

\$5.75

**MAGNETIC TAPE SYSTEMS
REFERENCE DOCUMENTS
FOR ALL "A" AND "P" SYSTEMS**

SDS 901040B

April 1967

This publication supersedes SDS 901040A-1
dated August 1965, revised February 1966.

SDS

SCIENTIFIC DATA SYSTEMS • 1649 Seventeenth Street • Santa Monica, Calif. • (213) 871-0960

© 1965, 66, 67, Scientific Data Systems, Inc.

INTRODUCTION

This is an updating packet for all Ampex and Potter Magnetic Tape Systems shipped.

It is to be integrated into and used in conjunction with the following documents:

1. Logic Diagrams, Magnetic Tape Control unit SDS 103257 D
2. Logic Diagrams, Magnetic Tape Unit SDS 103258 D

These two documents have been supplied as BINDER II of the respective Magnetic Tape Technical Manuals.

The "E" revision pages and Addendum sheets supplied in this package reflect the configurations of all magnetic tape systems presently in the field.

History logic configurations can be determined by the Addendum pages with the corresponding schematics affected. These Addendum pages are for reference only and are not to be used for reworking. The respective Engineering Change Order numbers are referenced to the changes.

Subsequent updating packets will be supplied to be collated by the user.

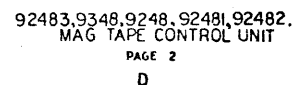
MASTER INDEX
(SDS 901040)

TITLE	SDS NUMBER
LOGIC DIAGRAMS, MAGNETIC TAPE CONTROL UNIT	103257E
LOGIC DIAGRAMS, MAGNETIC TAPE UNIT	103258E
POWER DISTRIBUTION, SCHEMATIC	102334B
ZK51 TERMINATION MODULE	101714
ZK56 TERMINATION MODULE	103015
ZK57 TERMINATION MODULE, SCHEMATIC	103470
ZK58 TERMINATION MODULE, SCHEMATIC	103473
ZK58 MATERIAL LIST	103474
ZK67, ZK68 TERMINATION MODULES	114062
ILLUSTRATED PARTS CATALOG, SEE MODULE DATA SHEETS (SDS 900623 AND SDS 980034) TM-4 MANUAL AND MT-120 MANUAL	
SUPPLIERS CODE INDEX	900036

NOTES UNLESS OTHERWISE SPECIFIED

1 RECEPTACLE J(25V) IS PROVIDED FOR THE P41 TO P40 CABLE. P40 IS CONNECTED TO J(16) OF THE MODEL 910 OR 920 COMPUTER, OR J(38X) OF THE MODEL 9120 Y BUFFER, OR TO J(1H) OR J(6H) OF THE MODEL 9126 SIGNAL COUPLER.

REVISIONS			103257
REV	DESCRIPTION	ENG	DATE
A	RELEASED TO MFG.		
D	SEE REV E.O.		



QTY REQD	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION
MATERIAL LIST			
NOTES UNLESS SPECIFIED		DRAWN <i>Jack</i>	 STANDARD DRAWING SERVICE 1545 KENTWOOD STREET, SUITE 100, GAITHERSBURG, MARYLAND
1. UNLESS NOTED, ALL DIMENSIONS ARE IN INCHES		CHECKED <i>1/10/82</i>	
2. DIMENSIONS IN PARENTHESIS ARE ALTERNATE		DATE <i>7/15/82</i>	
3. DIMENSIONS ALL SHOWN DIMENSIONS ARE APPROXIMATE		APPROVED <i>3/11</i>	
4. DIMENSIONS ALL SHOWN DIMENSIONS ARE APPROXIMATE		DATE <i>7/19/82</i>	
5. DIMENSIONS ALL SHOWN DIMENSIONS ARE APPROXIMATE		TITLE DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
MODEL NO. 9248		SIZE 8 1/2" x 11" D 103257	
SHEET COUNT 101872		SCALE SEE NEXT SCALE DRAWING	

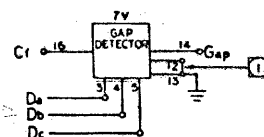
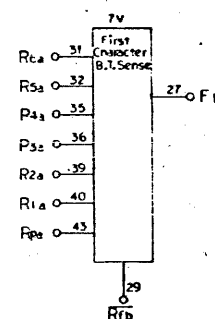
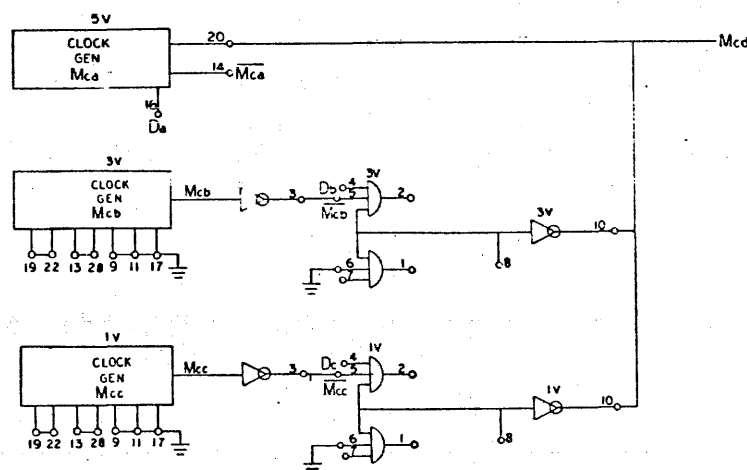
[illegible]

Panel	ITEM	Page
27	Mq1	12
	Mq	11
29	Mq2	14
	Mq	23
	Mq	10
31	Mq3	24
5, 6, 7	(Mq3)	22
5, 6, 7	(Mq3)	32
5, 6, 7	(Mq3)	29
8	Mq3	15
8	Mq3	20
8	Mq3	14
8	(Mq3)	24
21	Mq4	16
27	(Mq4)	26
29	(Mq4)	10
29	M1	16
29	(M1)	33
29	M2	14
29	(M2)	13
29	M3	15
29	(M3)	23
29	M4	19
29	(M4)	22
29	M5	18
29	(M5)	33
29	M6	15
29	(M6)	33
29		
31	Q1	21
31		
31	R1	21
31	R1	27
29	R2	27
29	R2	27
29	R3	27
29	R3	27
29	R4	21
29	R4	27
29	R5	21
29	R5	27
29	R6	21
29	R6	27
29	R7a	26
29	R7b	26
29	R8a	16
29	R8b	17
29	R9a	17
29	R9b	17
29	R10a	17
29	R10b	17
29	R11a	17
29	R11b	17
29	R12a	17
29	R12b	17
29	R13a	17
29	R13b	17
29	R14a	17
29	R14b	17
29	R15a	17
29	R15b	17
29	R16a	17
29	R16b	17
29	R17a	17
29	R17b	17
29	R18a	17
29	R18b	17
29	R19a	17
29	R19b	17
29	R20a	17
29	R20b	17
29	R21a	17
29	R21b	17
29	R22a	17
29	R22b	17
29	R23a	17
29	R23b	17
29	R24a	17
29	R24b	17
29	R25a	17
29	R25b	17
29	R26a	17
29	R26b	17
29	R27a	17
29	R27b	17
29	R28a	17
29	R28b	17
29	R29a	17
29	R29b	17
29	R30a	17
29	R30b	17
29	R31a	17
29	R31b	17
29	R32a	17
29	R32b	17
29	R33a	17
29	R33b	17
29	R34a	17
29	R34b	17
29	R35a	17
29	R35b	17
29	R36a	17
29	R36b	17
29	R37a	17
29	R37b	17
29	R38a	17
29	R38b	17
29	R39a	17
29	R39b	17
29	R40a	17
29	R40b	17
29	R41a	17
29	R41b	17
29	R42a	17
29	R42b	17
29	R43a	17
29	R43b	17
29	R44a	17
29	R44b	17
29	R45a	17
29	R45b	17
29	R46a	17
29	R46b	17
29	R47a	17
29	R47b	17
29	R48a	17
29	R48b	17
29	R49a	17
29	R49b	17
29	R50a	17
29	R50b	17
29	R51a	17
29	R51b	17
29	R52a	17
29	R52b	17
29	R53a	17
29	R53b	17
29	R54a	17
29	R54b	17
29	R55a	17
29	R55b	17
29	R56a	17
29	R56b	17
29	R57a	17
29	R57b	17
29	R58a	17
29	R58b	17
29	R59a	17
29	R59b	17
29	R60a	17
29	R60b	17
29	R61a	17
29	R61b	17

9348,92483,9248,92481,92402
MAG TAPE CONTROL UNIT

FORM NO. 101	ISSUING NO.	DESCRIPTION	REFERENCE DESIGNATION
MAGNETIC UNIT			
PARTS (INCLUDE SUB-ASSEMBLY) 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822.			

REVISIONS		103257	D
REV.	DESCRIPTION	DATE	BY
A	REL. TO MFG.	10/1/68	103
B	SEE REV. E.O.		
C	SEE REV. E.O.		



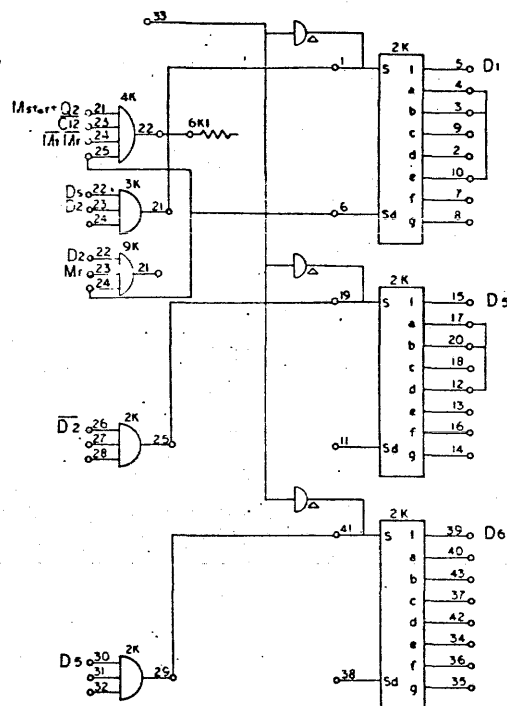
1 REMOVE JUMPER FOR MODEL 92463.

MODEL	FREQUENCY/PERIOD μs			GAP DETECTOR SETTING IN μs		
	POSITION 5V Mca	POSITION 3V Mcb	POSITION 1V Mcc	Da	Db	Dc
9248	15KC	41.7 KC	NOT USED	150	54	NOT USED
92481	15KC	NOT USED	NOT USED	150	NOT USED	NOT USED
92482	15KC	41.7 KC	60KC	150	54	37
92483	24KC	65.22KC	56KC	95	34	23
9346	41.6 μs	15 μs	10.4 μs	185	67	46

9348,
92483, 9248, 92481, 92482
TAPE CONTROL
PAGE 4
D

NO. REV.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION
NOTES UNLESS SPECIFIED: 1. TOLERANCES: 2. DIMENSIONS: 3. DIMENSIONS: 4. DIMENSIONS: 5. DIMENSIONS: CHECKED: ☐ APPROVED: ☒			
MODEL NO. 9248 DATE: 10/1/68 SCALE: 1:1 BY: 103			
103257 D 103257 D			

REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG	7-72	[Signature]
D	SEE REV E.O.		

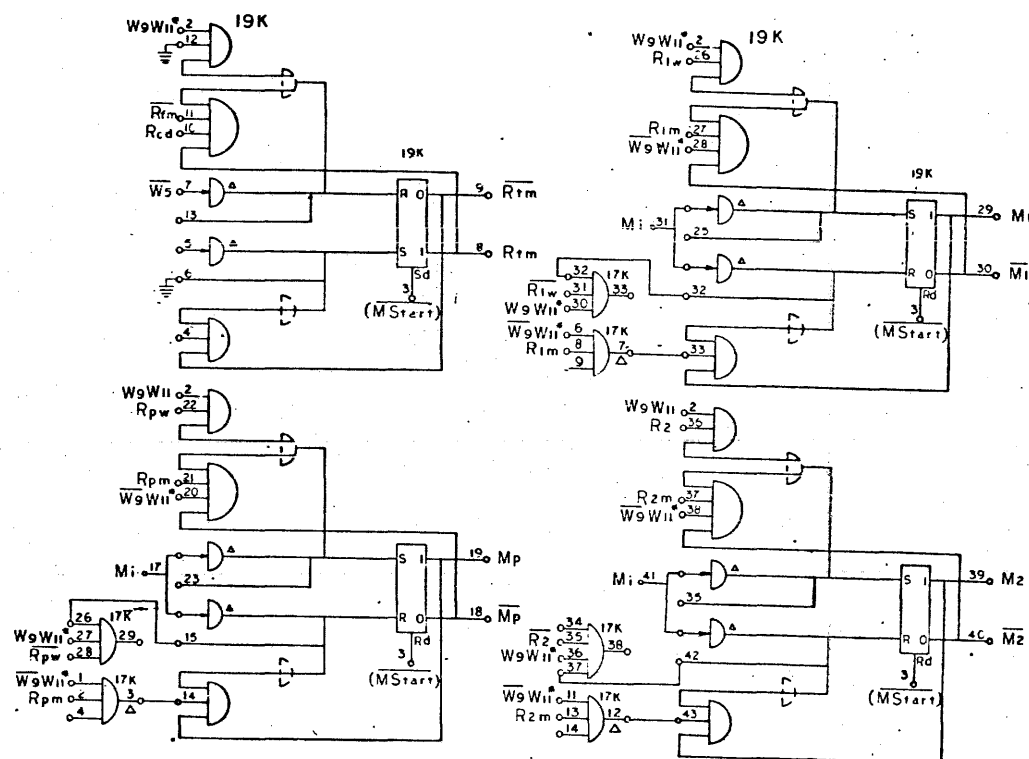


MODEL	D1	D5	D6
9248	4.7ms	350us	10us
92481	4.7ms	350us	
92482	4.7ms	350us	
92483	3.8ms	250us	
9348	6 ms	425us	10us

9348,
92483, 92481, 92482
TAPE CONTROL
PAGE 12
D

NO. REV	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	DATE
NOTES UNLESS SPECIFIED		MATERIAL LIST		
1. TOLERANCES UNLESS SPECIFIED ARE 1/16" ANGLES 30°		SDS SEMICONDUCTOR DATA SYSTEMS 1001 CALIFORNIA STREET, SANTA MONICA, CALIFORNIA 90406		
2. DIMENSIONS AND SHOWN DIMENSIONS ARE IN INCHES		TITLE DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		
3. DIMENSIONS ARE IN INCHES		MODEL NO. 9248		
4. DIMENSIONS ARE IN INCHES		REV. NO. D 103257		
5. DIMENSIONS ARE IN INCHES		D		
6. DIMENSIONS ARE IN INCHES		SCALE DO NOT SCALE DRAWING		
7. DIMENSIONS ARE IN INCHES		SHEET		

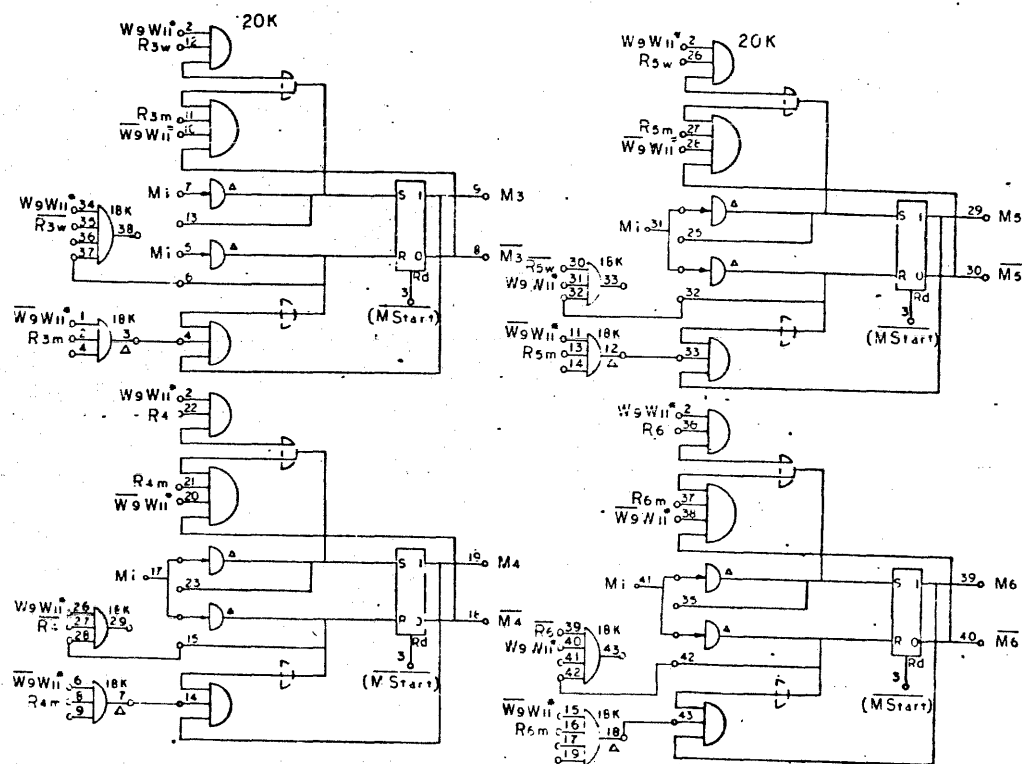
REVISING				103257
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG.			
D	SEE REV E.O.			



9348
92483,9248.92481,92482
TAPE CONTROL
PAGE 14
D

[illegible]

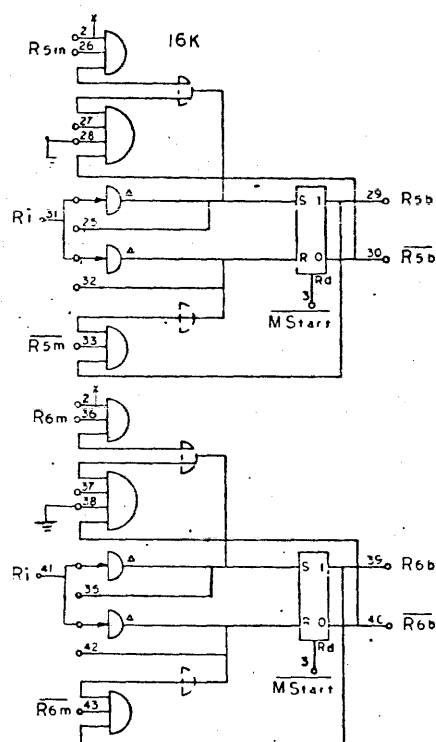
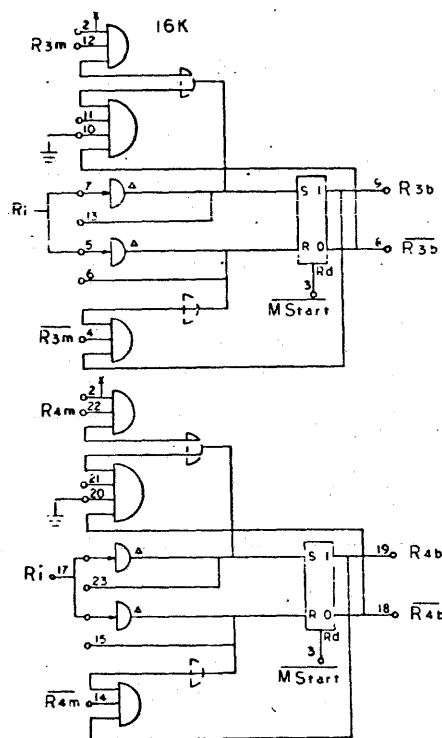
REVISING				03257
REV	DESCRIPTION	ENG	DATE	APPROVED
A	REL TO MFG			
D	SEE REV E.O.			



9348
92483, 9248, 92481, 92482
TAPE CONTROL
PAGE 15
D

[illegible]

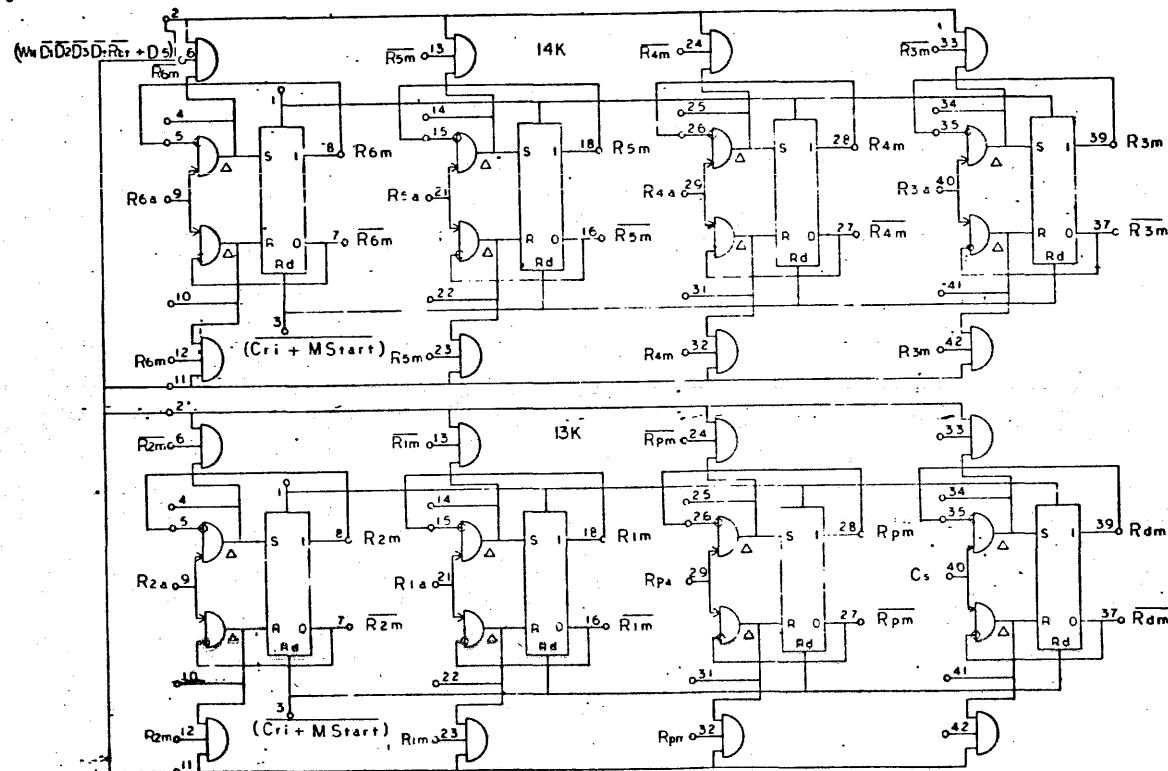
REV	DESCRIPTION	DATE	BY	APP'D
A	QS TO EFG			
C	SEE REV E.O.			



