

"1st-TYPE" ARM-DRIVE SYSTEMS

68600-40

(ECCENTRIC - CLUTCH - CRANK /

CONN. LINK) COVERED HERE

"2nd-TYPE" ARM-DRIVE SYSTEMS

(PULL-OFF COIL - PIVOT PLATE /

WORM - SECTOR GEAR) IN APP. "B"

AMPEX CORPORATION

SE-10

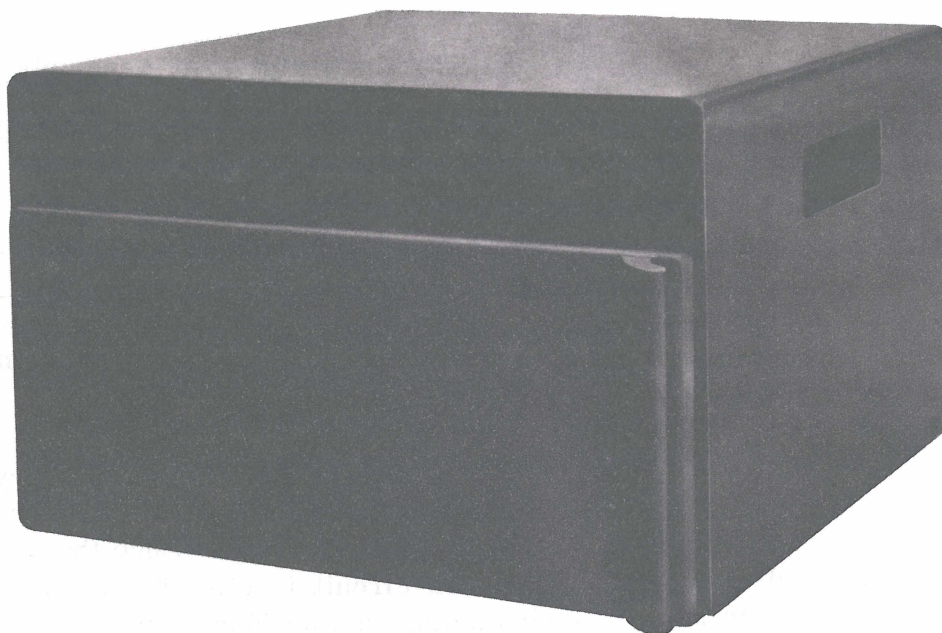
AUTOMATIC BULK

TAPE DEGAUSSER

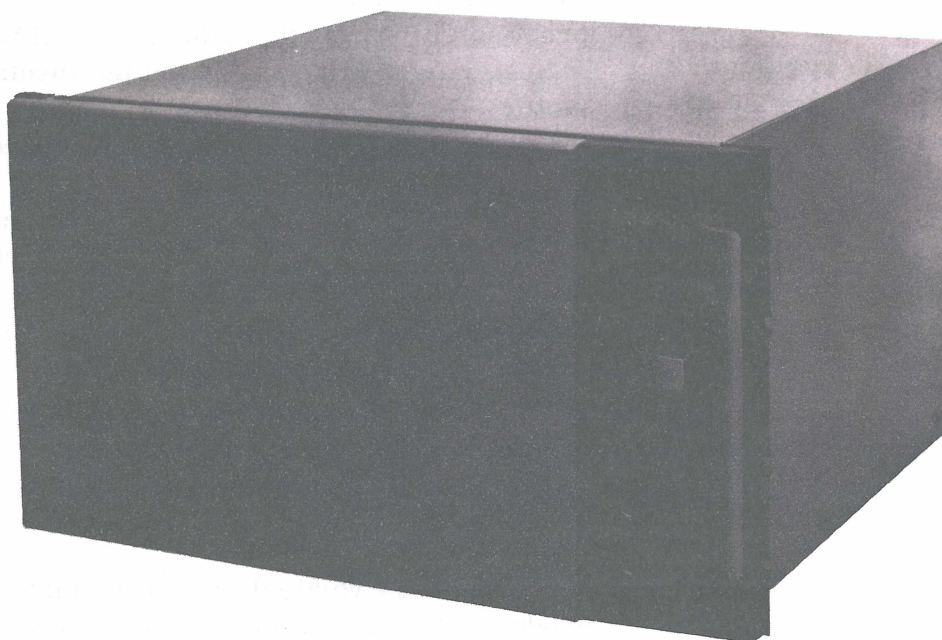
Catalog Numbers 22070-01, and 22070-02

REDWOOD CITY, CALIFORNIA





Tape Degausser, Catalog No. 22070-01
(Table Mounted)



Tape Degausser, Catalog No. 22070-02
(Rack Mounted)

NOTE → 22070-31 HAS SOLID FRONT DOOR W/NO
BUTTON CATCH. - NOO- PIN LOCK LIKE "U-O" "
STYLES - DIFFERENT (BUT SIMILAR) DOOR HANDLE
1. COILING SURVEILLANCE DEVICES - 1.00

SE-10 Tape Degausser

1. DESCRIPTION

The Ampex Model SE-10 Automatic Bulk Tape Degausser is designed for maximum erasure of previously recorded data or residual noise on magnetic tape. Both table mounted (Catalog No. 22070-01), and rack mounted (Catalog No. 22070-02) versions are fully automatic and require a minimum of operational steps to fully erase the magnetic tape.

