Lettering, Bracket, Detent	MS-1567	A-2064	1	
1	LD-982		1	Lettering, Plate, Capacitor Mtg.	PX-625	A-2064	1	

REVISION SHEET

THE TECHNICAL MATERIEL CORP.
MAMARONECK NEW YORK

NPL-AX-250

MODEL KIT-105,106

PROJECT NO _____

DATE	REV.	PAGE	EMN#	DESCRIPTION	CHK.	APP.
9/20/61	A	7	5612	On LWS25MRN, Chg. Quan. From 13 to 14. Add 1 ea. NT-129-420-6	✓	3/6
		8		On NTH2520BN14, Chg. Quan. From 7 to 4	✓	
12/5/61	B	1	6017	Chg. CO-101-1000-15C to CO-106-1000-30C. Chg. Sym. from C911 to C949.		
		2		Delete 1 ea. MS-202-5-1.75.		
		4		Chg. PX-537 to PX-625, Chg. Ref. from LD-830 to LD-982 .		
		10		On TE-156-32953, Chg. Quan. from 1 to 2. Add 2 ea. TE-156-34149.		
		14		Chg. LD-830 to LD-982, Chg. Quan. from 2 to 1. Chg. PX-537 to PX-625.		
6/22/62	C	7	6840	On NT-129-1032-6, Chg. Quan. From 4 to 8.		
		8		On NTH1032BN12, Chg. Quan. From 20 to 16.		
1/19/63	D	2	8057	On MS-202-8-7.62, Chg. Desc. from C911 to C949		
		4		Chg. 2 ea. PO-185-3S to PO-185-4S		
		6		Chg. LWE04MRN Quan. from 4 to 6		
				Chg. LWE06MRN Quan. from 41 to 27		
				Chg. LWE08MRN Quan. from 18 to 46		
		7		Add 4 ea. NT-139-SFT-20		
				Chg. NTH0440BN6 Quan. from 20 to 22		
				Chg. NTH0632BN8 Quan. from 41 to 39		
				Chg. NTH0832BN10 Quan. from 21 to 45		
		8		Chg. NTH1032BN12 Quan. from 16 to 18		
				Chg. NTH2520BN14 Quan. from 4 to 8		
				Chg. all "SCBS" to "SCBP"		
				Add 2 ea. SCBP0440BN18		
				Chg. SCBP0632BN6 Quan. from 24 to 12		
				Dele. 12 ea. SCBP0632BN8		
				Add 12 ea. SCBP0832BN10		
				Add 12 ea. SCBP0632BN12		
				Chg. SCBP0832BN8 Quan. from 27 to 30		
		9		Chg. all "SCBS, SCFS" to "SCBP, SCFP"		
				Dele. 4 ea. SCBP1032BN16		
				Add 4 ea. SCBP1032BN10		
				Add 9 ea. SCBP1032BN12		
				Dele. 4 ea. SCFS0832BN8		