9348.
92483, 9248, 92481, 92482
TAPE CONTROL
PAGE 17
D

NO	REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION	REV
NOTES UNLESS SPECIFIED 1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. 2. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED. 3. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED. 4. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED. 5. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.					
SDS SCIENTIFIC DATA SYSTEMS DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT			MODEL NO 9248 REV D ENC NO 103257 SCALE 1/8" = 1"		

REVISED				103257	D
REV	DESCRIPTION	DATE	BY	APPROVED	
A	REL TO MFG	11/1/68			
D	SEE REV EO.	11/1/68			

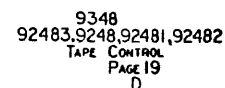


9348.
92483,9248,92481,92482

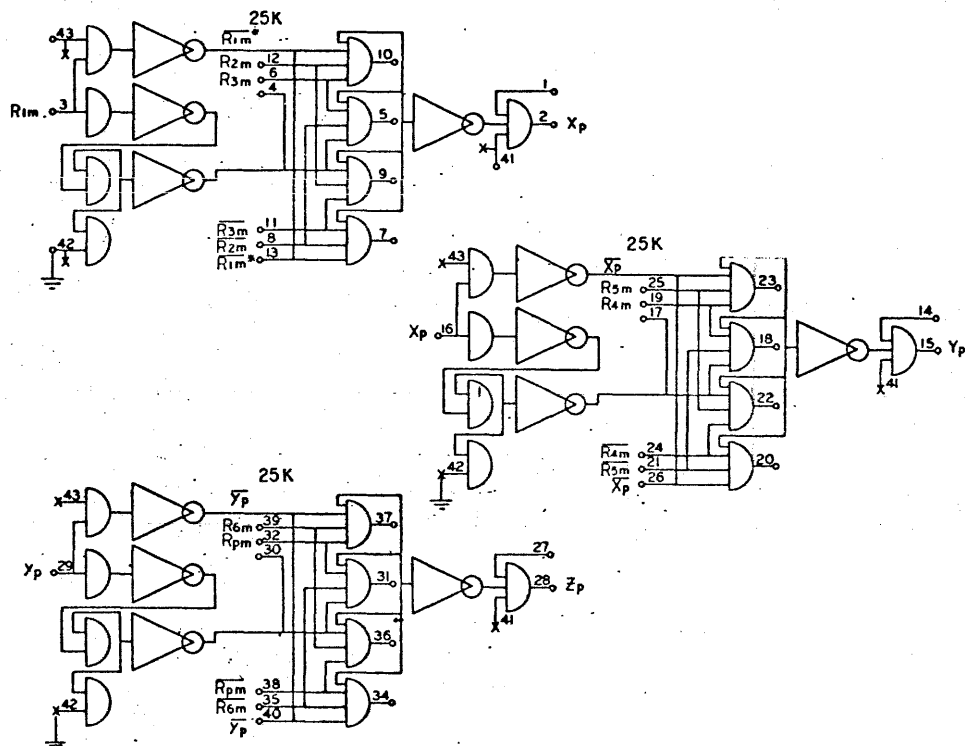
TAPE CONTROL
PAGE 18
D

NO	ISSUING NO	DESCRIPTION	REFERENCE DESIGNATION	UNIT NO
MATERIAL LIST				
NOTES UNLESS SPECIFIED		DRAWN	DATE	
1. TOLERANCES UNLESS SPECIFIED ARE AS SHOWN ON DRAWING		CHECKED	7/4/53	
2. SPECIFY ALL SURFACE FINISHES		APPROVED	7/4/53	
3. DIMENSIONS UNLESS SPECIFIED		TITLE		
4. ALL DIMENSIONS UNLESS SPECIFIED		DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		
MODEL NO	9248	REV	REV NO	D
MILITARY		DO NOT SCALE DRAWING	103257	
		SCALE		

103257	0
--------	---

11

REV	DESCRIPTION	DATE	BY
A	REL TO INFO		
D	SEE RE / E.O.		

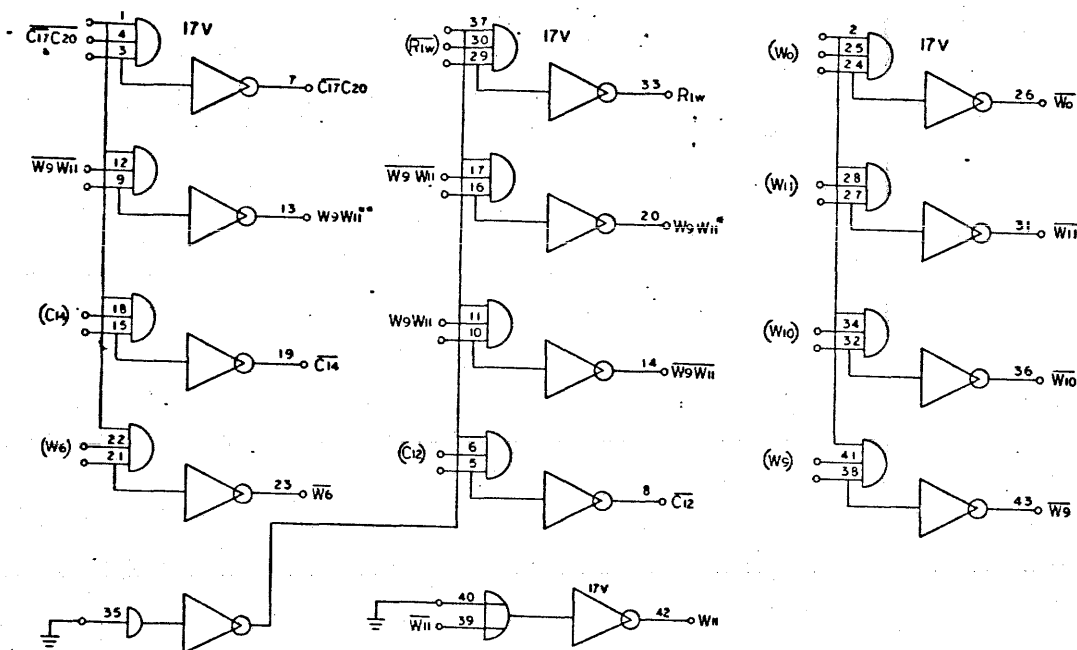


9348
92483,9248,92481,92482
TAPE CONTROL
PAGE 23

D

NO. REV.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	DATE
1	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62
2	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62
3	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62
4	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62
5	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62
6	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62
7	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62
8	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62
9	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62
10	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		10/1/62

REVISIONS				103257	D
REV	DESCRIPTION	CHK	DATE	APPROVED	
A	REL. TO MFG				
C	SEE REV. E.D.				



9348,
92483,9248,92481,92482
TAPE CONTROL
PAGE 24
D

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

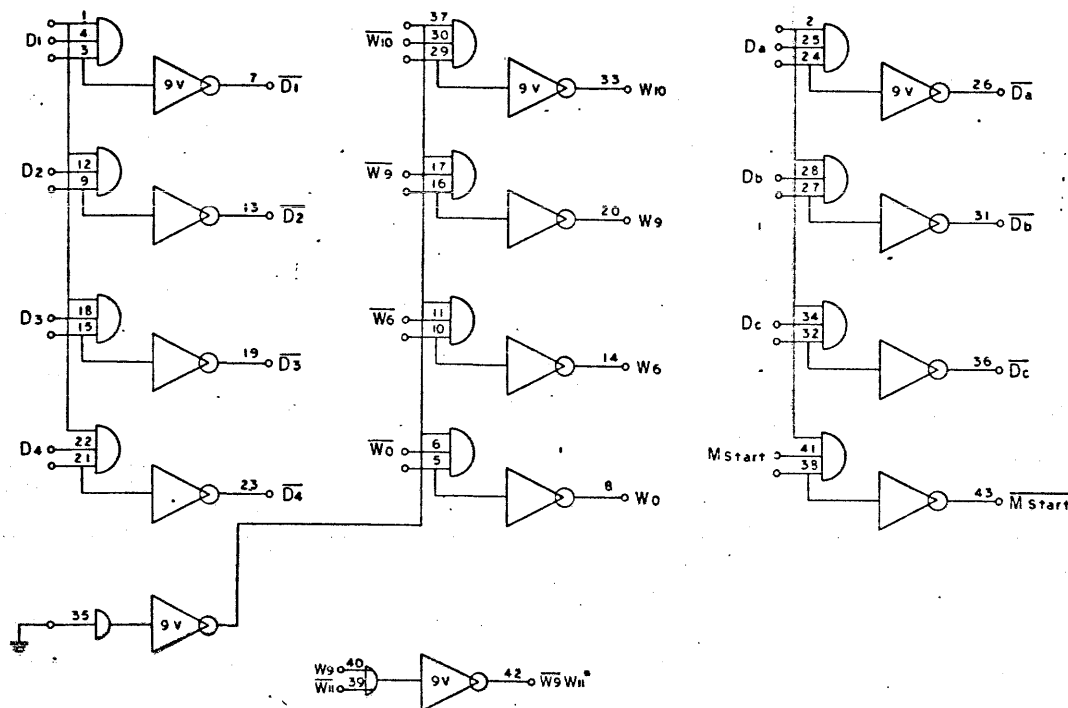
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG			
C	SEE REV. E.D.			

REV	DESCRIPTION	CHK
-----	-------------	-----

REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG	7/5	103257
D	SEE REV E.O.	1/1	103257



9348,9248,9248I,92482,92483

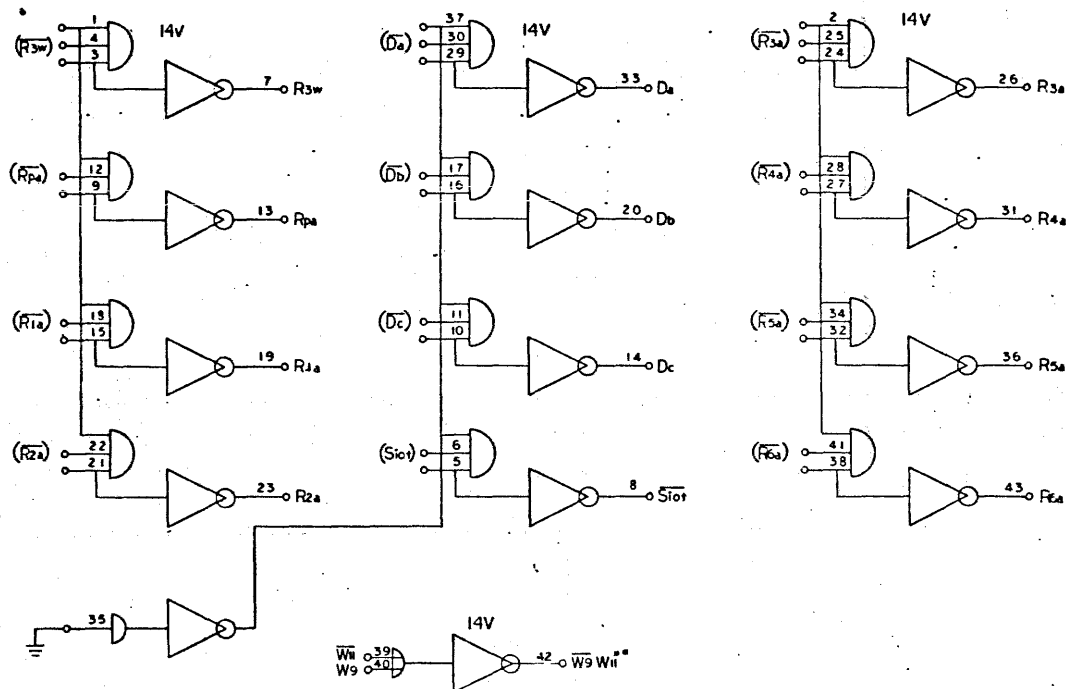
TAPE CONTROL

PAGE 25

D

DWG NO	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION
103257	103257	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
9248	9248		
D	103257		D

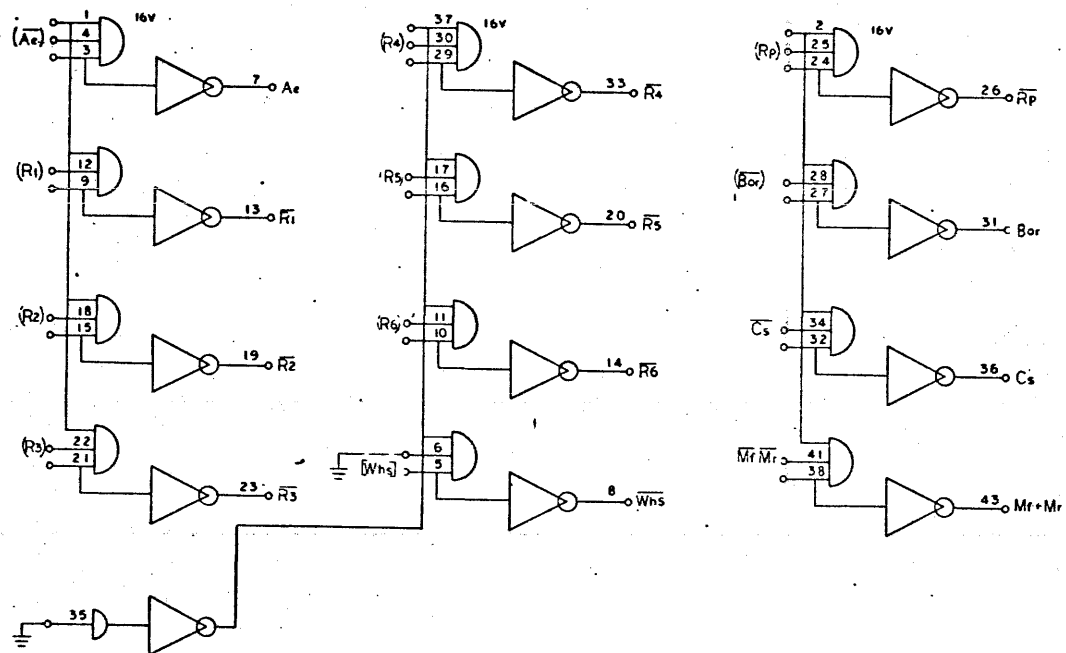
REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG.	5/11/71	[Signature]
D	SEE REV E.D.	11/1/71	[Signature]



9348,
92483,9248,92481,92482
TAPE CONTROL
PAGE 26
D

DWG NO	DESCRIPTION	REFERENCE DESIGNATION	REV								
9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		D								
<table border="1"> <tr> <th>DATE</th><th>BY</th><th>CHKD</th><th>APPD</th></tr> <tr> <td>7/1/71</td><td>[Signature]</td><td>[Signature]</td><td>[Signature]</td></tr> </table>				DATE	BY	CHKD	APPD	7/1/71	[Signature]	[Signature]	[Signature]
DATE	BY	CHKD	APPD								
7/1/71	[Signature]	[Signature]	[Signature]								
<table border="1"> <tr> <th>SCALE</th><th>UNIT</th><th>SCALE</th><th>UNIT</th></tr> <tr> <td></td><td></td><td></td><td></td></tr> </table>				SCALE	UNIT	SCALE	UNIT				
SCALE	UNIT	SCALE	UNIT								

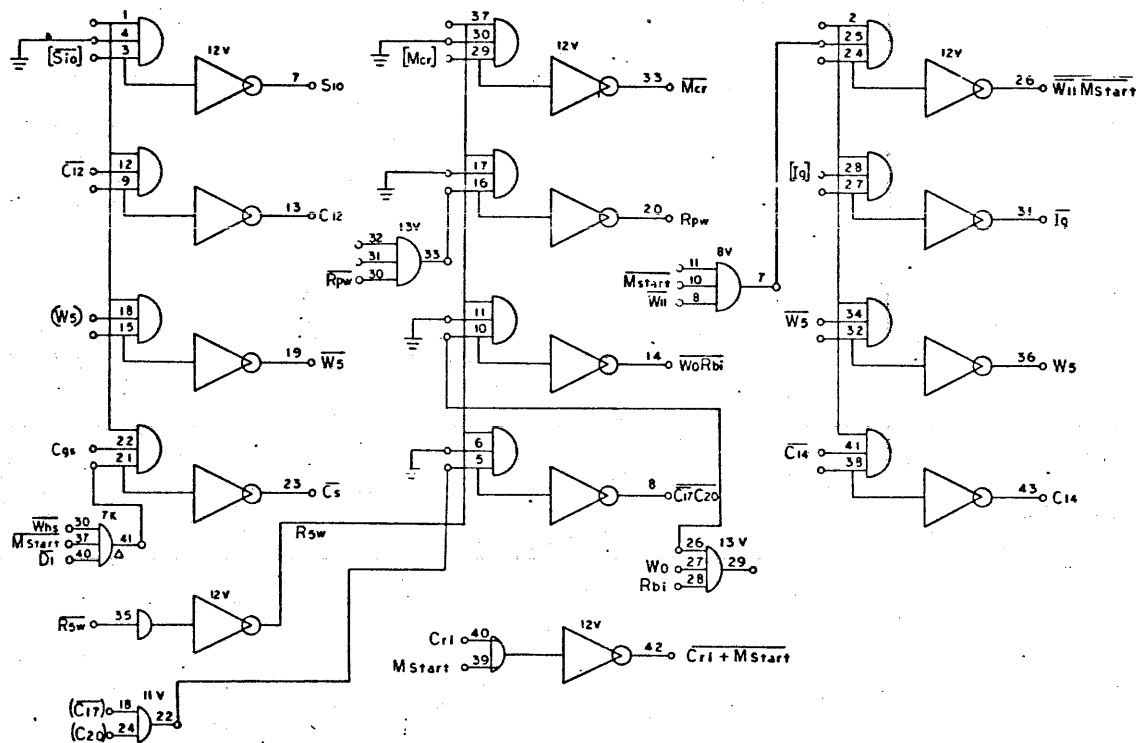
REVISIONS				103257	D
REV	DESCRIPTION	DATE	APPROVED		
A	REL TO MFG	1/7			
D	SEE REV E O	1/7			



9348.
92483,9248,92481,92482
TAPE CONTROL
PAGE 27
D

REV	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV
NOTES UNLESS SPECIFIED				
1. TOLERANCES	DRAWN	CHECK	DATE	
2. DIMENSIONS				
3. HOLE DIA. UNLESS SHOWN				
4. HOLE DEPTH				
5. ALL DIM. IN INCHES				
MATERIAL LIST				
SDS SENSITIVE DATA SYSTEMS				
1045 KATELINO STREET, SANTA MONICA, CALIFORNIA				
TITLE				
DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT				
MODEL NO.	9248		REV	D
DRAWN BY			DATE	103257
CHECKED BY			SCALE	D
DO NOT SCALE DRAWING				
SHEET				

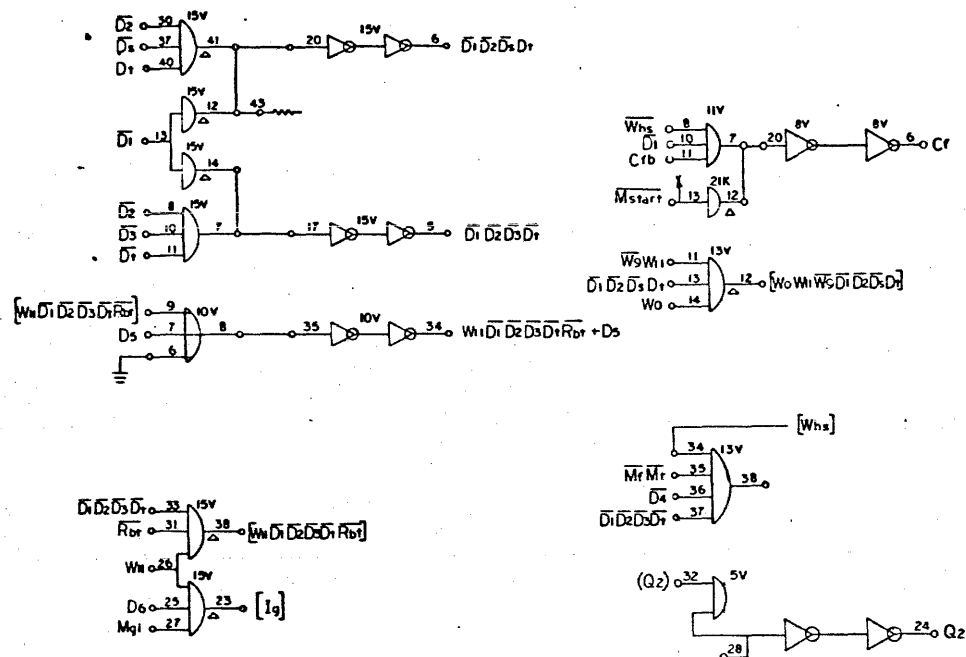
REVISING				103257	D
REV	DESCRIPTION	CHK	DATE	APPROVED	
A	REL. TO MFG	E	10	[Signature]	
D	SEE REV E.O.	OK	10/6	[Signature]	