2. SPECIFICATIONS

Reel & Tape Sizes:	Accommodates reels up to 14 inches in diameter and tape widths up to 1 inch.
Erase Characteristics:	Better than 80 db below saturated single frequency signal.
Power Requirements:	117-125v, 60 cycles, 12 amps; or 117-125v, 50 cycles, 14.2 amps.
Duty Cycle:	25 reels per hour at 125v, 60 cycles; or 17 reels per hour at 125v, 50 cycles.

3. OPERATION

The SE-10 Degausser consists of three major units, 1) Control Box, 2) Turntable Arm Assembly, and 3) Degaussing Coils Arm Assembly. (See Figure 1).

The Control Box houses control relays, the operating switch, POWER and ERASED lights, and a protective fuse.

The Turntable Arm Assembly consists of a vertically mounted turntable upon which the reel of tape to be de-magnetized is placed. The assembly is mounted on a retractable pivot arm and the whole assembly will move out and into the unit when the cover door is opened and closed respectively. A low speed drive motor rotates the reel of tape loaded onto the turntable when the operating cycle is started.

Prior to the actual operating cycle, upon application of power, cooling air is provided by a blower motor. Once the operating switch circuit is closed (by the cover door closing on a pushbutton type switch) the turntable motor, the Degaussing Coils Arm motor, and the degaussing coils are energized. The amber POWER light will be illuminated at the start of the operating cycle. Upon completion of the operating cycle (approximately one minute), the green ERASED indicator light will come on and the turntable motor, Degaussing Coils Arm motor, and the degaussing coils will be de-energized.

The Degaussing Coils Arm assembly consists of two laminated E frames each of which has coils on its outer legs. The gap between the upper and lower coil assemblies accommodates the passage of the rotating reel of tape into the strong magnetic fields produced by the degaussing coils. The arm supporting the two coils swings the whole assembly over the entire area of the tape.

Both the vertical and horizontal fields, produced by the continually reversing current (due to the a-c operation), aid each other in the complete degaussing of the tape.

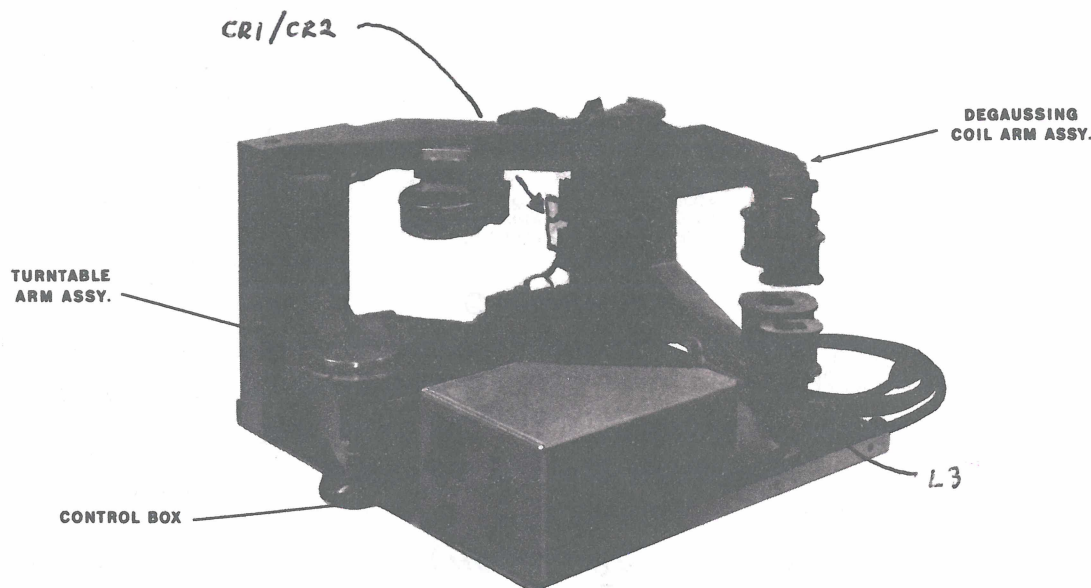


FIG. 1 Tape Degausser With Cover Removed

4. OPERATION

Before proceeding with the following operational steps, check that all packing and insulating material has been removed from inside the unit, particularly around the Degaussing Coils Arm Assembly. Optimum performance will be achieved when the unit is operated in a horizontal position.

- Step 1: Connect the Degausser to a source of 117-125 volts ac.
- Step 2: Open the cover door to expose the turntable and load the reel of tape onto the turntable (the loose end of the tape should be secured using a suitable piece of adhesive).
- Step 3: Place POWER (circuit breaker) switch to ON, thus starting the blower.
- Step 4: Close the cover door, thus actuating the operating switch, and observe that the amber POWER light is on.
- Step 5: When the green ERASED light comes on, the tape has been completely

erased, open cover door and remove reel of tape. Because of the temperature produced within the unit, the duty cycle should not be exceeded.

5. MAINTENANCE

The SE-10 Degausser has been adjusted for optimum performance before leaving the factory. Some of these adjustments which may be made in the field, are shown in Figure 2.

The parts list appearing at the rear of this manual, should be used to the extent of parts replacement. Do not attempt to disassemble the unit beyond the indicated point.

Defective assemblies may be returned to the factory for repair or replacement after receipt of authorization from:

Ampex Corporation
Parts & Service Division
Service Department
934 Charter Street
Redwood City, California

SE-10 Tape Degausser

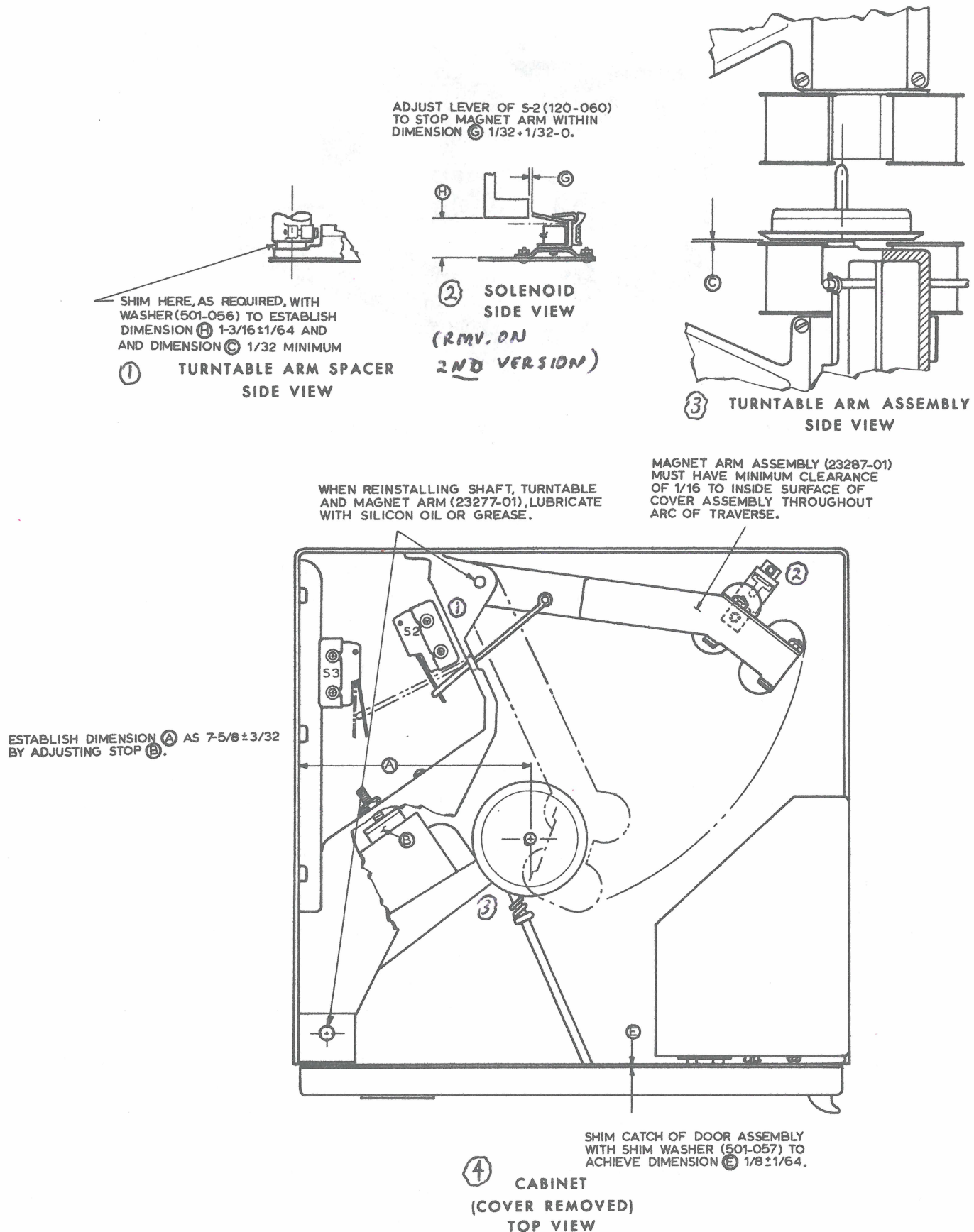
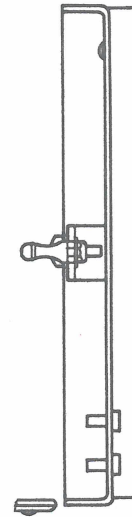
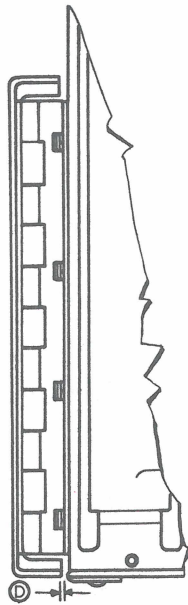