9348,
92483,9248,92481,92482
TAPE CONTROL
PAGE 28
D

NO.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	UNIT NO.
MATERIAL LIST				
NOTES UNLESS SPECIFIED		DRAWN	CHECKED	
1. TOLERANCES UNLESS OTHERWISE SPECIFIED		DATE	DATE	
2. UNLESS ALL DIMENSIONS ARE SPECIFIED		APPROVED	DATE	
3. MATCH SHOWN		DATE		
4. MATCH SHOWN		DATE		
TITLE				
DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT				
MODEL NO.	SIZE	DATE	D	
9248		103257	D	
NEXT ASST.	SCALE	DO NOT SCALE ON VARIOUS	UNLESS	

REVISIONS			103257
REV	DESCRIPTION	ENG	DATE APPROVED
A	REL. TO MFG.	10	JAN 1964
C	SEE REV. E.O.	10	JAN 1964
D	SEE REV. E.O.	10	JAN 1964

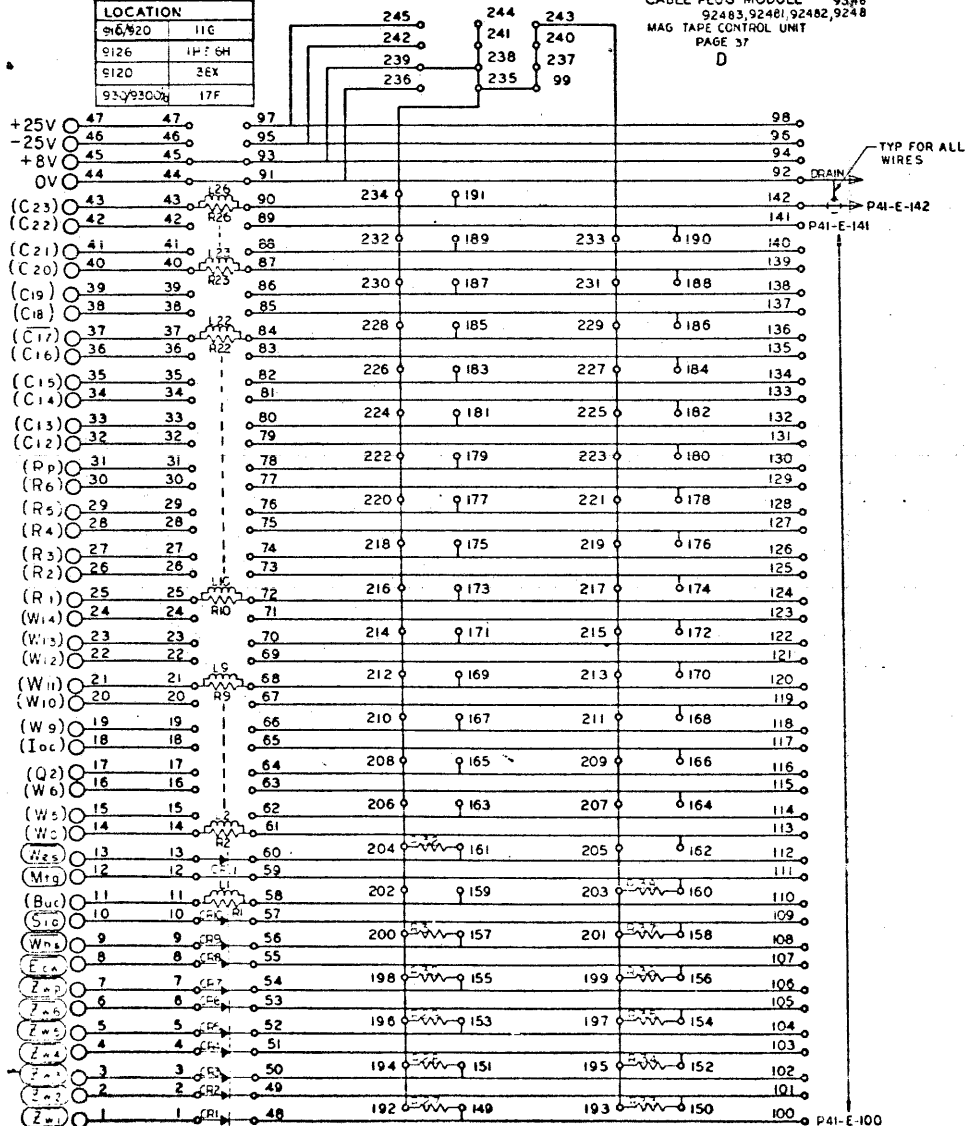


9348.
92483 9248, 92481, 92482
TAPE CONTROL
PAGE 31
D

NO		DRAWING NO		DESCRIPTION		REFERENCE DESIGNATION	
MATERIAL LIST							
NOTES AND SPECIFICATIONS				QUANTITY	UNIT	MATERIAL	
1. THIS DRAWING IS A PART OF THE DRAWING SET FOR THE PROJECT. 2. ALL DIMENSIONS ARE IN INCHES. 3. ALL DIMENSIONS ARE TO BE MAINTAINED. 4. ALL DIMENSIONS ARE TO BE MAINTAINED.				100	100	100	
				100	100	100	
				100	100	100	
				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 100				100	100	100	
1. 100 2. 100 3. 100 4. 10							

DESIGNATION P40	
KEY 6-2E	
LOCATION	
9126	11G
9126	1P7 6H
9120	3EX
9349300	17F

CABLE PLUG MODULE 9348
92483, 92481, 92482, 9248
MAG TAPE CONTROL UNIT
PAGE 37
D

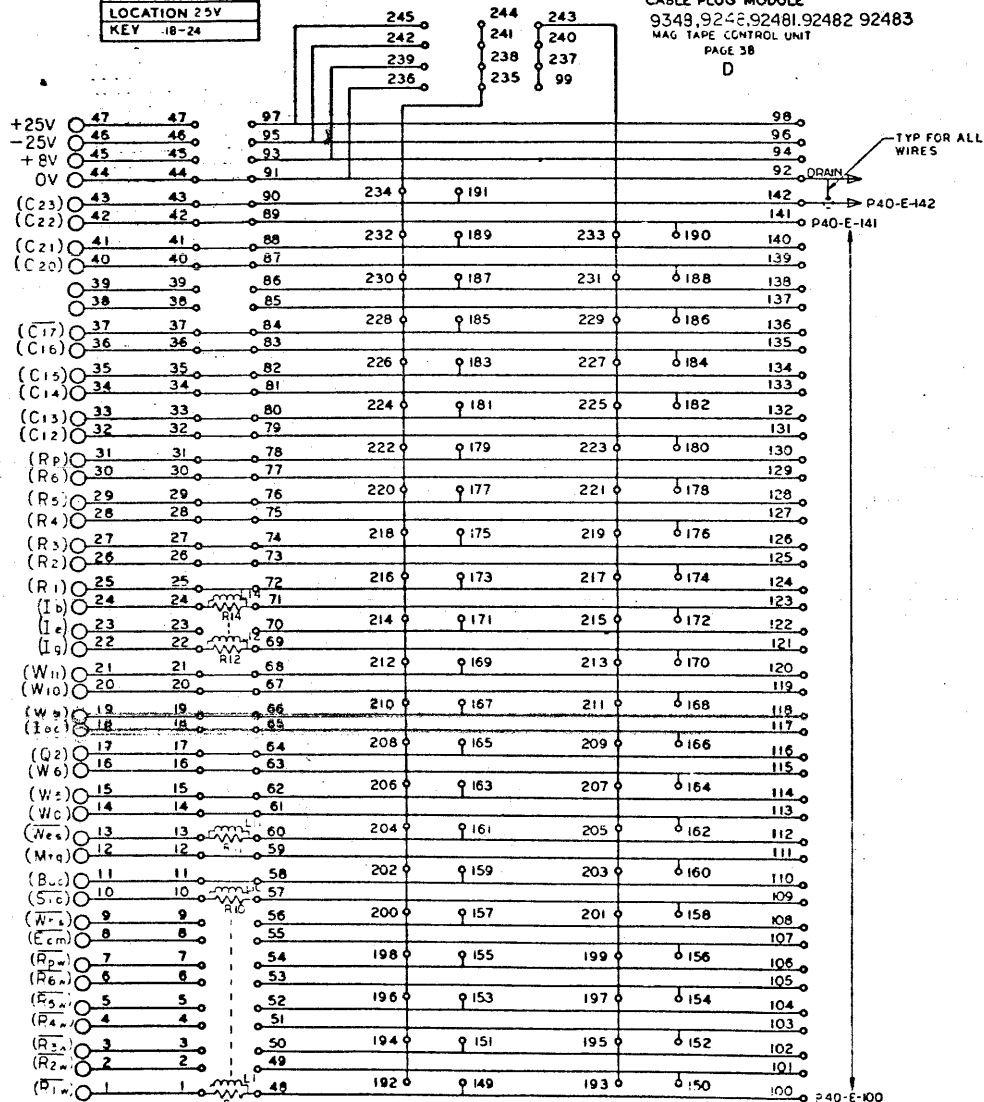


REVISIONS		DATE	APPROVED
REV	DESCRIPTION	DATE	APPROVED
A	REL. TO MFG.		
D	SEE REV E.O.		

NO.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION
1	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
2	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
3	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
4	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
5	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
6	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
7	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
8	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
9	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
10	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
11	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
12	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
13	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
14	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
15	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
16	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
17	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
18	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
19	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
20	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
21	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
22	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
23	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
24	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
25	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
26	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
27	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
28	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
29	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
30	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
31	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
32	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
33	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
34	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
35	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
36	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
37	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
38	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
39	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
40	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
41	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
42	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
43	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
44	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
45	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
46	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
47	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
48	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
49	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
50	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
51	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
52	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
53	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
54	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
55	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
56	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
57	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
58	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
59	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
60	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
61	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
62	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
63	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
64	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
65	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
66	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
67	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
68	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
69	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
70	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
71	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
72	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
73	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
74	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
75	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
76	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
77	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
78	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
79	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
80	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
81	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
82	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
83	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
84	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
85	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
86	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
87	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
88	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
89	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
90	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
91	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
92	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
93	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
94	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
95	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
96	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
97	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
98	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
99	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
100	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	

DESIGNATION P41
LOCATION 25V
KEY -18-24

CABLE PLUG MODULE
9348, 9248, 92481, 92482, 92483
MAG TAPE CONTROL UNIT
PAGE 38
D



REV	DESCRIPTION	DATE	BY	103257
A	REL. TO MFG.			
D	SEE REV E.O.			

REV	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV
1	103257	DIAGRAM, LOGIC MAG TAPE CONTROL UNIT		D
2	103257			D
3	103257			D
4	103257			D
5	103257			D
6	103257			D
7	103257			D
8	103257			D
9	103257			D
10	103257			D
11	103257			D
12	103257			D
13	103257			D
14	103257			D
15	103257			D
16	103257			D
17	103257			D
18	103257			D
19	103257			D
20	103257			D
21	103257			D
22	103257			D
23	103257			D
24	103257			D
25	103257			D
26	103257			D
27	103257			D
28	103257			D
29	103257			D
30	103257			D
31	103257			D
32	103257			D
33	103257			D
34	103257			D
35	103257			D
36	103257			D
37	103257			D
38	103257			D
39	103257			D
40	103257			D
41	103257			D
42	103257			D
43	103257			D
44	103257			D
45	103257			D
46	103257			D
47	103257			D
48	103257			D
49	103257			D
50	103257			D
51	103257			D
52	103257			D
53	103257			D
54	103257			D
55	103257			D
56	103257			D
57	103257			D
58	103257			D
59	103257			D
60	103257			D
61	103257			D
62	103257			D
63	103257			D
64	103257			D
65	103257			D
66	103257			D
67	103257			D
68	103257			D
69	103257			D
70	103257			D
71	103257			D
72	103257			D
73	103257			D
74	103257			D
75	103257			D
76	103257			D
77	103257			D
78	103257			D
79	103257			D
80	103257			D
81	103257			D
82	103257			D
83	103257			D
84	103257			D
85	103257			D
86	103257			D
87	103257			D
88	103257			D
89	103257			D
90	103257			D
91	103257			D
92	103257			D
93	103257			D
94	103257			D
95	103257			D
96	103257			D
97	103257			D
98	103257			D
99	103257			D
100	103257			D

PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG
1	E								
2	D								
3	E								
4	D								
5	E								
6	E								
7	E								
8	E								
9	E								
10	E								
11	E								
12	D								
13	E								
14	D								
15	D								
16	E								
17	D								
18	D								
19	D								
20	E								
21	D								
22	E								
23	D								
24	D								
25	D								
26	D								
27	D								
28	D								
29	E								
30	E								
31	D								
32	E								
33	E								
34	E								
35	E								
36	E								
37	D								
38	D								
39	E								
40	E								

REFERENCE DESIGNATIONS
ARE ABBREVIATED.
PREFIX THE DESIGNATION
WITH UNIT NUMBER
OR ASSEMBLY DESIGNATION
OR BOTH. (MIL. STD. 168)

- NOTES:
1. REV. LETTERS LISTED INDICATE STATUS OF EACH SHEET OF THIS MULTIPLE SHEET DRAWING.
2. CHECK INDIVIDUAL SHEETS FOR REVISION LETTER AGAINST THIS SHEET BEFORE USING THIS DRAWING.

* NOT USED ON 92481.

** NOT USED ON 92481, 9248.

9348,
92483, 9248, 92481, 92482
MAG TAPE CONTROL UNIT
PAGE 1
E

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG	10-1-57	
B	SEE REV. E.O.		
C	SEE REV. E.O.		
D	SEE REV. E.O.		
E	SEE REV. E.O.		

DESIGN NO.	9248	DESCRIPTION	DIAGRAM, LOGIC MAG TAPE CONTROL UNIT	REFERENCE DESIGNATION	E																																				
<table border="1"> <tr> <td>NOTES UNLESS SPECIFIED</td><td>DRAWN</td><td>CHECKED</td><td>APPROVED</td><td>DATE</td><td>BY</td></tr> <tr> <td>1. PULL-UP</td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>2. PULL-DOWN</td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>3. PULL-UP AND PULL-DOWN</td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>4. PULL-UP AND PULL-DOWN</td><td></td><td></td><td></td><td></td><td></td></tr> <tr> <td>5. PULL-UP AND PULL-DOWN</td><td></td><td></td><td></td><td></td><td></td></tr> </table>						NOTES UNLESS SPECIFIED	DRAWN	CHECKED	APPROVED	DATE	BY	1. PULL-UP						2. PULL-DOWN						3. PULL-UP AND PULL-DOWN						4. PULL-UP AND PULL-DOWN						5. PULL-UP AND PULL-DOWN					
NOTES UNLESS SPECIFIED	DRAWN	CHECKED	APPROVED	DATE	BY																																				
1. PULL-UP																																									
2. PULL-DOWN																																									
3. PULL-UP AND PULL-DOWN																																									
4. PULL-UP AND PULL-DOWN																																									
5. PULL-UP AND PULL-DOWN																																									
<table border="1"> <tr> <td>SCALE</td><td>DO NOT SCALE DRAWING</td><td>REVISION</td><td>1</td><td>DATE</td><td>10-1-57</td></tr> </table>						SCALE	DO NOT SCALE DRAWING	REVISION	1	DATE	10-1-57																														
SCALE	DO NOT SCALE DRAWING	REVISION	1	DATE	10-1-57																																				

Change	Reason
<u>103257A</u> Remove Resistor R1 (47 K Ω) from location 9K from Pin 40 to Pin 47. Add wire from Pin 40 to Pin 43 location 9K. Refer to Logic page 22 OX14 Module used for 92483 models	<u>EO 103140C</u> <u>EO 103403J</u> 800 BPI Operation Cri Timing Change. 200 KΩ Resistor in OX13 is used instead of 47 KΩ external. See page 22 Addendum for One Shot Timing Adjustment change.
<u>103257E</u> Added resistor 220 Ω 1/2 watt part #100111-221 from Pin 10V26 to 10V44 on back of chassis.	<u>EO 103140D</u> <u>EO 107512B</u> Resistor added for Digital to stair case test point. See page 29E for logic change.

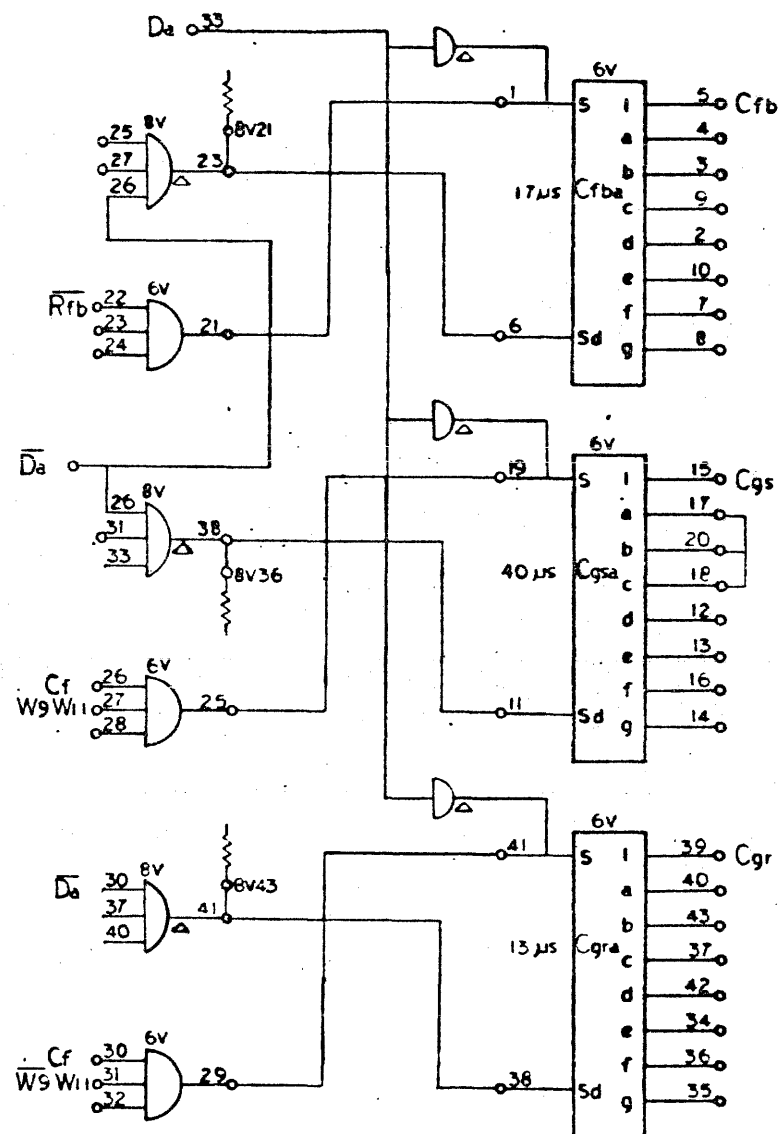
Signal	Logic Pages	Signal	Logic Pages	Signal	Logic Pages	Signal	Logic Pages	Signal	Logic Pages
Ae	27 22	(C17)	37 28, 38	W11 R2b	21 10	(Mrs)	32	R5	21
(Ae)	27	C17 C20	24 29, 30, 34, 35	(lb)	36 38	M Start	29 8A, 13, 25, 28, 20, 32	(R5)	37 27, 38
Bor	27 9, 32	C17 C20	28 24, 30	(lb)	36	M Start	25 8, 10, 11, 15, 16, 17, 28, 31	R5	27 19, 21
(Bor)	27	(C20)	37 28, 38	(Ie)	36 38	M Start Rbi	8 9	R6	21 15
Buc	37 29, 38	(C21)	37 35, 38	(Ie)	36	M Start Q2	30 10, 11, 12, 34	(R6)	37 27, 38
Cf	31 4, 5, 6, 7, 8, 10, 22	(C21)	35	Ig	28	(M Start Q2)	34	R6	27 19, 21
Cfba	5	(C22)	37 35, 38	(Ig)	35 38	Mtg	10 11, 38	[R1 R2]	19
Cfbb	6	(C22)	35	Ig	35	Mtg	10	R1a	26 4, 18, 29
Cfbc	7	(C23)	37 35, 38	[Ig]	31 28	(Mtg)	36 30, 37	(R1a)	26
Cfb	31	(C23)	35	Ioc	37 30	(Mw)	32	R2a	26 4, 18, 29
Cfra	5	Da	26 4, 5, 25	Mc	22 8, 9, 29, 36	M1	14 33	(R2a)	26
Cfrb	6	Da	25 5	(Mc)	36	MT	14 21	R3a	26 4, 18, 29
Cfrc	7	(Da)	26	Mca	4	(MT)	33	(R3a)	26
Cfr	8	Db	26 4, 6, 25	(Mca)	34	M2	14 33	R4a	26 4, 18, 29
Cfsa	5	Db	25 6	Mca	4 34	M2	14 21	(R4a)	26
Cfsb	6	(Db)	26	Mcb	4	(M2)	33	R5a	26 4, 18, 29
Cfsc	7	Dc	26	Mcb	4	M3	15 33	(R5a)	26
Cfs	28	Dc	25 7	Mcc	4	M3	15 21	R6a	26 4, 18, 29
Cr	8 5, 29	(Dc)	26	Mcc	4	(M3)	33	(R6a)	26
Cr W3 W6	5 6, 7	Ds	13 12	Mod	4 22	M4	15 33	R1b	16 19, 32
Cr + Cs	8D	Ds	13 10, 16, 31	M Control	30 13, 16, 34	M4	15 21	R1b	16 19, 21
Cr + W9 W11 Mc	8 9	Dt	13 10, 11, 30, 31	M Control	34	(M4)	33	R2b	16 19, 21, 22, 32
Cr + Cf W9 W11	8 13	Dt	13 11, 31	[Mcr]	29 28	M5	15 33	R2b	16 19, 21
Cri	22 28	D1	12 13, 22, 24, 32	Mcr	28 10	M5	15 21	R3b	17 19, 21
Cri + M Start	28 18	D1	25 8, 28, 31	Me	10 19, 22	(M5)	33	R3b	17
Cs	27 8A, 9, 18, 22	D1 D2 D3 Dt	31 16, 21, 31, 32	Me	10 19, 22	M6	15 33	R4b	17 20, 21
Cs	28 9, 27	D1 D2 Ds Dt	31 11, 13, 29	Mf	10 11, 34	M6	15 21	R4b	17 19
C12	28 10, 34	D2	11 12, 13, 25, 30	Mf	10	(M6)	33	R5b	17 19, 21
(C12)	37 24, 34, 38	D2	25 12, 31	(Mf)	34	Q2	31 11, 13, 30	R5b	17
C12	24 10, 12, 28, 29	D2 + Dt	30 36	Mf Mr	11 12, 27, 31	(Q2)	37 31	R6b	17 20, 21
(C12)	34	D3	11 13, 25	Mf + Mr	27 11, 31	R1	21 19	R6b	17 19
C12 C13 C15 C16	29 13, 16, 30	D3	25 31	Mgi	13 31	(R1)	37 27, 38	[R1b R2b]	19
(C13)	37 29, 35, 38	D4	11 25	Mgi	13	R1	27 19, 21	[R2b R1b]	19
(C13)	35	D4	25 11, 31	Mi	30 14, 15	R2	21 14, 19	R1m	18 14, 16, 23
C14	28 10, 16, 30, 34	D5	12 13, 31, 36	Mpc	21 22	(R2)	37 27, 38	R1m	18 16, 21, 23
(C14)	37 24, 38	D5	30A	Mp	14 33	R2	27 14, 19, 21	R1m*	23
C14	24 10, 13, 28, 30	D6	12 22, 31	Mp	14 21	R3	21	R2m	18 14, 16, 23
(C14)	34	(Ecm)	32 38	(Mp)	33	(R3)	37 27, 38	R2m	18 11, 21, 23
(C15)	37 29, 35, 38	(Ecm)	37	Mr	10 11, 12, 29, 32, 34	R3	27 19, 21	R3m	18 15, 17, 23
(C15)	35	Fb	4 9, 13	Mr	10	R4	21 15	R3m	18 17, 21, 23
(C16)	37 29, 35, 38	Gap	4 21	(Mr)	34	(R4)	37 27, 38	R4m	18 15, 17, 23
(C16)	35	Gap + W9 W10		(Mre)	32	R4	27 15, 19, 21	R4m	18 17, 21, 23