FIG. 2 Maintenance

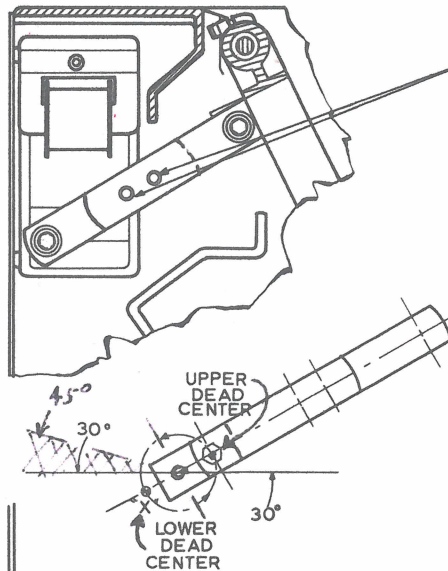


SHIM HINGE OF DOOR ASSEMBLY
WITH SHIM WASHER (501-507) TO
ESTABLISH DIMENSION $\textcircled{D}$ $1/8 \pm 1/64$.

$\textcircled{5}$

DOOR ASSEMBLY CONSOLE MODEL

SIDE VIEW



LOOSEN TWO SCREWS (470-029) ON CONNECTING
LINK (65036-1).

HOLD MAGNET ARM FIRMLY AGAINST TURNABLE
ARM AND POSITION MOTOR CRANK AND CONNECTING
LINK TO LIE AT LOWER DEAD CENTER POSITION "X"
AS SHOWN. $\textcircled{B}$

TIGHTEN SCREWS ON CONNECTING LINK.

ADJUST LEVER OF SWITCH S-3 (120-060) TO ACTUATE
BETWEEN 45° AND 30° BEFORE LOWER DEAD CENTER
AS SHOWN IN POSITION "X".

$\textcircled{B}$ SET DIM. "A" / VIEW # 4

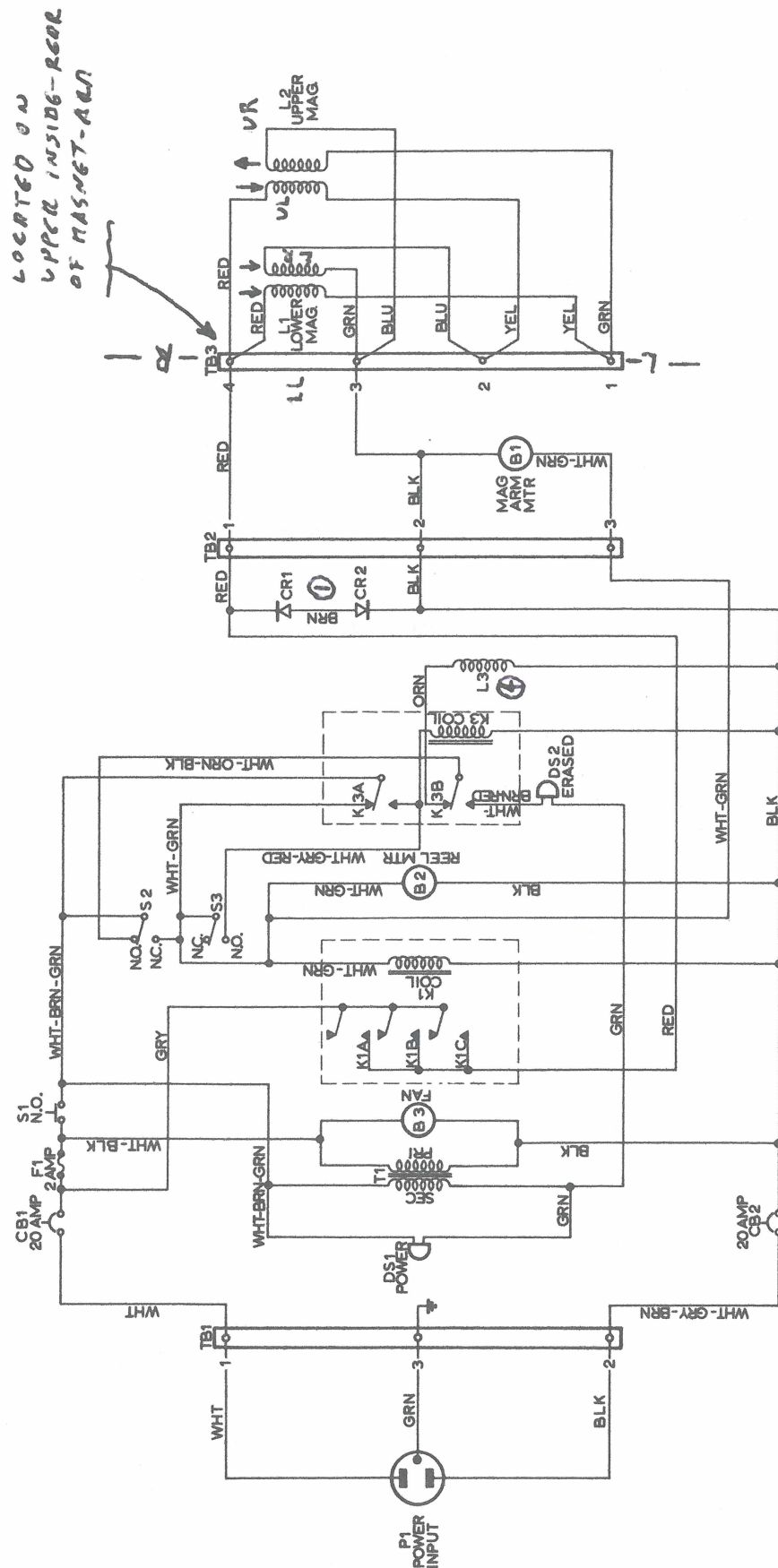
PAGE # 4 FIRST.

SCREW (471-753) AND NUT (492-011)
ARE USED FOR SHIPPING ONLY,
REMOVE UPON INSTALLATION.

$\textcircled{6}$

DOOR ASSEMBLY RACK MODEL

TOP VIEW



NOTES: (1) DIODES CRI AND CR2 USED IN CATALOG 22070-26 ∇ ∇ ∇
VERSION ONLY

2. S2 AND S3 SHOWN IN POSITION CORRESPONDING TO MAGNET ARM IN BACK REST POSITION.

3. ALL RELAYS SHOWN DEENERGIZED.

3. ALL RELAYS SHOWN DEENERGIZED.

④ 23 & 2530C. WIRE TO K3B/B"
RELAY ON "OTHER 41 VERSIONS
(AFTER "31")

FIG. 3 Schematic Diagram

PARTS LIST FOR: AUTOMATIC BULK TAPE DEGAUSSER, SE-10 Table Mounted Catalog No. 22070-01
AUTOMATIC BULK TAPE DEGAUSSER, SE-10 Rack Mounted Catalog No. 22070-02

REF. NO.	AMPEX PART NO.	DESCRIPTION	NO/ ASSY.
B1	65039	MOTOR, Degausser	1
B2	23241-02	MOTOR, Turntable	1
B3	591-016	MOTOR, Blower	1
CB1	126-006	CIRCUIT BREAKER	1
CB2	126-006	Same as CB1	1
CR1	582-046	RECTIFIER, Selenium	1
CR2	582-046	Same as CR1	1
DS1	060-001	LAMP, Miniature, bayonet base, 6.3v, 0.15a	1
DS2	060-001	Same as DS1	1
F1	070-016	FUSE, Cartridge, fast blow, 2 amp, 250v	1
K1	020-002	RELAY, 3PST, 115v	1
K2		NOT USED	
K3	020-033	RELAY, DPDT, 115v	1
L1	22032-01	MAGNET & COILS, Degausser	1
L2	22032-01	Same as L1	1
L3	022-014	SOLENOID, 115v	1
L3	020-033	SOLENOID, 115v	1
L3	69615-10	SOLENOID, 115v	1
P1	084-006	CORD SET	1
S1	120-018	SWITCH, SPDT, pushbutton	1
S2	120-060	SWITCH, rigid leaf actuator	1
S3	120-060	Same as S2	1
T1	561-017	TRANSFORMER, Filament, 117v, a-c, 6/3v, 1/2a	1
TB1	180-042	TERMINAL STRIP, 3 terminals	1
TB2	180-012	TERMINAL STRIP, 3 double terminals	1
TB3	180-014	TERMINAL STRIP, 4 double terminals	1
1	422-009	BEARING, Flanged, 3/8 in. lg.	2
2	65035-1	BRACKET, Shaft	1
3	302-007	CLAMP, Cable	1
4	302-031	CLAMP, Cable	2
5	302-036	CLAMP, Cable	2
6	302-037	CLAMP, Cable	5
7	18137-01	CLAMP, Limit Switch	2
8	281-015	CLUTCH, 1/4 in. shaft	1
9	23296-01	CONTROL BOX ASSEMBLY; includes CB1, CB2, DS1, DS2, F1, P1	1
9-1	23297-01	Component Panel Assembly; includes: K1, K3, T1, TB1	1
9-2	23311-01	Harness Assembly	1
9-3	23267-01	Control Box Subassembly	1
9-4	085-001	Fuseholder; extractor post	1
9-5	260-039	Grommet, Neoprene, 3/8 in. id x 5/8 in. od	2
9-6	132-033	Pilot Lamp, amber lens	1
9-7	132-013	Pilot Lamp, green lens	1
10	23270-01	COVER ASSEMBLY	1(-01)
10	23303-01	COVER ASSEMBLY	1(-02)
11	171-008	DISCONNECT, Splice	4
12	69019-1	DOOR ASSEMBLY	1(-01)
12	23323-01	DOOR ASSEMBLY	1(-02)
13	15908-14	DOOR LATCH ASSEMBLY	1(-02)
14	23276-01	FRAME, Degausser	1
15	65039-1	GEARCASE, Motor	1
16	250-008	GUIDE, Cabinet	4(-02)
17	23316-01	HANDLE, Door	1
18	15847-01	HINGE	1(-02)
19	65041-1	HOUSING, Clutch	1
20	68600-30	INSTRUCTION MANUAL	2
20	68600-40	INSTRUCTION MANUAL	2
21	23278-01	JEWEL	2
22	65036-1	LINK, Connecting	2
23	23287-01	MAGNET ARM ASSEMBLY; includes: B1, L1, L2, TB3	1
24	492-009	NUT, Plain, hex, #6-32	4
25	492-010	NUT, Plain, hex, #8-32	2
26	492-011	NUT, Plain, hex, #10-32	3(-01)
27	492-037	NUT, Plain, hex, 1/4-28	5(-02)
28	23256-01	PANEL, Bottom	1