SIGNAL DIRECTORY (Continued)

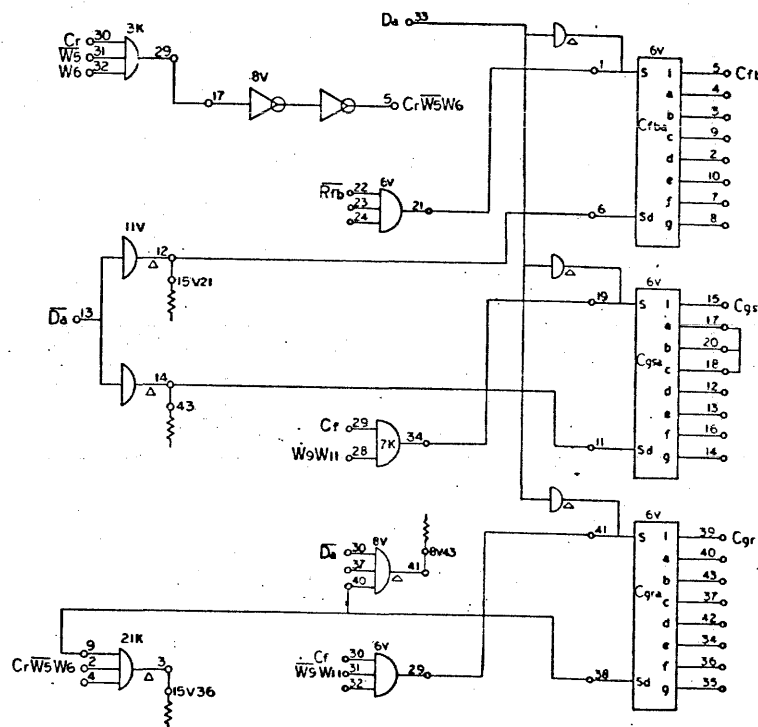
Signal	Logic Pages	Signal	Logic Pages	Signal	Logic Pages	Signal	Logic Pages	Signal	Logic Pages
R5m	18 15, 17, 23	Rbt	9	[Rpw]	19, 20	[W0 W9 W11 DT — D2 D5 Dt]	31 29	W9 W11	32 24, 33
R5m	18 17, 21, 23	Rbt	9 31	Rpw	14, 28	W0 W5 W6 W9 W11	11 16	W9 W11 Me	19
R6m	18 15, 17, 23	Rdm	18 22	(Rpw)	20 38	W0 W5 W6 W9 W11	11 16	W9 W11 Me	19
R6m	18 17, 21, 23	Rdm	18 22	Rse	9 22	W5	28 11	W9 W11 Me	19
R1w	24 14	Rfb	13	Rse	9	(W5)	37 28, 38	(W9 W11)	32
(R1w)	24	Rfb	13 4, 5, 6, 7, 29	RtM	29	W5	28 5, 8, 9, 14, 29, 30, 32	W9 W11 Me	19
[R1w]	19, 20	Rfd	9 8, 22, 29	Rtm	30 29, 30	(W5 W9 W11 Rcd + W9 W11 Mc Rfd)	8 9	W10	25 21, 32
R1w	14	Rfd	9	Rtm	14	W6	25 5, 9, 30	(W10)	37 24, 38
(R1w)	20 38	Rfm	21 14	Rtm	14	(W6)	37 24, 38	W10	24 10, 25, 30
(R2w)	20 38	Ri	29 16, 17, 22	Rwe	20	W9	25 29	W11	24 29, 31
R3w	26 15	Rpa	26 4, 18, 29	Sio	28 36	(W9)	37 24	(W11)	37 24, 38
[R3w]	19, 20	(Rpa)	26	(Sio)	36 37, 38	W9 W11	29 4, 5, 6, 7, 8, 14, 19, 29, 30	W11	24 20, 25, 28, 32
R3w	15	Rp	21 19	[Sio]	30 28	W9 W11*	24 14, 15, 19, 22	W11 D1 D2 D3 —	
(R3w)	20 26, 38	(Rp)	37 27, 38	Siot	26 30	W9 W11**	24 8, 9, 11, 13, 16, 21, 29, 32	— Dt Rbt + D5	31 13, 18
(R4w)	20 38	Rp	27 19, 21	Siot	26 30	W9 W11*	25 14, 15, 16, 19	[W11 M Start]	29
R5w	28 15	[Rp R2]	19	Wes	22 36	W9 W11	29 6, 7, 8, 31	W11 M Start	28 13
[R5w]	19, 20	[Rp R2]	19	(Wes)	36 37, 38	W9 W11*	25 9, 11, 13, 16, 22, 32	Xp, Xp, Yp, Yp	23 22
R5w	15, 28	Rpb	16 19, 22, 32	(Whs)	36 32	W9 W11**	24 8, 9, 11, 13, 16, 21, 29, 32	Zp	23 22
(R5w)	20 38	Rpb	16 19, 21, 29	[Whs]	27 8, 28, 31, 36	W9 W11	29 6, 7, 8, 31	Zp	22
(R6w)	20 38	[Rpb R2b]	19	Whs	27 8, 28, 31, 36	W9 W11*	25 14, 15, 16, 19	(W12), (W13),	
Rbi	16 8A, 28	[Rpb R2b]	19	(Whs)	32	W9 W11*	25 9, 11, 13, 16, 22, 32	(W14)	37
Rbt	16 8	Rpb	21 22	W0	25 11, 28, 31	W9 W11*	25 9, 11, 13, 16, 22, 32	(Zw1) thru (Zw6)	37
Rcd	9 8, 14, 16, 22, 29, 30, 31	Rpm	18 16, 23	(W0)	37 24, 28	W9 W11**		(Zwp)	37
Rcd	9 29	Rpm	18 16, 21, 23	W0	24 13, 25				
		Rpw	28 14, 20	W0 Rbi	28 32				

Change	Reason
<u>103257A</u> 5V is CX13 The diagram shows a 'CLOCK GENERATOR Mca' block with pins 26, 30, 13, 28, 12, 22, 14, 24, 9, 11, and 17. Pin 5V is labeled above it. Its output goes through a buffer/inverter to pin 3. A feedback loop from pin 3 goes through an AND gate (pins 4, 5) to pin 2, then through another buffer/inverter to pin 10 (labeled Mcd). An OR gate (pins 6, 7) has its input from pin 8 and its output at pin 1. A voltage divider (3V, 10k, 1V, 10k) is shown at the bottom.	<u>EO 103403B</u> <u>EO 103514B</u> CX13 Clock Generator is not stable at 15KC. CX13 in location 5V was changed to a CK52. 9248 S/N 101 is only unit built with CX13.
<u>103257B</u> 5V is CK52 The diagram shows a 'Clock Generator Mca' block with pins 16, 20, and 14. Pin 5V is labeled above it. Pins 20 and 14 are connected to pin 10 (labeled Mcd). Pin 14 is also labeled as Mca. Pin 16 is labeled Da. A voltage divider (3V, 10k, 1V, 10k) is shown at the bottom.	

Change	Reason
Major logic change from A to C logic revision level. Change D adds timing chart. See Page 5 A and D revision.	<u>EO 103403F</u> In earlier systems, characters were lost when reading high density (556 Bpi) tapes without Interlace. That is reading the remaining characters in a long block when the interlace count had reached "0". Cr and $\overline{W5}$ W6 Q2 were setting and resetting Rcd at the same time.
Relocation of Cf W9 W11 Gate on D Revision to E Revision. Location 6V to 7K. Also added new timing adjustment chart on the E revision logic level.	<u>EO 103403S</u> (for 92483) <u>EO 107514H</u> To insure compatibility between tape units at 800 Bpi operation. Change tightens the allowable write character skew.



REV	DESCRIPTION	DATE	BY	CHKD
A	REL TO EFG			
C	SEE REV. E.O.			
D	SEE REV EQ			
E	SEE REV E.O.			



SIGNAL	12KC	15KC	24KC	33.3KC	41.7KC	56.7KC	48KC	60KC	96KC	
CHARACTER TIME	832us	67us	416us	30us	24us	15us	20.8us	16.7us	10.4us	
GAP	185us	150us	95us	67us	54us	34us	46us	37us	23us	7V14
DETECTOR	200	200	200	556	556	556	500	200	800	
DENSITY	60	75	120	60	75	120	60	75	120	
SPEED										
Crb	20us	17us	11us	8us	6us	4us	5us	4us	2us	
Cgr	60us	51us	32us	23us	18us	11us	15us	12us	8us	
D5	425us	350us	250us	425us	350us	250us	425us	350us	250us	2K15
D1	6ms	4.7ms	3.6ms	6ms	4.7ms	3.6ms	6ms	4.7ms	3.6ms	2K5
D2	1.6ms	1.6ms	1.0ms	1.6ms	1.6ms	1.0ms	1.6ms	1.6ms	1.0ms	3K15
D3	20ms	20ms	8ms	20ms	20ms	8ms	20ms	20ms	8ms	3K39
C11	0.5us								0.5us	9K39
D4	14ms								14ms	3K5
D6	10us								10us	2K39

* TIMES GIVEN FOR Cgs & Cgr ARE TIMED TO FALL OF Cgs OR Cgr FROM RISE OF Cfb

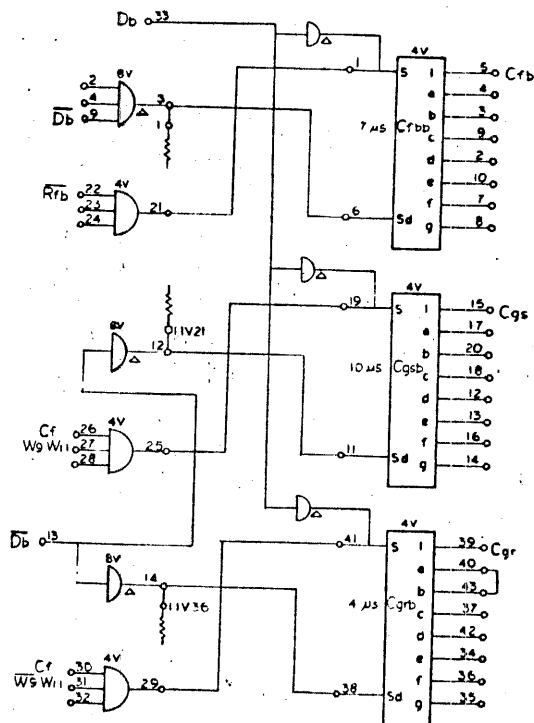
9348, 9248, 92481, 92482, 92483
PAGE 5
E

DRAWING NO		DESCRIPTION		REVISIONS	
9248		DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		103257	
DATE		BY		CHKD	
10/1/68		J. H. H.		J. H. H.	
NEXT APPR		DATE		BY	

Addendum

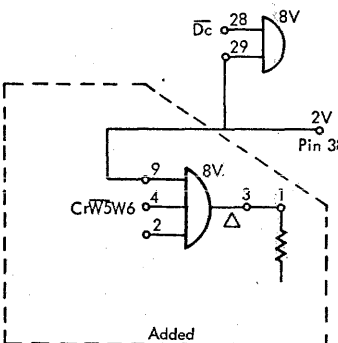
Change	Reason
Major logic change from A to C logic revision. Change D adds timing chart. See Page 5 A & D revision.	<u>EO 103403F</u> See Page 5 addendum sheet Item 1 for reason.
Added jumper between 4V4 and 4V3 on D revision to E revision.	EO 107514H for 92483 only allows adjustment of Cfbb to new range.
Deleted jumper between 4V40 and 4V43 on D revision to E revision.	EO 103403S for all but 92483 allows adjustment of Cgrb to new range.
Also added new timing adjustment chart on the E revision logic level.	EO 103403S EO 107514H (92483 only). See Page 5 addendum sheet Item 2 for reason.

CX-II

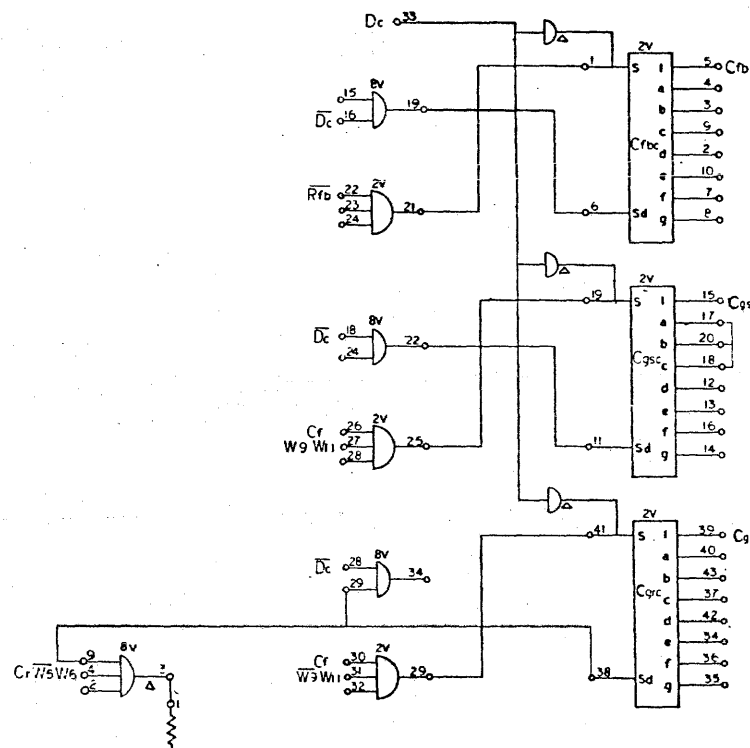


■ TIMES GIVEN FOR Cgs & Cgr ARE TIMED TO FALL
OF Cgs OR Cgr FROM RISE OF C7b

FORM NO.	DD FORM 1300, 10-66	USE PREVIOUS EDITIONS
ISSUE NO.	1	
FORM TITLE	MATERIAL LIST	
1. TITLE	MATERIAL LIST	
2. DESCRIPTION	MATERIAL LIST	
3. QUANTITY	MATERIAL LIST	
4. UNIT	MATERIAL LIST	
5. DATE	MATERIAL LIST	
6. BY	MATERIAL LIST	
7. CHECKED BY	MATERIAL LIST	
8. APPROVED BY	MATERIAL LIST	
9. DATE	MATERIAL LIST	
10. BY	MATERIAL LIST	
11. CHECKED BY	MATERIAL LIST	
12. APPROVED BY	MATERIAL LIST	
13. DATE	MATERIAL LIST	
14. BY	MATERIAL LIST	
15. CHECKED BY	MATERIAL LIST	
16. APPROVED BY	MATERIAL LIST	
17. DATE	MATERIAL LIST	
18. BY	MATERIAL LIST	
19. CHECKED BY	MATERIAL LIST	
20. APPROVED BY	MATERIAL LIST	
21. DATE	MATERIAL LIST	
22. BY	MATERIAL LIST	
23. CHECKED BY	MATERIAL LIST	
24. APPROVED BY	MATERIAL LIST	
25. DATE	MATERIAL LIST	
26. BY	MATERIAL LIST	
27. CHECKED BY	MATERIAL LIST	
28. APPROVED BY	MATERIAL LIST	
29. DATE	MATERIAL LIST	
30. BY	MATERIAL LIST	
31. CHECKED BY	MATERIAL LIST	
32. APPROVED BY	MATERIAL LIST	
33. DATE	MATERIAL LIST	
34. BY	MATERIAL LIST	
35. CHECKED BY	MATERIAL LIST	
36. APPROVED BY	MATERIAL LIST	
37. DATE	MATERIAL LIST	
38. BY	MATERIAL LIST	
39. CHECKED BY	MATERIAL LIST	
40. APPROVED BY	MATERIAL LIST	
41. DATE	MATERIAL LIST	
42. BY	MATERIAL LIST	
43. CHECKED BY	MATERIAL LIST	
44. APPROVED BY	MATERIAL LIST	
45. DATE	MATERIAL LIST	
46. BY	MATERIAL LIST	
47. CHECKED BY	MATERIAL LIST	
48. APPROVED BY	MATERIAL LIST	
49. DATE	MATERIAL LIST	
50. BY	MATERIAL LIST	
51. CHECKED BY	MATERIAL LIST	
52. APPROVED BY	MATERIAL LIST	
53. DATE	MATERIAL LIST	
54. BY	MATERIAL LIST	
55. CHECKED BY	MATERIAL LIST	
56. APPROVED BY	MATERIAL LIST	
57. DATE	MATERIAL LIST	
58. BY	MATERIAL LIST	
59. CHECKED BY	MATERIAL LIST	
60. APPROVED BY	MATERIAL LIST	
61. DATE	MATERIAL LIST	
62. BY	MATERIAL LIST	
63. CHECKED BY	MATERIAL LIST	
64. APPROVED BY	MATERIAL LIST	
65. DATE	MATERIAL LIST	
66. BY	MATERIAL LIST	
67. CHECKED BY	MATERIAL LIST	
68. APPROVED BY	MATERIAL LIST	
69. DATE	MATERIAL LIST	
70. BY	MATERIAL LIST	
71. CHECKED BY	MATERIAL LIST	
72. APPROVED BY	MATERIAL LIST	
73. DATE	MATERIAL LIST	
74. BY	MATERIAL LIST	
75. CHECKED BY	MATERIAL LIST	
76. APPROVED BY	MATERIAL LIST	
77. DATE	MATERIAL LIST	
78. BY	MATERIAL LIST	
79. CHECKED BY	MATERIAL LIST	
80. APPROVED BY	MATERIAL LIST	
81. DATE	MATERIAL LIST	
82. BY	MATERIAL LIST	
83. CHECKED BY	MATERIAL LIST	
84. APPROVED BY	MATERIAL LIST	
85. DATE	MATERIAL LIST	
86. BY	MATERIAL LIST	
87. CHECKED BY	MATERIAL LIST	
88. APPROVED BY	MATERIAL LIST	
89. DATE	MATERIAL LIST	
90. BY	MATERIAL LIST	
91. CHECKED BY	MATERIAL LIST	
92. APPROVED BY	MATERIAL LIST	
93. DATE	MATERIAL LIST	
94. BY	MATERIAL LIST	
95. CHECKED BY	MATERIAL LIST	
96. APPROVED BY	MATERIAL LIST	
97. DATE	MATERIAL LIST	
98. BY	MATERIAL LIST	
99. CHECKED BY	MATERIAL LIST	
100. APPROVED BY	MATERIAL LIST	
101. DATE	MATERIAL LIST	
102. BY	MATERIAL LIST	
103. CHECKED BY	MATERIAL LIST	
104. APPROVED BY	MATERIAL LIST	
105. DATE	MATERIAL LIST	
106. BY	MATERIAL LIST	
107. CHECKED BY	MATERIAL LIST	
108. APPROVED BY	MATERIAL LIST	
109. DATE	MATERIAL LIST	
110. BY	MATERIAL LIST	
111. CHECKED BY	MATERIAL LIST	
112. APPROVED BY	MATERIAL LIST	
113. DATE	MATERIAL LIST	
114. BY	MATERIAL LIST	
115. CHECKED BY	MATERIAL LIST	
116. APPROVED BY	MATERIAL LIST	
117. DATE	MATERIAL LIST	
118. BY	MATERIAL LIST	
119. CHECKED BY	MATERIAL LIST	
120. APPROVED BY	MATERIAL LIST	
121. DATE	MATERIAL LIST	
122. BY	MATERIAL LIST	
123. CHECKED BY	MATERIAL LIST	
124. APPROVED BY	MATERIAL LIST	
125. DATE	MATERIAL LIST	
126. BY	MATERIAL LIST	
127. CHECKED BY	MATERIAL LIST	
128. APPROVED BY	MATERIAL LIST	
129. DATE	MATERIAL LIST	
130. BY	MATERIAL LIST	
131. CHECKED BY	MATERIAL LIST	
132. APPROVED BY	MATERIAL LIST	
13		

Change	Reason
From A to C logic revision level added OR function to DC set input of Cgrc.  Added	<u>EO 103403F</u> See Page 5 addendum sheet Item 1 for reason.
Added timing chart from C logic revision to D logic revision.	Refer to Page 5D logic revision.
From D to E revision, added jumpers between pins 17, 18 and 20 location 2V.	<u>EO 103403S</u> <u>EO 107514H</u> (92483 only)
Also added new timing adjustment chart on the E revision logic level.	See Page 5 addendum sheet Item 2 for reason.
OX14 Module replaces OX13 Module in location 2V to meet new timing adjustment.	<u>EO 107536B</u> - 92482 <u>EO 107537B</u> - 92483 <u>EO 107538B</u> - 9348
Module not used in 9248 or 92481.	

REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG		
C	SEE REV E.O.		
D	SEE REV E.O.		
E	SEE REV E.O.		

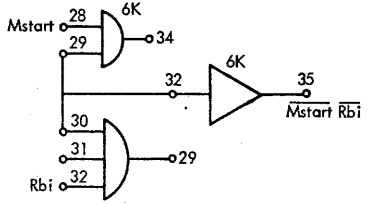
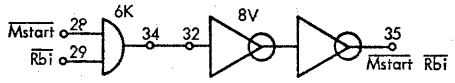
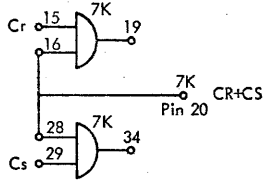
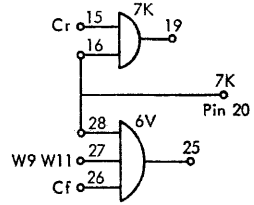


SIGNAL	12KC	15KC	24KC	33.3KC	41.7KC	66.7KC	48KC	60KC	96KC	
CHARACTER TIME	32us	67us	41.6us	30us	24us	15us	20.8us	16.7us	10.4us	
GAP DETECTOR	185us	150us	95us	67us	54us	34us	46us	37us	23us	7V14
DENSITY	200	200	200	556	556	556	500	600	800	
SPEED	75	75	120	60	75	120	60	75	120	
Crb	20us	17us	11us	8us	6us	4us	5us	4us	2us	
Cgs	60us	51us	32us	23us	19us	11us	15us	12us	8us	
Cgr	40us	34us	22us	16us	12us	8us	10us	8us	5us	
D5	425us	350us	250us	425us	350us	250us	425us	350us	250us	2K15
D1	6ms	47ms	2.6ms	6ms	47ms	3.8ms	6ms	47ms	3.8ms	2K5
D2	1.6ms	1.6ms	10ms	1.6ms	1.6ms	10ms	1.6ms	1.6ms	10ms	3K15
D3	20ms	20ms	8ms	20ms	20ms	8ms	20ms	20ms	8ms	3K39
Cr1	0.5us								0.5us	9K39
D4	14ms								14ms	3K5
D6	10us								10us	2K39

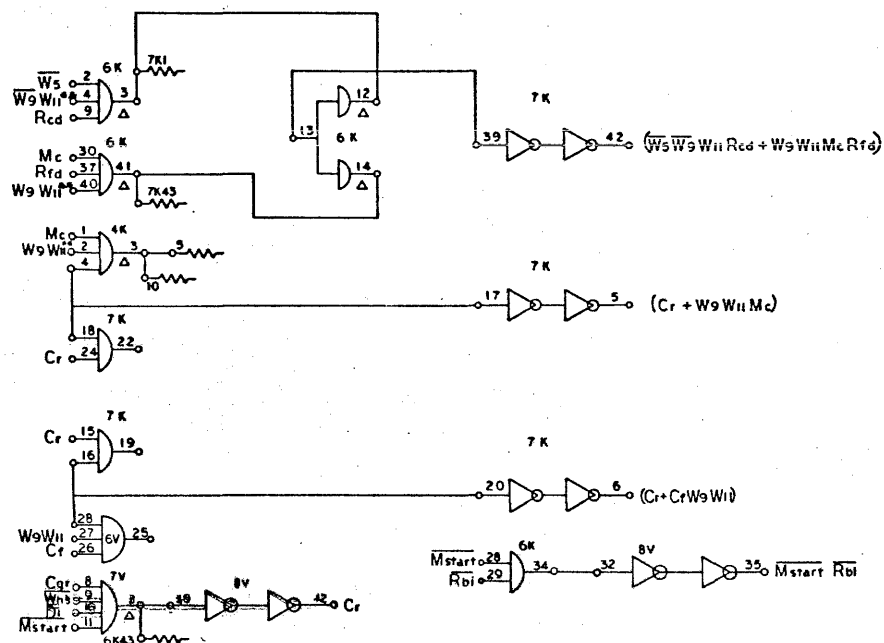
■ TIMES GIVEN FOR Cgs & Cgr ARE TIMED TO FALL OF Cgs OR Cgr FROM RISE OF Cfb

9348.
92482,92483
TAPE CONTROL
PAGE 7
E

NO	REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION	APP
NOTES UNLESS SPECIFIED			MATERIAL LIST		
1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.			SDS SCIENTIFIC DATA SYSTEMS		
2. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			TITLE		
3. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		
4. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			MODEL NO		
5. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			9248		
6. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			D14		
7. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			D		
8. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			103257		
9. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			E		
10. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			SCALE		
11. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			DO NOT SCALE DRAWING		
12. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.			SHEET 7		

Change	Reason
<u>103257A</u>  <u>103257C</u> 	<u>EO 103403F</u> See page 5 Addendum Sheet Item 1 for reason.
<u>103257C</u>  <u>103257E</u> 	<u>EO 103403S</u> <u>EO 107514H</u> See page 5 Addendum Sheet Item 2 for reason

REVISIONS				103257
REV	DESCRIPTION	ENG	DATE	APPROVED
A	REL TO MFG			
C	SEE REV. E.O.			
D	SEE REV E.O.	106		
F	SEE REV FD		11-1-58	



TAPE CONTROL

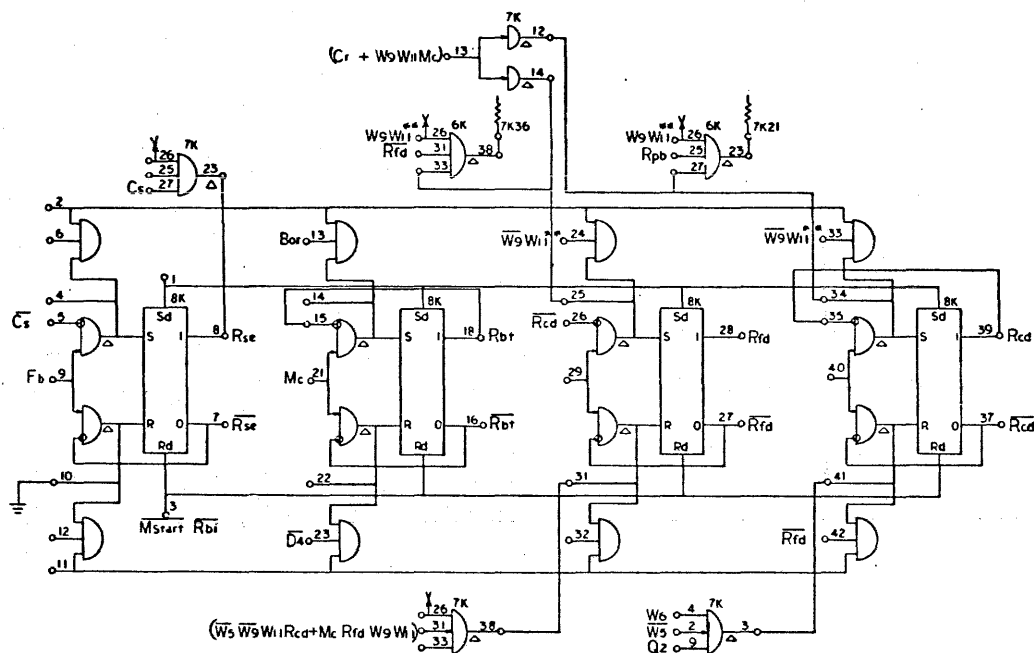
PAGE 8

F

UNIT NO.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	UNIT NO.
NOTED UNLESS SPECIFIED		MATERIAL LIST		
1. MATERIAL SPECIFIED BY THE DESIGNER	APPROVED BY THE DESIGNER	QUANTITY REQUIRED	UNIT PRICE PER UNIT	TOTAL
2. UNIT SHALL BE SHOWN AND Labeled	✓			
3. DRAWING SHALL BE SHOWN				
4. UNIT SHALL BE SHOWN				
MODEL NO.		UNIT NO.		
9248		103257		
NEXT ASST.		SCALE		
		UNIT PRICE PER UNIT		
		UNIT PRICE PER UNIT		

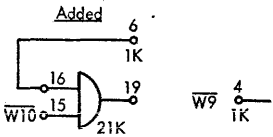
Change	Reason
No logic changes made from A revision thru D revision. From D revision to E revision changed clock input signal to Rse flip-flop from Rsk to Fb.	EO 103403S EO 107514H (92483 only). See Page 5 addendum sheet Item 2 for reason.

REVISIONS			
REV	DESCRIPTION	CHK	DATE
A	REL TO MFG		
D	SEE REV E.O.		
E	SEE REV E.O.		

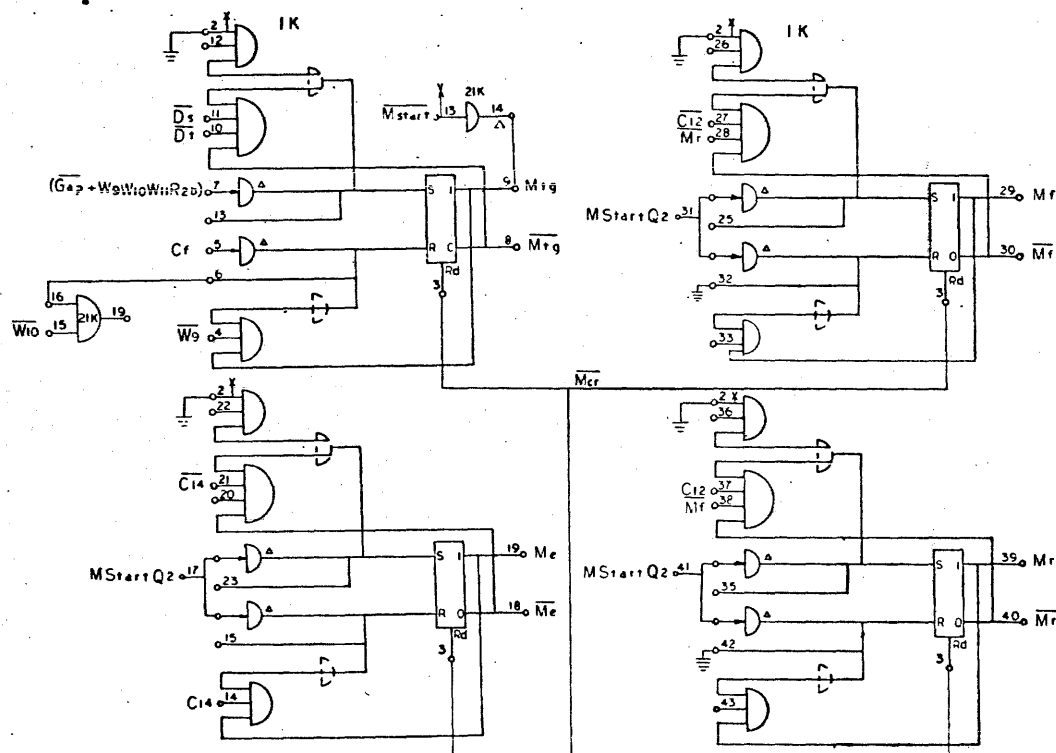


9348.
92483, 9248, 92481, 92482
TAPE CONTROL
PAGE 9
E

NO. REV.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	ITEM NO.
NOTES UNLESS SPECIFIED: 1. THE FOLLOWING: 2. THE FOLLOWING: 3. THE FOLLOWING: 4. THE FOLLOWING: 5. THE FOLLOWING: 6. THE FOLLOWING: 7. THE FOLLOWING: 8. THE FOLLOWING: 9. THE FOLLOWING: 10. THE FOLLOWING:				
MODEL NO. 9248		SDS SCIENTIFIC DATA SYSTEMS DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		
DATE 10/1/68		REV. 10/1/68		
SCALE		SCALE		

Change	Reason
No logic changes made from A thru D revision. On E revision added $\overline{W}T0$ or $\overline{W}9$ input to reset Mtg flip-flop. 	<u>EO 103403M</u> <u>EO 107514D</u> (92483 only). To correct logic timing error in erase reverse operation.

REV	DATE	BY	APP'D
1	10/25/71	W. J. H.	E
2	11/10/71	W. J. H.	E
3	11/10/71	W. J. H.	E
4	11/10/71	W. J. H.	E
5	11/10/71	W. J. H.	E

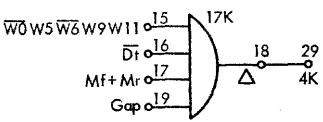


9348,
92483,9248,92481,92482
TAPE CONTROL
PAGE 10
E

REV	DATE	DESCRIPTION	REFERENCE DESIGNATION	APP'D
1	10/25/71	W. J. H.	E	
2	11/10/71	W. J. H.	E	
3	11/10/71	W. J. H.	E	
4	11/10/71	W. J. H.	E	
5	11/10/71	W. J. H.	E	

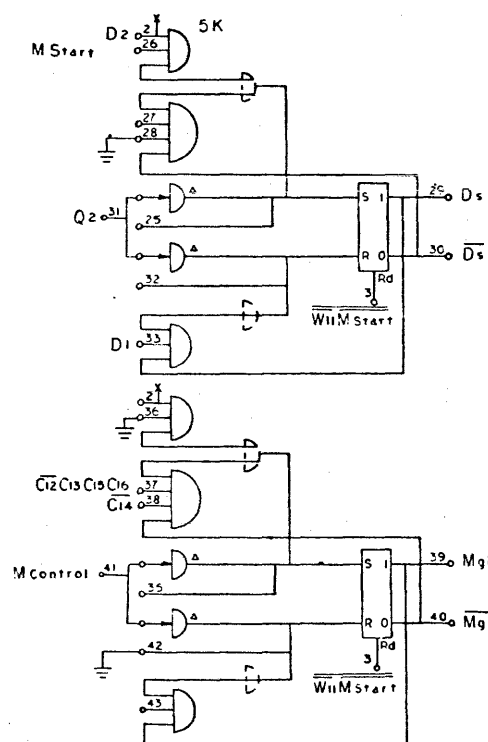
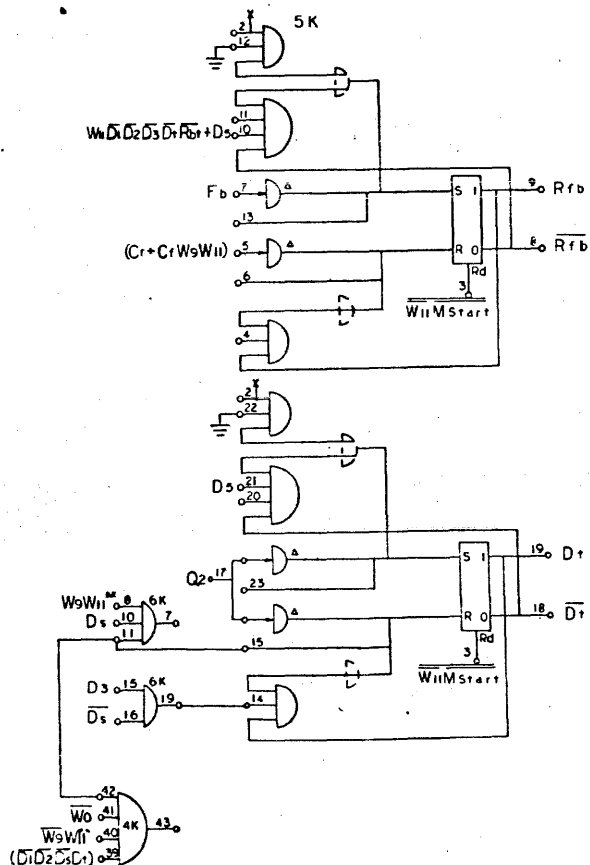
NOTES UNLESS SPECIFIED		MATERIAL LIST	
1. TOLERANCES	AS SHOWN	QTY	DESCRIPTION
2. DIMENSIONS	AS SHOWN	QTY	DESCRIPTION
3. ALL DIMENSIONS	AS SHOWN	QTY	DESCRIPTION
4. ALL DIMENSIONS	AS SHOWN	QTY	DESCRIPTION
5. ALL DIMENSIONS	AS SHOWN	QTY	DESCRIPTION

MODEL NO		REV NO	
9248		103257	
NEXT ASSEMBLY		SCALE	
		DO NOT SCALE DIMENSIONS	

Change	Reason
From A to D logic change switched input to D4 onshot from auxiliary input (pin 1) to D.C. set input (pin 6). Added ground to pin 1 location 3K. From A to D logic change eliminated OR function to auxiliary set of D3 one-shot for model 92483. Also added timing chart for one shot settings. Refer to D Logic revision.	<u>EO 103403E</u> To trigger D4 on leading edge of M start Q2 avoiding timing race condition. <u>EO 107514A</u> Effective with first release and shipment of 92483 model Nos.
From D to E logic change. (A) Changed timing adjustment chart for D3 one shot. (B) Removed time select connection to 3K Pin 43 D3 one-shot. (C) Removed $\overline{W9}$ $\overline{W11}$ $\overline{W0}$ and gate circuitry OR function circuit from setting D3 and deleted note 1. (D) Relocated AND gate to location 17K to pick up Gap.	<u>EO 103403R</u> <u>EO 107514G</u> (92483 only). On reverse erase, unit is stopping prematurely and leaving previously written information. This change keeps unit erasing until read head sees Gap and buffer clocking is finished. <u>EO 103403P</u> Not listed on left from D to E logic level, deletes circuitry covered by note (1) and transfers circuitry to Page 13.
relocation was 4K 	

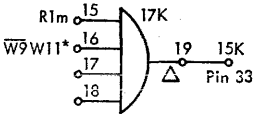
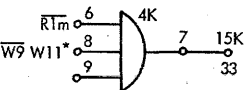
Change	Reason
From A to C logic revision removed <u>W10</u> to Pin 15 location 21K. Reset term Dt flip-flop.	EO 103403E To trigger D4 or leading edge of M start Q2 avoiding timing race condition.
From C to D logic revision added additional OR function to reset term of Dt flip-flop for 92483 models only.	EO 107514A Effective with release and shipment of first 92483 model Nos. See D revision logic.
From D to E revision logic deleted 21K Pins 15, 16 & 19 and added W9 W11 term to 6K Pin 8.	EO 103403M Relocation of components only, no logical change.
Adds circuitry covered by note (11) D revision logic to all model Nos. on E revision.	EO 103043P Relocated from logic revision level D Page 11 for all models. To overcome tape creep problems.

REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG		
C	SEE REV E		
D	SEE REV E		
E	SEE REV E		

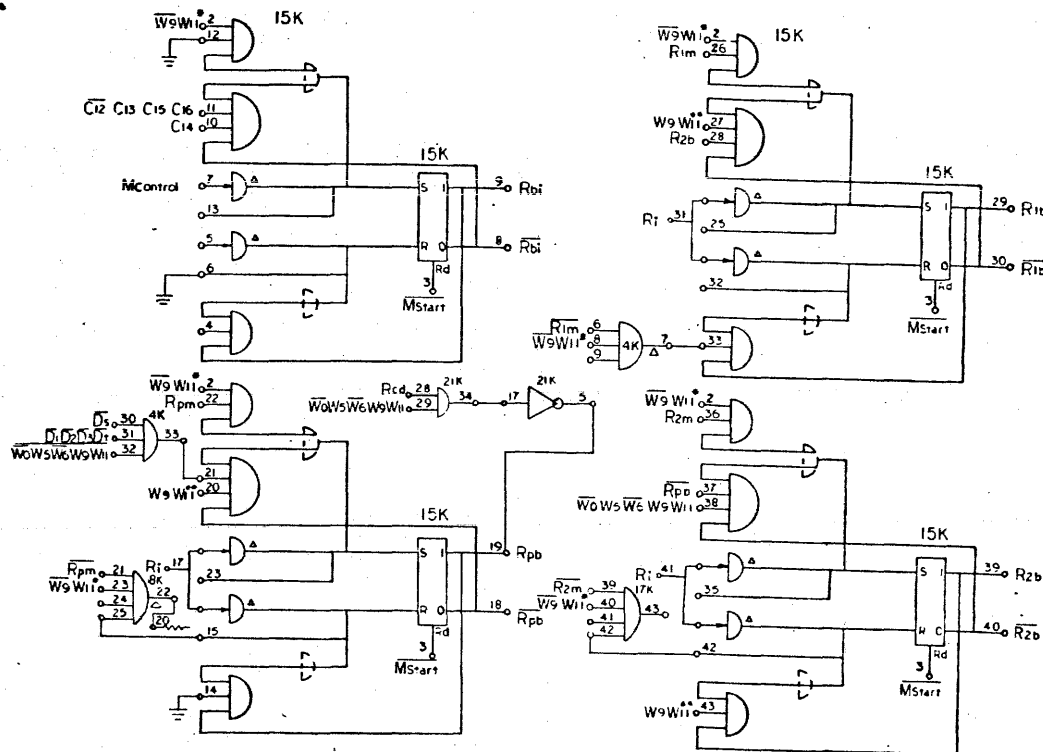


9348,
92483, 9248, 92481, 92482
TAPE CONTROL
PAGE 13
E

REV	DRAWING NO	DESCRIPTION	DATE	APPROVED
A	103257	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		
C	103257			
D	103257			
E	103257			

Change	Reason
From A through D revision level of logic, no changes. From D to E revision level of logic: <u>103257D</u>  <u>103257E</u> 	<u>EO 103403R</u> <u>EO 107514G</u> (92483 only) Rearrangement of components to pick up extra diode. No logic change. Part of reverse erase problem leaving previously written information.