SE-10 Tape Degausser

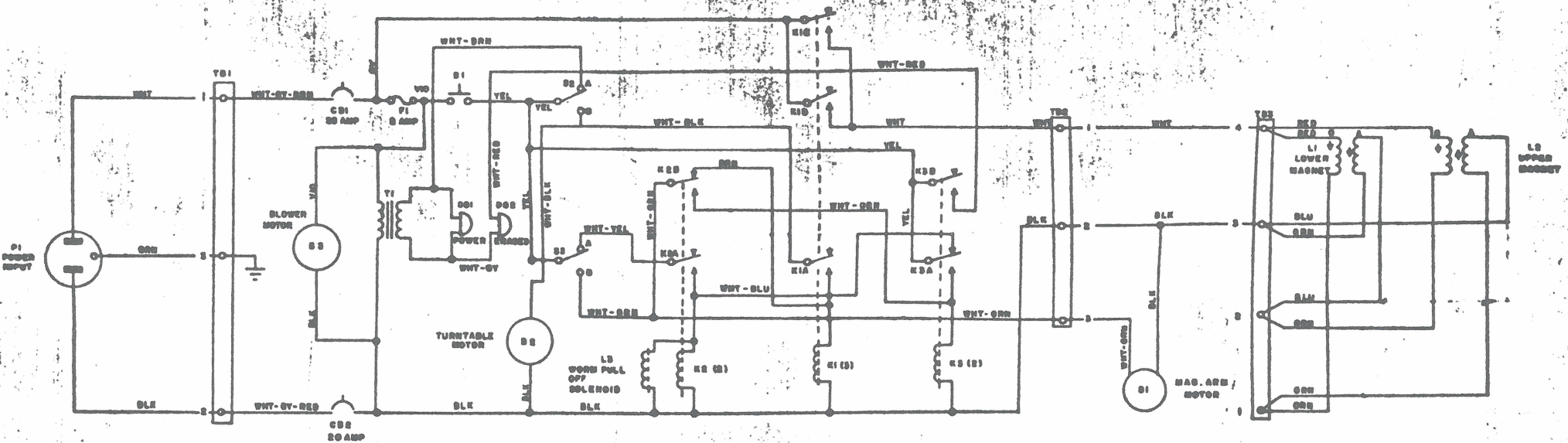
PARTS LIST FOR:			
AUTOMATIC BULK TAPE DEGAUSSER, SE-10		Table Mounted	Catalog No. 22070-01
AUTOMATIC BULK TAPE DEGAUSSER, SE-10		Rack Mounted	Catalog No. 22070-02
REF. NO.	AMPEX PART NO.	DESCRIPTION	NO./ ASSY.
29	400-013	PIN, Clevis, 3/16 in. dia x 21/32 in. lg.	2
30	400-017	PIN, Clevis, 3/16 in. dia x 15/32 in. lg.	1
31	400-022	PIN, Clevis, 3/16 in. dia x 27/32 in. lg.	1
32	401-007	PIN, Cotter, 1/16 in. dia x 1/2 in. lg.	2
33	406-056	PIN, Roll, 0.078 in. dia x 0.500 in. lg.	1
34	61814-01	PIN, Straight, threaded	2
35	430-005	RING, Retaining, 1/4 in.	1
36	23292-01	ROD, Door swingout	1
37	23280-01	ROD, Magnetic arm limit	2
38	470-029	SCREW, Cap, hex socket head, #8-32 x 1/2 in. lg.	2
39	470-035	SCREW, Cap, hex socket head, #10-32 x 5/16 in. lg.	4(-01)
39	470-036	SCREW, Cap, hex socket head, #10-32 x 3/8 in. lg.	4(-02)
40	471-069	SCREW, Machine, pan head, cross-recessed drive, #6-32 x 3/8 in. lg.	9
41	471-071	SCREW, Machine, pan head, cross-recessed drive, #6-32 x 1/2 in. lg.	2
42	471-078	SCREW, Machine, pan head, cross-recessed drive, #8-32 x 3/8 in. lg.	4
43	471-081	SCREW, Machine, pan head, cross-recessed drive, #8-32 x 5/16 in. lg.	2
44	471-090	SCREW, Machine, pan head, cross-recessed drive, #10-32 x 5/8 in. lg.	2
45	471-113	SCREW, Machine, pan head, cross-recessed drive, #4-40 x 7/16 in. lg.	2
46	471-385	SCREW, Machine, flat head, cross-recessed drive, #6-32 x 1/4 in. lg.	2(-02)
47	471-449	SCREW, Machine, pan head, cross-recessed drive, #6-32 x 1-3/8 in. lg.	4
48	471-464	SCREW, Machine, pan head, cross-recessed drive, #12-24 x 5/8 in. lg.	10(-02)
49	471-490	SCREW, Machine, pan head, cross-recessed drive, #10-32 x 5/8 in. lg.	10(-02)
50	471-750	SCREW, Machine, truss head, cross-recessed drive, #6-32 x 1/4 in. lg.	6
51	471-751	SCREW, Machine, truss head, cross-recessed drive, #10-32 x 3/8 in. lg.	15
52	471-753	SCREW, Machine, hex head, #10-32 x 5/16 in. lg.	2(-02)
53	471-858	SCREW, Machine, pan head, cross-recessed drive, #8-32 x 2-1/4 in. lg.	2
54	471-889	SCREW, Machine, truss head, cross-recessed drive, #10-32 x 1/4 in. lg.	1
55	477-049	SCREW, Set, headless, #10-32 x 3/8 in. lg.	4
56	23277-01	SHAFT, Turntable and magnet arm	2