REV	DESCRIPTION	DATE	BY	CHKD
A	REV TO VFC	7/2/68	W. J. H.	W. J. H.
D	SEE REV E.O.	7/2/68	W. J. H.	W. J. H.
E	SEE REV E.O.	7/2/68	W. J. H.	W. J. H.



9348
92483, 92486, 92481, 92482
TAPE CONTROL
PAGE 16
E

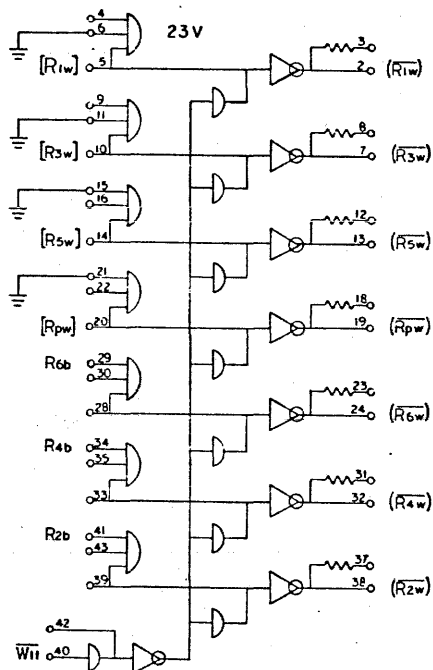
REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION
A	9248	DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
D	9248		
E	9248		

NOTES UNLESS SPECIFIED	DRAWN	CHECKED	APPROVED
1. TOLERANCES a. DIMENSIONS b. ANGLES c. RADIUS d. HOLE DIAMETER e. HOLE POSITION	W. J. H.	W. J. H.	W. J. H.
2. BREAK ALL SHARP EDGES 3. BREAK ALL SHARP CORNERS 4. BREAK ALL SHARP POINTS 5. BREAK ALL SHARP SURFACES			

MODEL NO	REV	DATE	BY	CHKD
9248	D	7/2/68	W. J. H.	W. J. H.
9248	E	7/2/68	W. J. H.	W. J. H.

Change	Reason
From A thru D logic revisions, no changes. From D to E logic revision, major logic change in gating RW signals. Compare logic revisions D & E.	EO 103403M EO 107514D (92483 only) To correct logic timing error on erase reverse operation

REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG	11/1/64	[Signature]
D	SEE REV E.O.	11/1/64	[Signature]
E	SEE REV E.O.	11/1/64	[Signature]



9348
92483,92488,92481,92482
TAPE CONTROL
PAGE 20
E

NO	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV
103257				E
NOTES UNLESS SPECIFIED: 1. TOLERANCES: ALL .001 INCHES 2. DIMENSIONS: ALL .001 INCHES 3. DIMENSIONS: ALL .001 INCHES 4. DIMENSIONS: ALL .001 INCHES 5. DIMENSIONS: ALL .001 INCHES				
SDS ELECTRONIC DATA SYSTEMS THE LITTLE ROCK, MISSISSIPPI, DIVISION DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT				
MODEL NO. 9248		REV. NO. 103257		
NEXT ASBY		SCALE: NO HYP SCALE SHOWN: SHEET 2 OF 24		

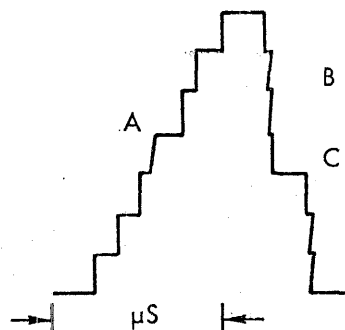
103257 | E

Change	Reason
From A to D logic change deleted 47KΩ resistor from 9K pin 40 to pin 47 (+25v). Added jumper from 9K pin 40 to 9K pin 43. .5 μsec time change to 2.0 μs except for 92483 which uses OX14 module in 9K. With 92483 use .5 μsec.	<u>EO 103140C</u> <u>EO 103403J</u> <u>EO 107514A</u> Uses 220K resistor in OX13 module instead of 47K external for timing increase change. OX14 module effective on first 92483 shipped.
From D to E logic change all models use OX14 in location 9K and hence all have Cri signal set at .5 μsec. Deleted jumper between 9K17 and 9K20. Added jumpers between 9K pins 3, 4 and 9.	<u>EO 103403L</u> <u>EO 103140D</u> <u>EO 103403S</u> OX13 module in location 9K changed to OX14. <u>EO 107514H</u> (92483 only) 92483 has OX14 and is not affected. Cri now .5 μsec on all models.
From D to E Adds buffered signal to set Wes one-shot. Set side was DC input, is now auxiliary input. Compare D and E logic.	<i>DONE</i> <i>7 NOV 75</i> <u>EO 103403L</u> <u>EO 107514C</u> One-shot (Wes) being triggered by noise causing false errors in multi unit systems.

10V Pin 26 Analog to Staircase Converter

The "OR" gate which was once RSK, is now used to detect the quality of the electrical deskew. The driven logic has been replaced with a 220 ohm resistor load. The value has been adjusted such that each bit as it occurs will cause a step of about one volt in amplitude. In the case of an all "ones" frame the converter will generate a signal staircase with a maximum of seven volts.

The leading edge of the waveform reflects the head mechanical misalignment, (gap scatter and gap are differential), for both the read and write head. The trailing edge shows how well the electrical compensation for these characteristics was accomplished.



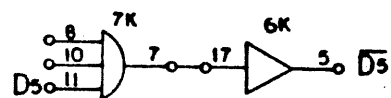
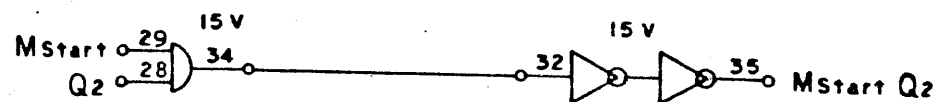
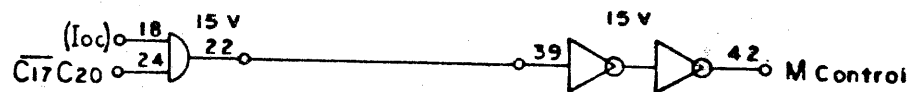
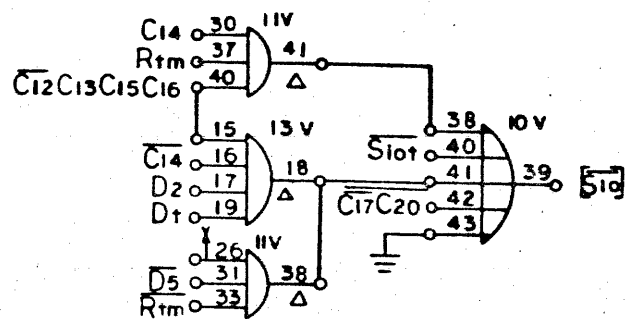
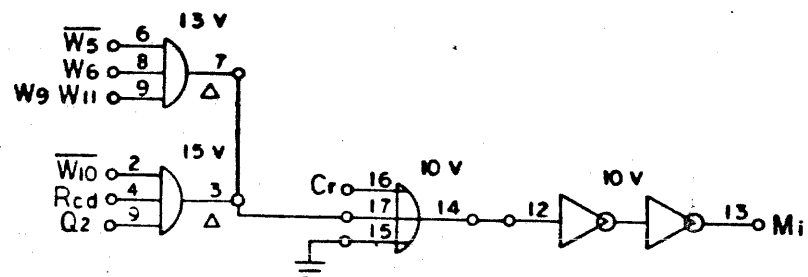
Staircase A, during the read pass of an "all ones" tape, is a measure of the skew in microseconds. This value will be in the order of up to 2 or 3 microseconds.

Staircase B exclusive of Point C would show how well the read deskew has been done. Point C would exist if one adjustment has been missed or incorrectly done. Although this differential is easily seen at the test point, re-adjustments are quite inaccurate and should not be attempted using only the test point. It is basically for qualitative checking.

If the tape unit is put in the "test mode" after read deskew, the write head scatter can be seen. This measurement would show if the misalignment is too bad to respond to any compensation.

After the alignment of write deskew, the test point will again show the quality of deskew. At 800 BPI this uncompensated deskew should be less than 1.5 μ s when observing the signal developed by an exerciser pass.

Change	Reason
From A to C logic revision level major changes made to gating terms making up $\overline{S_{10}}$ Also $\overline{D_5}$ signal eliminated and $\overline{D_2} + \overline{D_1}$ added. Compare A and D logic revisions.	<u>EO 103403D</u> Forward search failures were noted when running 15KC system programs on 15KC/42.7KC tape systems. An EOM to convert a scan to a read could result in Rcd locking on due to the longitudinal check character. As a result, the I/O Buffer would receive an erroneous clock prior to the first data character of the ensuing block.

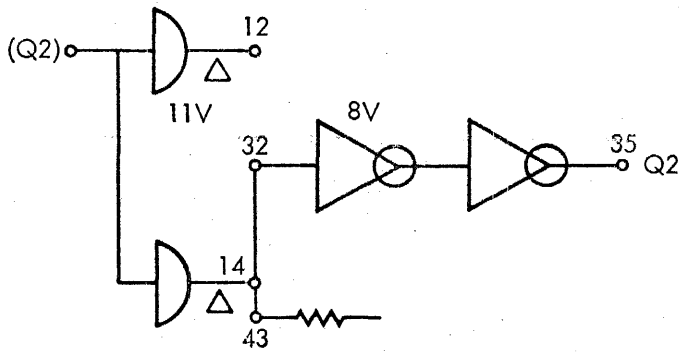


Change

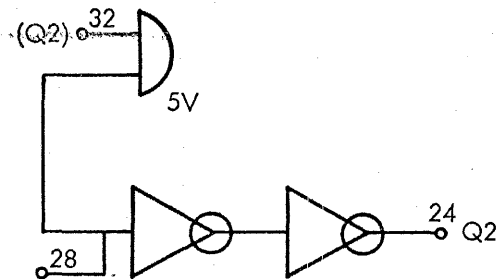
Reason

From A to C logic revision
level, Q2 buffer relocated

103257A



103257C & D

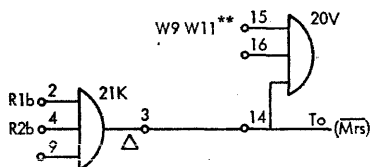


EO 103403F

Relocation of (Q2) to Q2
signal no logic change.
Diode gates in 11V were
required in revising gates
to Cfba and Cgsa on C
level logic change page 5.

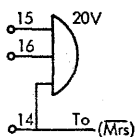
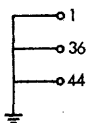
Change

Reason

103257AEO 103403F

Eliminates W9 W11** term from gating to (Mrs) term.

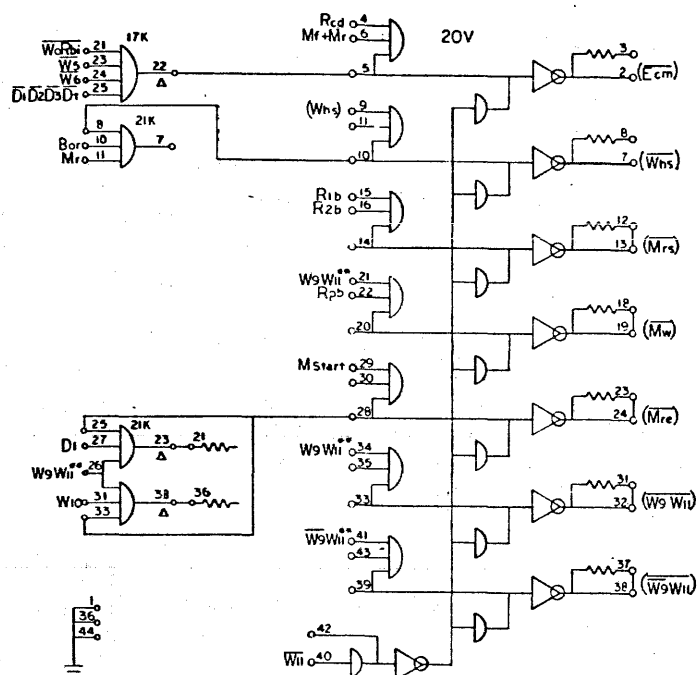
See Addendum Sheet page 5 Item 1 for reason.

103257C & D103257E

No logic change, only indicates that AX14 Module returns are tied to ground.

On Logic Pages
32 through 36

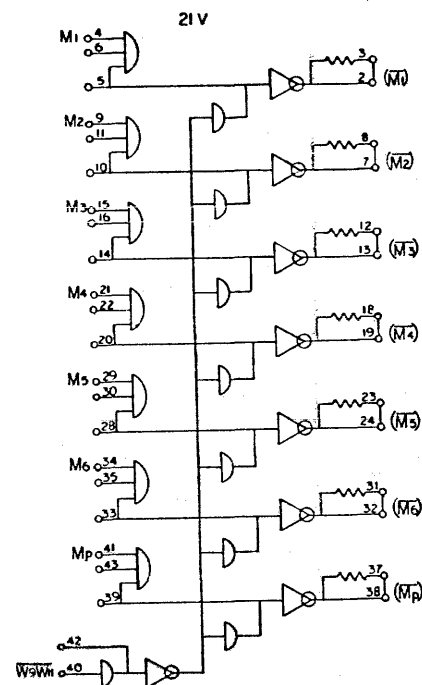
REVISIONS				03257
REV	DESCRIPTION	DATE	APPROVED	
A	REL TO MFG			
C	SEE REV. E.O.			
D	SEE REV E.O.			
E	SEE REV E.O.			



9348,
92483 9248,92481,92482
TAPE CONTROL
PAGE 32
E

PRO NO.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	PRO NO.
MATERIAL LIST				
NOTES UNLESS SPECIFIED		REVISION	SDS COMMUNITY DATA SYSTEMS	
1. TOLERANCES UNLESS SHOWN OTHERWISE ARE .0005	CHECK	DATE	1000 UNIVERSITY STREET, SANTA ANITA, CALIFORNIA	
2. SPECIAL MOUNTING INSTRUCTIONS ARE REQUIRED	APPROV	DATE	TITLE	
3. MOUNT SURFACES			DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
4. ALL DIM. TO CENTER				
MODEL NO.	9248	DATE	WORK NO.	
TEST ASBY			103257	E
		SCALE	DO NOT SCALE DIMENSIONS	SHOWN AS

REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG		
D	SEE REV E.O.		
E	SEE REV E.O.		

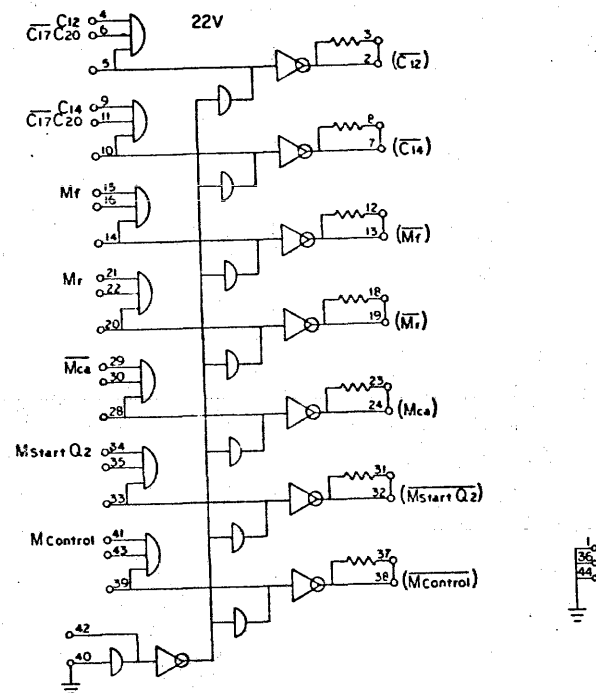


9348,
92483,9248,92481,92482
TAPE CONTROL
PAGE 33
E

REV	DRAWING NO	REV DESCRIPTION	REFERENCE DESIGNATION
NOTES UNLESS SPECIFIED			
1. MATERIALS	DATE	BY	SDS
2. DIMENSIONS	5/1/6	7/10/6	SDS
3. FINISH	5/1/6	7/10/6	SDS
4. TOLERANCES			
5. SURFACE FINISH			
6. PAINT			
7. OTHER			
MODEL NO	9248		
REV		D	103257
DATE			
SCALE			

Change	Reason
From A through D logic revision levels no changes were made. On E revision logic $\overline{C17}$ C20 was added to gate (C12) and (C14) signals.	EO 103403N EO 107514E (92483 only) To reduce noise between master control unit and slaves by keeping Cs quiet, except during Mag Tape EOM's and SKS's.

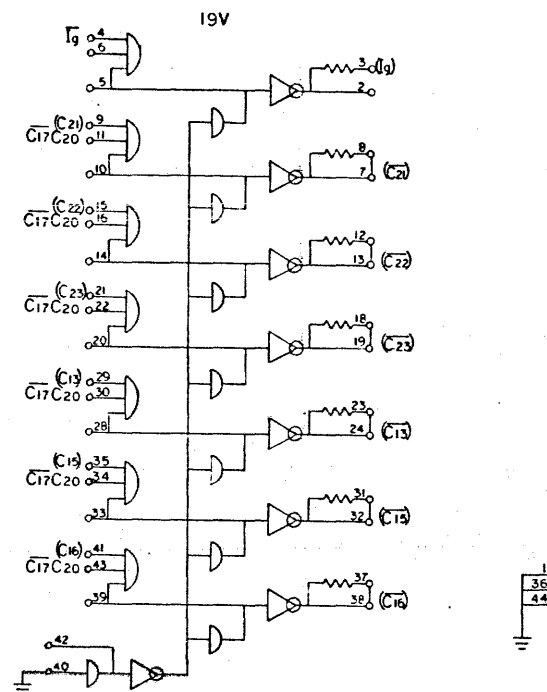
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL TO MFG			
D	SEE REV E			
E	SEE REV E			



9348
92483,9248,92481,92482
TAPE CONTROL
PAGE 34
E

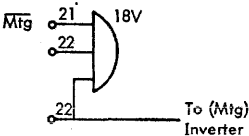
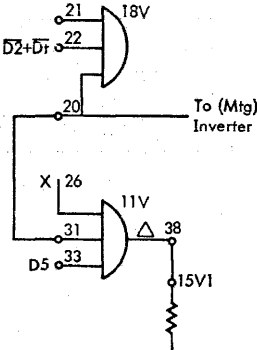
REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION	DATE
NOTES UNLESS SPECIFIED				
1. NO DIMENSIONS	DRAWN	1/13	SDS	
2. 1/16" DIMENSIONS	CHECKED	5/15	- 583	
3. BREAK ALL SURFACE DIMENSIONS	APPROVED	5/15	7/10/13	
4. DIMENSIONS IN PARENTHESES				
DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT				
MODEL NO	9248		DATE	103257
REVISION			DATE	E
SCALE				
SHEET 34 OF 41				

REV	DATE	DESCRIPTION
A		REL TO MFG
D		SEE REV E.O.
E		SEE REV E.O.

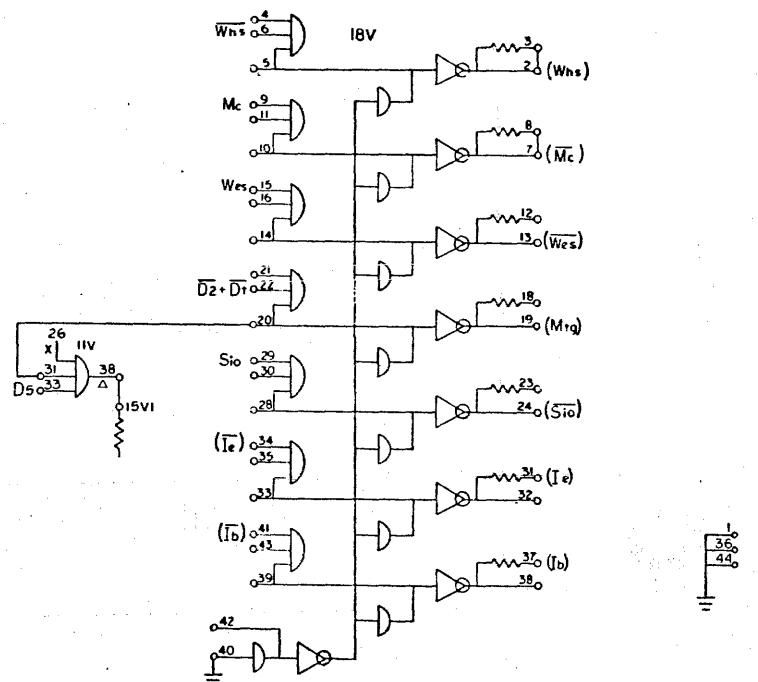


9348,
92483,9248,92481,92482
TAPE CONTROL
PAGE 35
E

NO	REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION	REV
NOTES UNLESS SPECIFIED					
1. TOLERANCES ALL .1 IN ALL .1 IN ALL .1 IN					
2. CHECK ALL DIMENSIONS AND TOLERANCES					
3. CHECK DIMENSIONS AND TOLERANCES					
4. ALL DIM IN INCHES					
DRAWN: 7/1/63 CHECK: 7/1/63 APP: 7/1/63					
SDS 6-VENTURE DATA SYSTEMS					
TITLE: DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT					
MODEL NO: 9248					
NEXT REV: D 103257 E					
SCALE: DO NOT SCALE ON THIS SHEET 25 OF 40					

Change	Reason
From A to C logic revision gating for (Mtg) signal changed. <u>103257A</u>  <u>103257C, D & E</u> 	<u>EO 103403D</u> See page 30 Addendum Sheet for reason.

REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG	10/1/68	
C	SEE REV. E.O.		
D	SEE REV E.O.		
E	SEE REV E.O.		



9348,
92483, 9248 92481, 92482
TAPE CONTROL
PAGE 36
E

REV	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	N
NOTES UNLESS SPECIFIED 1. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES. 2. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED. 3. DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED.				
MODEL NO. 9248		SDS DIGITIZING DATA SYSTEMS 1000 S. GATEWAY AVENUE, SANTA ANA, CALIFORNIA DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT		
DATE 10/1/68		SCALE 1/8" = 1"		
103257		E		

MODULE LIST							
ITEM	DESCRIPTION	MODEL	QTY				
			9248	92481	92482	92483	9348
1	CABLE DRIVER	AM4	6	6	6	6	6
2	AND/OR BUFFER AMP	BC10	3	3	3	3	3
3	AND/OR BUFFER AMP	BH10	1	1	1	1	1
4	OR GATE BUFFER AMP	BH11	1	1	1	1	1
5	CRYSTAL CLOCK GEN	CK13	1	-	2	2	2
6	COUNTER F.F.	FH15	3	3	3	3	3
7	UNIVERSAL F.F.	FH17	5	5	5	5	5
8	GATE EXPANDER	GH11	1	1	1	1	1
9	GATE EXPANDER	GC10	8	8	8	8	8
10	AND/OR INVERT.	IC10	2	2	2	2	2
11	AND INVERTER	IC12	4	4	4	4	4
12	AND INVERTER	IH12	2	2	2	2	2
13	ADDER MODULE	IK52	1	1	1	1	1
14	ONE SHOT MULT.	OX13	4	3	4	4	4
15	CLOCK GAP DETECTOR	SK39	1	1	1	1	1
16	UNIVERSAL F.F.	FC17	1	1	1	1	1
17	ONE SHOT MULT.	OX14	1	1	2	2	2
18	CLOCK GEN	CK52	1	1	1	-	-
19	CLOCK GEN	CK55	-	-	-	-	1
20	CLOCK GEN	CK56	-	-	-	1	-

REPLACEMENT PARTS LIST					
ITEM	DESCRIPTION	DESIGNATION	QTY	SUPPLIER CODE (SEE INDEX)	
1	RESISTOR, 170 Ω $\pm$ 2%	(P40)E27 THRU E38	12	18, 17	
2	INDUCTOR, MOLDED 220 μ H $\pm$ 5%	(P40)L1 THRU L26 (P40)L1 THRU L14	40	42, 90, 91	
3	DIODE, SILICON SWITCHING IN S14A	(P40)CR1 THRU CR11	11	4, 12, 13, 14	
4	CONNECTOR, SOLDER TAIL 47 CONTACT #100B-47	J1(R) THRU J25(R) J411 THRU J1251	50	82	

CABLE LENGTH								
ITEM	DESCRIPTION	11'	20'	30'	40'	DESIGNATION	QTY	SUPPLIER CODE (SEE INDEX)
5	RESISTOR	350 Ω $\pm 2\%$	330 Ω $\pm 2\%$	270 Ω $\pm 2\%$	220 Ω $\pm 2\%$	(P40)R1 THRU R26 (P40)R1 THRU R14	40	16, 17

9348,
92483, 9248, 92481, 92482
MAG TAPE CONTROL UNIT
PAGE 40
E

REVISIONS				103257	E
REV	DESCRIPTION	CHK	DATE	APPROVED	
A	REL TO MFG		1/17/74		
D	SEE REV E.O.		1/17/74		
E	SEE REV E.O.		1/17/74		

REV	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV
MATERIAL LIST				
NOTES UNLESS SPECIFIED:		DRAWN: K. K. K. 1/16/74 CHECK: H. H. H. 1/16/74 APPR: R. R. R. 1/16/74 SDS STANDARD DATA SYSTEM MAG TAPE CONTROL UNIT		
1. TOLERANCES: .01" UNLESS SPECIFIED 2. DIMENSIONS: 1" UNLESS SPECIFIED 3. SURFACE FINISH: 7 UNLESS SPECIFIED 4. ALL DIMENSIONS: 7 UNLESS SPECIFIED		TITLE: DIAGRAM, LCGIC MAG TAPE CONTROL UNIT		
MODEL NO. 9248		REV. NO. D 103257 WEST ARMY		
		SCALE: NO NET SCALE DRAWING		

PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG
1	C								
2	C								
3	C								
4	C								
5	C								
6	C								
7	C								
8	C								
9	C								
10	C								
11	C								
12	C								
13	C								
14	C								
15	C								
16	C								
17	C								
18	C								
19	C								
20	C								
21	C								
22	C								
23	C								
24	C								
25	C								
26	C								
27	C								
28	C								
29	C								
30	C								
31	C								
32	C								
33	C								
34	C								
35	C								
36	C								
37	C								
38	C								
39	C								

- NOTES:
1. REV LETTERS LISTED INDICATE STATUS OF EACH SHEET OF THIS MULTIPLE SHEET DRAWING.
 2. CHECK INDIVIDUAL SHEETS FOR REVISION LETTER AGAINST THIS SHEET BEFORE USING THIS DRAWING.

REFERENCE DESIGNATIONS ARE ABBREVIATED. PREFIX THE DESIGNATION WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH. (MIL. STD. 168)

NOTE:

THIS DWG APPLIES TO BOTH THE AMPEX (A) & POTTER (P) MAG TAPE UNITS. FOR SIMPLICITY ONLY 9246A AND/OR 9246P DESIGNATIONS ARE SHOWN ON INDIVIDUAL PAGES. 9246A IMPLIES 9246A, 92461A, 92462A, & 9346A. 9246P IMPLIES 9246P, 92461P, 92462P & 92463P. THE FOLLOWING CHART INDICATES THE EFFECTIVITY OF INDIVIDUAL PAGES.

PAGE NO.	AMPEX ONLY	POTTER ONLY	BOTH	92463P VARIATIONS
1				
2	X			
3				
4			X	
5			X	
6			X	
7			X	
8			X	
9			X	
10			X	
11			X	
12			X	
13			X	
14			X	X
15			X	
16			X	
17			X	
18			X	
19			X	
20			X	
21			X	
22			X	
23			X	
24			X	
25			X	
26			X	X
27	X			
28	X			
29	X			
30	X			
31			X	
32			X	
33			X	
34	X			
35	X			
36		X		X
37		X		
38		X		
39		X		

9246A, 9246P
MAG TAPE UNIT
PAGE 1
D

REV	DESCRIPTION	CHG	DATE	APPROVED
A	REL TO MFG			
B	SEE REF. E.O.			
C	SEE REV E.O.			
D	SEE SEE E.O.			

DRAWING NO.		DESCRIPTION		REFERENCE DESIGNATION	
NOTES UNLESS SPECIFIED		MATERIAL LIST		SDS	
1. PAPER UNITS: 11" x 17" 1/2"		2. PAPER: 11" x 17" 1/2"		3. PAPER: 11" x 17" 1/2"	
4. PAPER: 11" x 17" 1/2"		5. PAPER: 11" x 17" 1/2"		6. PAPER: 11" x 17" 1/2"	
7. PAPER: 11" x 17" 1/2"		8. PAPER: 11" x 17" 1/2"		9. PAPER: 11" x 17" 1/2"	
10. PAPER: 11" x 17" 1/2"		11. PAPER: 11" x 17" 1/2"		12. PAPER: 11" x 17" 1/2"	
13. PAPER: 11" x 17" 1/2"		14. PAPER: 11" x 17" 1/2"		15. PAPER: 11" x 17" 1/2"	
16. PAPER: 11" x 17" 1/2"		17. PAPER: 11" x 17" 1/2"		18. PAPER: 11" x 17" 1/2"	
19. PAPER: 11" x 17" 1/2"		20. PAPER: 11" x 17" 1/2"		21. PAPER: 11" x 17" 1/2"	
22. PAPER: 11" x 17" 1/2"		23. PAPER: 11" x 17" 1/2"		24. PAPER: 11" x 17" 1/2"	
25. PAPER: 11" x 17" 1/2"		26. PAPER: 11" x 17" 1/2"		27. PAPER: 11" x 17" 1/2"	
28. PAPER: 11" x 17" 1/2"		29. PAPER: 11" x 17" 1/2"		30. PAPER: 11" x 17" 1/2"	
31. PAPER: 11" x 17" 1/2"		32. PAPER: 11" x 17" 1/2"		33. PAPER: 11" x 17" 1/2"	
34. PAPER: 11" x 17" 1/2"		35. PAPER: 11" x 17" 1/2"		36. PAPER: 11" x 17" 1/2"	
37. PAPER: 11" x 17" 1/2"		38. PAPER: 11" x 17" 1/2"		39. PAPER: 11" x 17" 1/2"	
40. PAPER: 11" x 17" 1/2"		41. PAPER: 11" x 17" 1/2"		42. PAPER: 11" x 17" 1/2"	
43. PAPER: 11" x 17" 1/2"		44. PAPER: 11" x 17" 1/2"		45. PAPER: 11" x 17" 1/2"	
46. PAPER: 11" x 17" 1/2"		47. PAPER: 11" x 17" 1/2"		48. PAPER: 11" x 17" 1/2"	
49. PAPER: 11" x 17" 1/2"		50. PAPER: 11" x 17" 1/2"		51. PAPER: 11" x 17" 1/2"	
52. PAPER: 11" x 17" 1/2"		53. PAPER: 11" x 17" 1/2"		54. PAPER: 11" x 17" 1/2"	
55. PAPER: 11" x 17" 1/2"		56. PAPER: 11" x 17" 1/2"		57. PAPER: 11" x 17" 1/2"	
58. PAPER: 11" x 17" 1/2"		59. PAPER: 11" x 17" 1/2"		60. PAPER: 11" x 17" 1/2"	
61. PAPER: 11" x 17" 1/2"		62. PAPER: 11" x 17" 1/2"		63. PAPER: 11" x 17" 1/2"	
64. PAPER: 11" x 17" 1/2"		65. PAPER: 11" x 17" 1/2"		66. PAPER: 11" x 17" 1/2"	
67. PAPER: 11" x 17" 1/2"		68. PAPER: 11" x 17" 1/2"		69. PAPER: 11" x 17" 1/2"	
70. PAPER: 11" x 17" 1/2"		71. PAPER: 11" x 17" 1/2"		72. PAPER: 11" x 17" 1/2"	
73. PAPER: 11" x 17" 1/2"		74. PAPER: 11" x 17" 1/2"		75. PAPER: 11" x 17" 1/2"	
76. PAPER: 11" x 17" 1/2"		77. PAPER: 11" x 17" 1/2"		78. PAPER: 11" x 17" 1/2"	
79. PAPER: 11" x 17" 1/2"		80. PAPER: 11" x 17" 1/2"		81. PAPER: 11" x 17" 1/2"	
82. PAPER: 11" x 17" 1/2"		83. PAPER: 11" x 17" 1/2"		84. PAPER: 11" x 17" 1/2"	
85. PAPER: 11" x 17" 1/2"		86. PAPER: 11" x 17" 1/2"		87. PAPER: 11" x 17" 1/2"	
88. PAPER: 11" x 17" 1/2"		89. PAPER: 11" x 17" 1/2"		90. PAPER: 11" x 17" 1/2"	
91. PAPER: 11" x 17" 1/2"		92. PAPER: 11" x 17" 1/2"		93. PAPER: 11" x 17" 1/2"	
94. PAPER: 11" x 17" 1/2"		95. PAPER: 11" x 17" 1/2"		96. PAPER: 11" x 17" 1/2"	
97. PAPER: 11" x 17" 1/2"		98. PAPER: 11" x 17" 1/2"		99. PAPER: 11" x 17" 1/2"	
100. PAPER: 11" x 17" 1/2"		101. PAPER: 11" x 17" 1/2"		102. PAPER: 11" x 17" 1/2"	
103. PAPER: 11" x 17" 1/2"		104. PAPER: 11" x 17" 1/2"		105. PAPER: 11" x 17" 1/2"	
106. PAPER: 11" x 17" 1/2"		107. PAPER: 11" x 17" 1/2"		108. PAPER: 11" x 17" 1/2"	
109. PAPER: 11" x 17" 1/2"		110. PAPER: 11" x 17" 1/2"		111. PAPER: 11" x 17" 1/2"	
112. PAPER: 11" x 17" 1/2"		113. PAPER: 11" x 17" 1/2"		114. PAPER: 11" x 17" 1/2"	
115. PAPER: 11" x 17" 1/2"		116. PAPER: 11" x 17" 1/2"		117. PAPER: 11" x 17" 1/2"	
118. PAPER: 11" x 17" 1/2"		119. PAPER: 11" x 17" 1/2"		120. PAPER: 11" x 17" 1/2"	
121. PAPER: 11" x 17" 1/2"		122. PAPER: 11" x 17" 1/2"		123. PAPER: 11" x 17" 1/2"	
124. PAPER: 11" x 17" 1/2"		125. PAPER: 11" x 17" 1/2"		126. PAPER: 11" x 17" 1/2"	
127. PAPER: 11" x 17" 1/2"		128. PAPER: 11" x 17" 1/2"		129. PAPER: 11" x 17" 1/2"	
130. PAPER: 11" x 17" 1/2"		131. PAPER: 11" x 17" 1/2"		132. PAPER: 11" x 17" 1/2"	
133. PAPER: 11" x 17" 1/2"		134. PAPER: 11" x 17" 1/2"		135. PAPER: 11" x 17" 1/2"	
136. PAPER: 11" x 17" 1/2"		137. PAPER: 11" x 17" 1/2"		138. PAPER: 11" x 17" 1/2"	
139. PAPER: 11" x 17" 1/2"		140. PAPER: 11" x 17" 1/2"		141. PAPER: 11" x 17" 1/2"	
142. PAPER: 11" x 17" 1/2"		143. PAPER: 11" x 17" 1/2"		144. PAPER: 11" x 17" 1/2"	
145. PAPER: 11" x 17" 1/2"		146. PAPER: 11" x 17" 1/2"		147. PAPER: 11" x 17" 1/2"	
148. PAPER: 11" x 17" 1/2"		149. PAPER: 11" x 17" 1/2"		150. PAPER: 11" x 17" 1/2"	
151. PAPER: 11" x 17" 1/2"		152. PAPER: 11" x 17" 1/2"		153. PAPER: 11" x 17" 1/2"	
154. PAPER: 11" x 17" 1/2"		155. PAPER: 11" x 17" 1/2"		156. PAPER: 11" x 17" 1/2"	
157. PAPER: 11" x 17" 1/2"		158. PAPER: 11" x 17" 1/2"		159. PAPER: 11" x 17" 1/2"	
160. PAPER: 11" x 17" 1/2"		161. PAPER: 11" x 17" 1/2"		162. PAPER: 11" x 17" 1/2"	
163. PAPER: 11" x 17" 1/2"		164. PAPER: 11" x 17" 1/2"		165. PAPER: 11" x 17" 1/2"	
166. PAPER: 11" x 17" 1/2"		167. PAPER: 11" x 17" 1/2"		168. PAPER: 11" x 17" 1/2"	
169. PAPER: 11" x 17" 1/2"		170. PAPER: 11" x 17" 1/2"		171. PAPER: 11" x 17" 1/2"	
172. PAPER: 11" x 17" 1/2"		173. PAPER: 11" x 17" 1/2"		174. PAPER: 11" x 17" 1/2"	
175. PAPER: 11" x 17" 1/2"		176. PAPER: 11" x 17" 1/2"		177. PAPER: 11" x 17" 1/2"	
178. PAPER: 11" x 17" 1/2"		179. PAPER: 11" x 17" 1/2"		180. PAPER: 11" x 17" 1/2"	
181. PAPER: 11" x 17" 1/2"		182. PAPER: 11" x 17" 1/2"		183. PAPER: 11" x 17" 1/2"	
184. PAPER: 11" x 17" 1/2"		185. PAPER: 11" x 17" 1/2"		186. PAPER: 11" x 17" 1/2"	
187. PAPER: 11" x 17" 1/2"		188. PAPER: 11" x 17" 1/2"		189. PAPER: 11" x 17" 1/2"	
190. PAPER: 11" x 17" 1/2"		191. PAPER: 11" x 17" 1/2"		192. PAPER: 11" x 17" 1/2"	
193. PAPER: 11" x 17" 1/2"		194. PAPER: 11" x 17" 1/2"		195. PAPER: 11" x 17" 1/2"	
196. PAPER: 11" x 17" 1/2"		197. PAPER: 11" x 17" 1/2"		198. PAPER: 11" x 17" 1/2"	
199. PAPER: 11" x 17" 1/2"		200. PAPER: 11" x 17" 1/2"		201. PAPER: 11" x 17" 1/2"	
202. PAPER: 11" x 17" 1/2"		203. PAPER: 11" x 17" 1/2"		204. PAPER: 11" x 17" 1/2"	
205. PAPER: 11" x 17" 1/2"		206. PAPER: 11" x 17" 1/2"		207. PAPER: 11" x 17" 1/2"	
208. PAPER: 11" x 17" 1/2"		209. PAPER: 11" x 17" 1/2"		210. PAPER: 11" x 17" 1/2"	
211. PAPER: 11" x 17" 1/2"		212. PAPER: 11" x 17" 1/2"		213. PAPER: 11" x 17" 1/2"	
214. PAPER: 11" x 17" 1/2"		215. PAPER: 11" x 17" 1/2"		216. PAPER: 11" x 17" 1/2"	
217. PAPER: 11" x 17" 1/2"		218. PAPER: 11" x 17" 1/2"		219. PAPER: 11" x 17" 1/2"	
220. PAPER: 11" x 17" 1/2"		221. PAPER: 11" x 17" 1/2"		222. PAPER: 11" x 17" 1/2"	
223. PAPER: 11" x 17" 1/2"		224. PAPER: 11" x 17" 1/2"		225. PAPER: 11" x 17" 1/2"	
226. PAPER: 11" x 17" 1/2"		227. PAPER: 11" x 17" 1/2"		228. PAPER: 11" x 17" 1/2"	
229. PAPER: 11" x 17" 1/2"		230. PAPER: 11" x 17" 1/2"		231. PAPER: 11" x 17" 1/2"	
232. PAPER: 11" x 17" 1/2"		233. PAPER: 11" x 17" 1/2"		234. PAPER: 11" x 17" 1/2"	
235. PAPER: 11" x 17" 1/2"		236. PAPER: 11" x 17" 1/2"		237. PAPER: 11" x 17" 1/2"	
238. PAPER: 11" x 17" 1/2"		239. PAPER: 11" x 17" 1/2"		240. PAPER: 11" x 17" 1/2"	
241. PAPER: 11" x 17" 1/2"		242. PAPER: 11" x 17" 1/2"		243. PAPER: 11" x 17" 1/2"	
244. PAPER: 11" x 17" 1/2"		245. PAPER: 11" x 17" 1/2"		246. PAPER: 11" x 17" 1/2"	
247. PAPER: 11" x 17" 1/2"		248. PAPER: 11" x 17" 1/2"		249. PAPER: 11" x 17" 1/2"	
250. PAPER: 11" x 17" 1/2"		251. PAPER: 11" x 17" 1/2"		252. PAPER: 11" x 17" 1/2"	
253. PAPER: 11" x 17" 1/2"		254. PAPER: 11" x 17" 1/2"		255. PAPER: 11" x 17" 1/2"	
256. PAPER: 11" x 17" 1/2"		257. PAPER: 11" x 17" 1/2"		258. PAPER: 11" x 17" 1/2"	
259. PAPER: 11" x 17" 1/2"		260. PAPER: 11" x 17" 1/2"		261. PAPER: 11" x 17" 1/2"	
262. PAPER: 11" x 17" 1/2"		263. PAPER: 11" x 17" 1/2"		264. PAPER: 11" x 17" 1/2"	
265. PAPER: 11" x 17" 1/2"		266. PAPER: 11" x 17" 1/2"		267. PAPER: 11" x 17" 1/2"	
268. PAPER: 11" x 17" 1/2"		269. PAPER: 11" x 17" 1/2"		270. PAPER: 11" x 17" 1/2"	

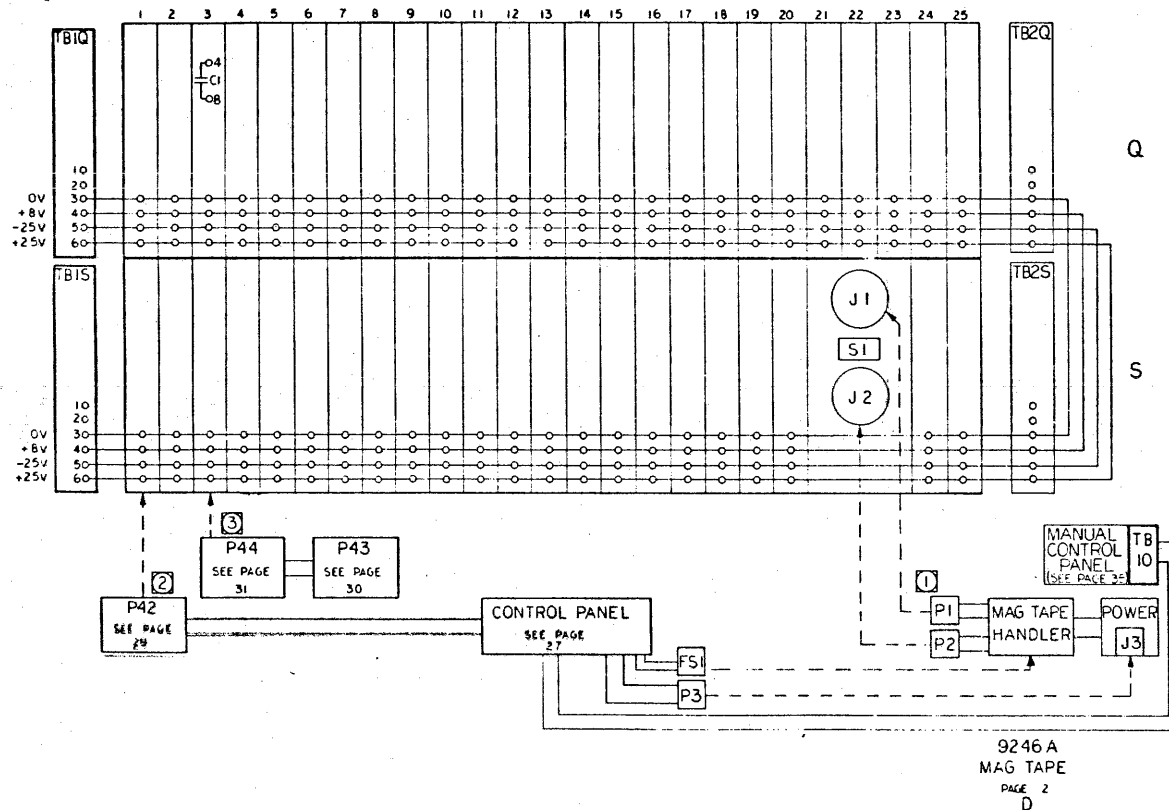
③ RECEPTACLE J(35) IS PROVIDED FOR THE P44 TO P43 CABLE. P43 CONNECTS TO RECEPTACLE J(24V) OF THE MODEL 9248 CONTROL UNIT OR TO J(25) OF A SECOND MODEL 9246.