57	160-019	SHIELD, Switch	2
58	23205-01	SPACER, Door rod	1
59	69619-01	SPACER, Door hinge	A/R
60	23280-01	SPACER, Turntable arm	1
61	23291-01	SPRING, Door rod	1
62	23305-01	SPRING, Magnet arm	1
63	23258-01	STOP ASSEMBLY, Magnet arm	2
64	15917-01	STRIKER, Plate	1(-02)
65	23283-01	TURNTABLE ARM ASSEMBLY; includes B2	1
PC 65	23283-13	TURNTABLE ARM ASSEMBLY; includes B2	Effective 7-12-62
PC 65	23283-14	TURNTABLE ARM ASSEMBLY; includes B2	Effective 7-27-62
PC 65	23283-15	TURNTABLE ARM ASSEMBLY; includes B2	Effective 8-21-62
65-1	23251-01	Arm, Turntable	1
65-2	420-008	Ball, Nylon, 5/32 in. dia.	1
65-3	422-014	Bearing, Flanged sleeve	2
65-4	081-008	Belt, Vee, 14 in. o.c., size 0, 1/4 in. nom	1
PC 65-4	081-021	Belt, Vee, 12 in. o.c., size 0, 1/4 in. nom	Effective 7-27-62
65-5	260-028	Bushing, neoprene	2
65-6	23281-01	Hub, reel turntable	1
65-7	23279-01	Pulley, Turntable motor	2
QD 65-7	23279-01	Pulley, Turntable motor	Effective 7-12-62
PC 65-7	23279-3	Pulley, Turntable motor	Effective 7-12-62
PC 65-7	23279-10	Pulley, Turntable motor	Effective 7-27-62
PC 65-7	23279-11	Pulley, Turntable motor	Effective 8-21-62
A 65-8	23279-2	Pulley, Motor	Effective 7-12-62
PC 65-8	23279-21	Pulley, Motor	Effective 8-21-62
65-9	477-037	Screw, Set, headless, #6-32 x 3/8 in. lg.	4
PC 65-9	477-035	Screw, Set, headless, #6-32 x 1/4 in. lg.	Effective 8-21-62
65-10	23288-01	Shaft, Turntable	1
65-11	23285-01	Shield, Motor	1
65-12	60481-01	Spring, Detent	1
66	501-008	WASHER, Flat, #4	2
67	501-009	WASHER, Flat, #6	11
68	501-010	WASHER, Flat, #8	8
69	501-019	WASHER, Flat, #10	3
70	501-025	WASHER, Flat, 1/4 in.	2
71	501-027	WASHER, Flat, 3/8 in.	4
72	501-056	WASHER, Shim, 0.005 in. thk x 0.500 in. id	A/R
73	501-057	WASHER, Shim, 0.010 in. thk x 0.203 in. id	A/R
74	501-071	WASHER, Flat, 3/8 in.	4
PC 74	501-027	WASHER, Flat, 3/8 in.	Effective 9-22-61
75	502-004	WASHER, Lock, spring, #8	4
76	502-005	WASHER, Lock, spring, #10	6
77	502-014	WASHER, Lock, ext tooth, #6	5
78	502-027	WASHER, Lock, int. tooth, 0.022 in. thk	2
79	502-033	WASHER, Lock, int. tooth, #10	A/R
80	502-039	WASHER, Lock, ext. tooth, #6	1
81	506-012	WASHER, Finishing, #8	2(-02)
Revision Key: A: addition; PC: part no. change; QD: quantity decrease			

APP. "B"

2nd version / PARTS LIST

REF. NO.	PART DESCRIPTION	AMPEX PART NO.
	DEGAUSSER. Catalog Nos. 23070-01 and 23070-02	
B1	DOOR ASSEMBLY (-01 only)	23054-01
	STOP ASSEMBLY, magnet arm	23055-01
	COVER ASSEMBLY (-01 only)	23070-01
	LABEL, control diagram	23080-01
	TURNTABLE ARM ASSEMBLY	23083-01
	MOTOR, turntable	23041-02
	ARM, turntable	23081-01
	PULLEY, turntable	23079-01
	HUB, turntable	23081-01
	SHIELD, motor	23080-01
	SHAFT, turntable	23080-01
	BELT, V	001-000
	ROLL PIN	400-000
L1, L2	MAGNET ARM ASSEMBLY	23087-01
	MAGNET	23080-01
	GEAR, sector	23047-01
	YOKE, magnet arm	23040-01
	PLATE, side, coil support	23073-01
TS-0	TERMINAL STRIP, 4 terminals, Check part No. 4-170	100-012
	CONTROL ASSEMBLY	23086-01
	CONTROL BOX ASSEMBLY	23087-01
	COMPONENT PANEL ASSEMBLY	23087-01
	COMPONENT PANEL	23086-01
	HARNES ASSEMBLY	23011-01
K1	RELAY, SPDT	020-000
K2, K3	RELAY, DPDT	000-000
T1	TRANSFORMER: Siemens; 0.5v sec. Thordarson part No. 21700	001-017
TS1	TERMINAL STRIP: 3 terminals; Eukia part No. 800-40T-0M	100-040
	CORD SET: 7 ft; Cornish part No. 3534	004-000
	FUSE HOLDER: type 3AG, Littlefuse part No. 242000	000-001
S1	SWITCH, pushbutton, spot	120-010
CB1	CIRCUIT BREAKER: Weismann type RAM 12	120-000
CB2	CIRCUIT BREAKER: Weismann type LAM 12	120-007
DS2	PILOT LIGHT: green, Dialco part No. 0100-433	120-010
DS1	PILOT LIGHT: amber, Dialco part No. 0100-433	120-000
	CATCH: door, Monadnock Mills part No. 204147	011-000
DS1, DS2	LAMP: 0.5V .15A min. bayonet; G.E. part No. 67	000-000
F1	FUSE, cartridge, 150V 2A	070-000
	COVER ASSEMBLY, rack mounting (-01 only)	23080-01
	LABEL, special operating instructions	23080-01
	DOOR ASSEMBLY, rack mount (-01 only)	23080-01
	BRACKET, swing-out	23084-01
	BRACKET, switch actuator	23087-01
	DOOR, 10-1/2 inch	23080-01
	LATCH ASSEMBLY	10000-01
	BEARING PAD	10010-01
	BRACKET, door latch	10011-01
	SPRING	10020-01
	CAP	10020-01
	RESTAINER	10040-01
	EMBLEM, trade mark (-01 only)	7100-00
	LINK, cross tie	11120-01
	CLAMP, link switch	10127-01
	PANEL, bottom	05000-00
	PIVOT, magnet arm motor	02087-00
	ROD, magnet arm limit	00000-00
	SUPPORT, magnet arm motor	02001-00
	HANDLE, door (-01 only)	23070-01
	FRAME, degausser	23070-01
	SHAFT, turntable and magnet arm	23077-00
	JEWEL	23070-00
	SPACER, turntable arm	23080-01
	LINK, master	23080-01
	SPRING, door rod	23081-01
	ROD, door swing-out	23080-01
	STRIP, clamping	23080-01
	STRIP, clamping	23080-01
	SPACER, door rod	23080-01
	SPRING, solenoid	23080-01
	SPRING, magnet arm	23080-01
	HINGE (-01 only)	10047-01
	STRIKER PLATE (-01 only)	10017-01
SS, SS	SWITCH: SPDT	120-000
	SHIELD, switch	100-010
L3	SOLENOID: 110 VAC cycle	000-000
	CATCH: Monadnock Mills Part No. 204120 (-01 only)	011-000
B3	BLOWER: Bohn Part No. 27 CCW rotation	001-010
TS2	TERMINAL STRIP: 3 terminals, Check Part No. 5-170	100-012

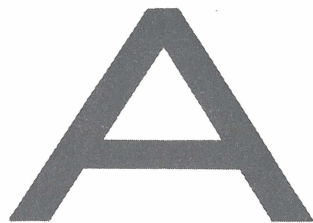
DEGAUSSER-MODEL SE-10



S2 & S3 SHOWN IN REST POSITION
ALL RELAYS SHOWN DEENERGIZED

PART NO. 9-22290-1

2nd VERSION / SCHEMATIC



FIRST IN MAGNETIC TAPE INSTRUMENTATION