NOTES: UNLESS OTHERWISE SPECIFIED

① RECEPTACLES J1 & J2 ARE PROVIDED FOR CONNECTION TO THE READ & WRITE HEADS OF THE MAG TAPE UNIT.

② RECEPTACLE J(15) IS PROVIDED FOR P42 FROM CONTROL PANEL.

REVISIONS				103258
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL TO MFG		1/1/73	
	SEE REV. E.O.			
D	SEE REV E.O.			



9246A
MAG TAPE
PAGE 2
D

NO	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION	REV
1	103258	103258	103258	1
2	103258	103258	103258	2
3	103258	103258	103258	3
4	103258	103258	103258	4
5	103258	103258	103258	5
6	103258	103258	103258	6
7	103258	103258	103258	7
8	103258	103258	103258	8
9	103258	103258	103258	9
10	103258	103258	103258	10
11	103258	103258	103258	11
12	103258	103258	103258	12
13	103258	103258	103258	13
14	103258	103258	103258	14
15	103258	103258	103258	15
16	103258	103258	103258	16
17	103258	103258	103258	17
18	103258	103258	103258	18
19	103258	103258	103258	19
20	103258	103258	103258	20
21	103258	103258	103258	21
22	103258	103258	103258	22
23	103258	103258	103258	23
24	103258	103258	103258	24
25	103258	103258	103258	25
26	103258	103258	103258	26
27	103258	103258	103258	27
28	103258	103258	103258	28
29	103258	103258	103258	29
30	103258	103258	103258	30
31	103258	103258	103258	31
32	103258	103258	103258	32
33	103258	103258	103258	33
34	103258	103258	103258	34
35	103258	103258	103258	35
36	103258	103258	103258	36
37	103258	103258	103258	37
38	103258	103258	103258	38
39	103258	103258	103258	39
40	103258	103258	103258	40
41	103258	103258	103258	41
42	103258	103258	103258	42
43	103258	103258	103258	43
44	103258	103258	103258	44
45	103258	103258	103258	45
46	103258	103258	103258	46
47	103258	103258	103258	47
48	103258	103258	103258	48
49	103258	103258	103258	49
50	103258	103258	103258	50
51	103258	103258	103258	51
52	103258	103258	103258	52
53	103258	103258	103258	53
54	103258	103258	103258	54
55	103258	103258	103258	55
56	103258	103258	103258	56
57	103258	103258	103258	57
58	103258	103258	103258	58
59	103258	103258	103258	59
60	103258	103258	103258	60
61	103258	103258	103258	61
62	103258	103258	103258	62
63	103258	103258	103258	63
64	103258	103258	103258	64
65	103258	103258	103258	65
66	103258	103258	103258	66
67	103258	103258	103258	67
68	103258	103258	103258	68
69	103258	103258	103258	69
70	103258	103258	103258	70
71	103258	103258	103258	71
72	103258	103258	103258	72
73	103258	103258	103258	73
74	103258	103258	103258	74
75	103258	103258	103258	75
76	103258	103258	103258	76
77	103258	103258	103258	77
78	103258	103258	103258	78
79	103258	103258	103258	79
80	103258	103258	103258	80
81	103258	103258	103258	81
82	103258	103258	103258	82
83	103258	103258	103258	83
84	103258	103258	103258	84
85	103258	103258	103258	85
86	103258	103258	103258	86
87	103258	103258	103258	87
88	103258	103258	103258	88
89	103258	103258	103258	89
90	103258	103258	103258	90
91	103258	103258	103258	91
92	103258	103258	103258	92
93	103258	103258	103258	93
94	103258	103258	103258	94
95	103258	103258	103258	95
96	103258	103258	103258	96
97	103258	103258	103258	97
98	103258	103258	103258	98
99	103258	103258	103258	99
100	103258	103258	103258	100

REVISIONS				103258	D
REV	DESCRIPTION	DATE	APPROVED		
A	REL TO MFG.				
C	SEE REV. B.O.				
D	SEE REV E.O.				

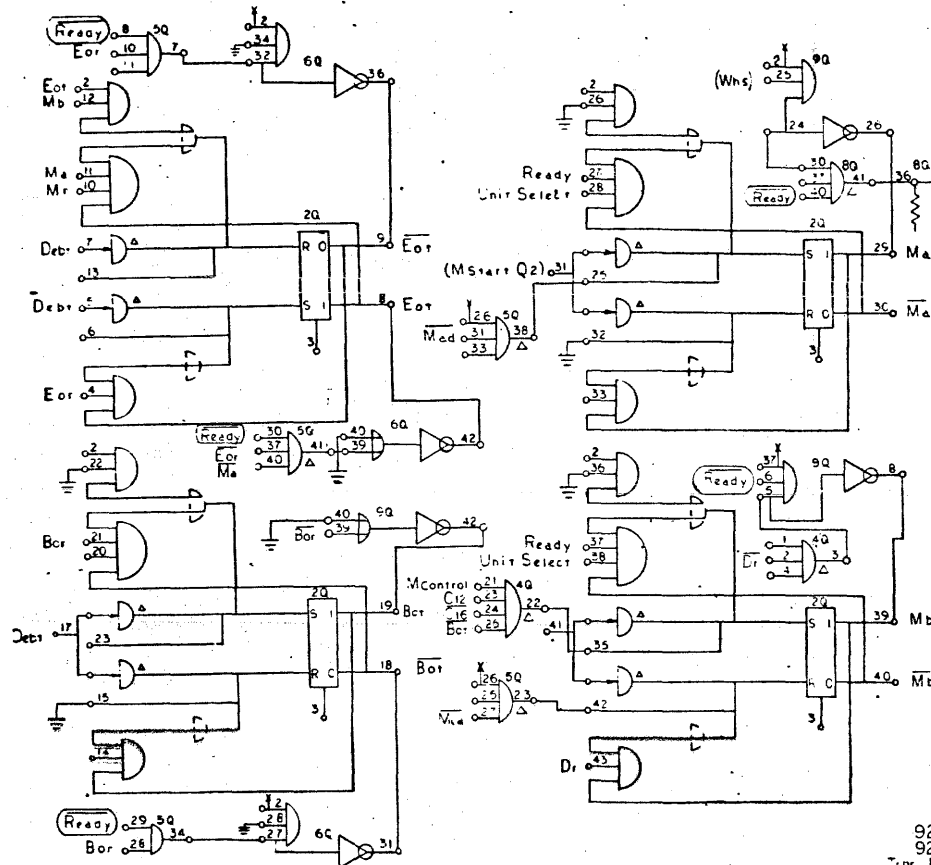
9246 DIRECTORY

As	10	Es	20	Mle	9	R1a	20
TAa	24	Eor	22	M2e	9	R1a	21
Aaa	6	Esa	22	M3a	9	R1a	1
Aaa	26	Eur + Eor	22	M4e	11	R2a	17
Ann. Contr. Panel	27	Eur Eor	19	M5e	10	R3a	16
Des	28	Eut	4	M6e	10	R3a	14
Der	4	Eut Indicate	4	M7e	11	R3a	14
Der	22	Flw Pr. Act Indicate	8	M8e	11	R3a	14
Det	4	Forward Actuate	13	M9e	12	R3a	17
Det Indicate	8			M10e	12	R3a	17
Ch1 Read	26	(H)	23	M11e	12	R3a	17
Ch2 Read	26	(G)	23	M12e	12	R3a	17
Ch3 Read	26	K1 Set	8	M13e	13	R3a	17
Ch4 Read	26	K2 Set	8	M14e	13	R3a	17
Ch5 Read	26			M15e	13	R3a	17
Ch6 Read	26	Ma	4	M16e	13	R3a	17
Ch7 Read	26	Mad	22	M17e	13	R3a	17
Ch1 Write	13	W1a	22	M18e	13	R3a	17
Ch2 Write	13	(V1a)	24	Read	4	R3a	17
Ch3 Write	13	Ma M	17	Read	6	R3a	17
Ch4 Write	13	Ma M	17	Read Indicate	8	R3a	17
Ch5 Write	13	Ma M + M	17	Reverse Actuate	13	R3a	17
Ch6 Write	13	Ma Test	17	R1a	10, 11	R3a	17
Ch7 Write	13	Ma Test	17	(R1a)	25	R3a	17
C13	20	Ma Test	17	(R1a)	25	R3a	17
C14	20	Ma	4	R1a	25	R3a	17
C15	20	Ma	4	R1a	25	R3a	17
C16	20	Ma	4	R1a	25	R3a	17
C17	20	Ma	4	R1a	25	R3a	17
C18	20	Ma	4	R1a	25	R3a	17
C19	20	Ma	4	R1a	25	R3a	17
C20	20	Ma	4	R1a	25	R3a	17
C21	20	Ma	4	R1a	25	R3a	17
C22	20	Ma	4	R1a	25	R3a	17
C23	20	Ma	4	R1a	25	R3a	17
C24	20	Ma	4	R1a	25	R3a	17
C25	20	Ma	4	R1a	25	R3a	17
C26	20	Ma	4	R1a	25	R3a	17
C27	20	Ma	4	R1a	25	R3a	17
C28	20	Ma	4	R1a	25	R3a	17
C29	20	Ma	4	R1a	25	R3a	17
C30	20	Ma	4	R1a	25	R3a	17
C31	20	Ma	4	R1a	25	R3a	17
C32	20	Ma	4	R1a	25	R3a	17
C33	20	Ma	4	R1a	25	R3a	17
C34	20	Ma	4	R1a	25	R3a	17
C35	20	Ma	4	R1a	25	R3a	17
C36	20	Ma	4	R1a	25	R3a	17
C37	20	Ma	4	R1a	25	R3a	17
C38	20	Ma	4	R1a	25	R3a	17
C39	20	Ma	4	R1a	25	R3a	17
C40	20	Ma	4	R1a	25	R3a	17
C41	20	Ma	4	R1a	25	R3a	17
C42	20	Ma	4	R1a	25	R3a	17
C43	20	Ma	4	R1a	25	R3a	17
C44	20	Ma	4	R1a	25	R3a	17
C45	20	Ma	4	R1a	25	R3a	17
C46	20	Ma	4	R1a	25	R3a	17
C47	20	Ma	4	R1a	25	R3a	17
C48	20	Ma	4	R1a	25	R3a	17
C49	20	Ma	4	R1a	25	R3a	17
C50	20	Ma	4	R1a	25	R3a	17
C51	20	Ma	4	R1a	25	R3a	17
C52	20	Ma	4	R1a	25	R3a	17
C53	20	Ma	4	R1a	25	R3a	17
C54	20	Ma	4	R1a	25	R3a	17
C55	20	Ma	4	R1a	25	R3a	17
C56	20	Ma	4	R1a	25	R3a	17
C57	20	Ma	4	R1a	25	R3a	17
C58	20	Ma	4	R1a	25	R3a	17
C59	20	Ma	4	R1a	25	R3a	17
C60	20	Ma	4	R1a	25	R3a	17
C61	20	Ma	4	R1a	25	R3a	17
C62	20	Ma	4	R1a	25	R3a	17
C63	20	Ma	4	R1a	25	R3a	17
C64	20	Ma	4	R1a	25	R3a	17
C65	20	Ma	4	R1a	25	R3a	17
C66	20	Ma	4	R1a	25	R3a	17
C67	20	Ma	4	R1a	25	R3a	17
C68	20	Ma	4	R1a	25	R3a	17
C69	20	Ma	4	R1a	25	R3a	17
C70	20	Ma	4	R1a	25	R3a	17
C71	20	Ma	4	R1a	25	R3a	17
C72	20	Ma	4	R1a	25	R3a	17
C73	20	Ma	4	R1a	25	R3a	17
C74	20	Ma	4	R1a	25	R3a	17
C75	20	Ma	4	R1a	25	R3a	17
C76	20	Ma	4	R1a	25	R3a	17
C77	20	Ma	4	R1a	25	R3a	17
C78	20	Ma	4	R1a	25	R3a	17
C79	20	Ma	4	R1a	25	R3a	17
C80	20	Ma	4	R1a	25	R3a	17
C81	20	Ma	4	R1a	25	R3a	17
C82	20	Ma	4	R1a	25	R3a	17
C83	20	Ma	4	R1a	25	R3a	17
C84	20	Ma	4	R1a	25	R3a	17
C85	20	Ma	4	R1a	25	R3a	17
C86	20	Ma	4	R1a	25	R3a	17
C87	20	Ma	4	R1a	25	R3a	17
C88	20	Ma	4	R1a	25	R3a	17
C89	20	Ma	4	R1a	25	R3a	17
C90	20	Ma	4	R1a	25	R3a	17
C91	20	Ma	4	R1a	25	R3a	17
C92	20	Ma	4	R1a	25	R3a	17
C93	20	Ma	4	R1a	25	R3a	17
C94	20	Ma	4	R1a	25	R3a	17
C95	20	Ma	4	R1a	25	R3a	17
C96	20	Ma	4	R1a	25	R3a	17
C97	20	Ma	4	R1a	25	R3a	17
C98	20	Ma	4	R1a	25	R3a	17
C99	20	Ma	4	R1a	25	R3a	17
C100	20	Ma	4	R1a	25	R3a	17

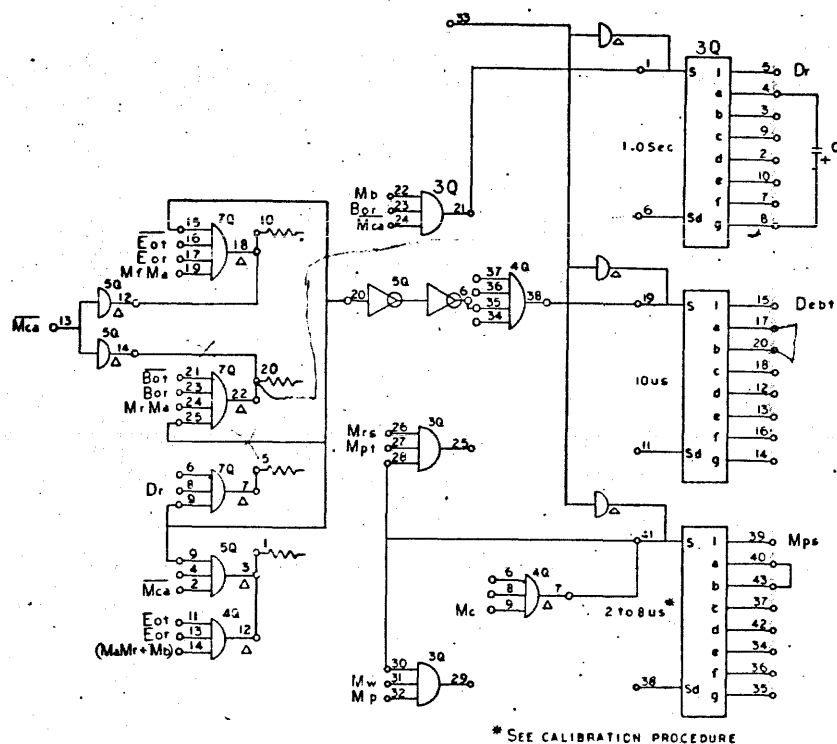
9246A
9246P
MAG TAPE UNIT
PAGE 3
D

NO.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV.
NOTES: UNLESS SPECIFIED 1. TOLERANCES 2. DIMENSIONS 3. SURFACE FINISH 4. ALL DIMENSIONS IN INCHES CHECK DATE BY APPROVED DATE BY				
MATERIAL LIST ITEM NO. QTY. UNIT 1. 1.000 1.000 1.000 2. 1.000 1.000 1.000 3. 1.000 1.000 1.000 4. 1.000 1.000 1.000 SDS SHEET NO. 1 OF 1 TITLE DIAGRAM, LOGIC, MAG TAPE UNIT				
MODEL NO. 9246		DATE D 103258 D		
NEXT ASSY		SCALE DO NOT SCALE DRAWING SHEET 3		

REV. BY: BNS			IC3256 3	
REV.	DESCRIPTION	CHK.	DATE	APPROVAL
A	REL TO MFG		10-1-81	
B	SEE REV E.O.		10-1-81	
C	SEE REV. E.O.		10-1-81	
D	SEE REV E.O.		10-1-81	

[illegible]

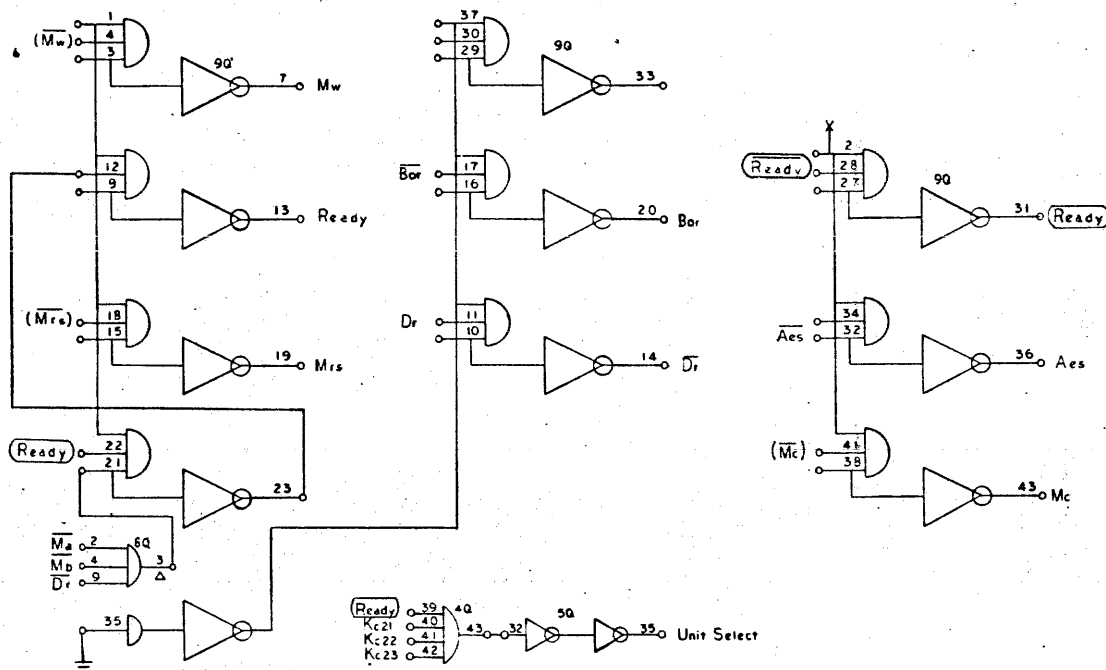
REVISIONS				103258	2
REV	DESCRIPTION	CHK	DATE	APPROVED	
A	REL. TO MFG.	CH	10/17		
C	SEE REV. E.O.				
D	SEE REV E.O.				



9246A
9246P
TAP ELECTRONICS
PAGE 5
D

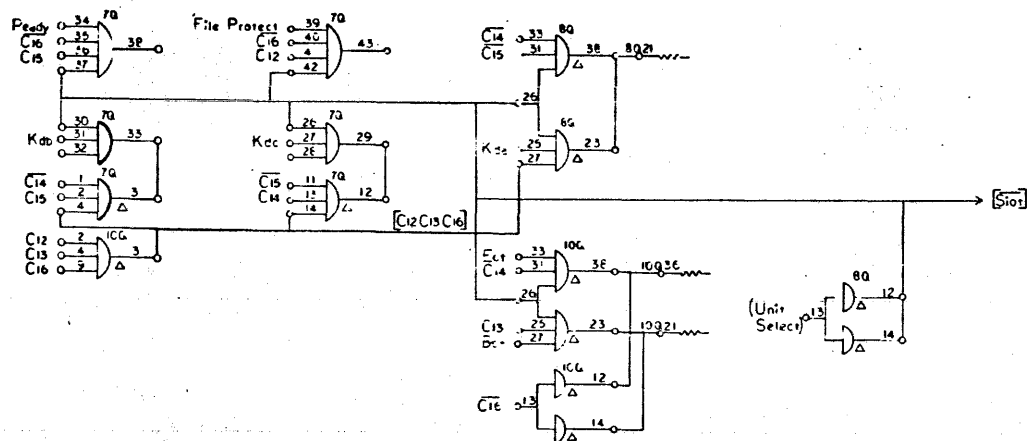
NO. 418	DRAWING NO.	DESCRIPTION	DEPARTMENT INFORMATION
NOTES UNLESS SO SPECIFIED		DATE 7/19/63	 STANDARD OPERATING SYSTEM
1. FOR DRAWING SEE	DESIGN CUB	7/19/63	
2. SEE	DATE	7/19/63	
3. SPECIAL ALL CHANGES PER APPROVAL	DATE	7/19/63	
4. DESIGN SURVEYED	DATE		
5. ALL WORK ON INCHES			
APPROVED	9246		 STANDARD OPERATING SYSTEM
DATE	7/19/63		
BY			
NO. 418			

REF ID: A66066		REASON FOR		C3258	
REL	DATE	FILE	DATE	APPROVED	
A		RFL TO MFG	08/01/01		
C		SEE REV. E.O.	08/01/01		
D		SEE REV E.O.	08/01/01		



9246A
9246P
TAPE ELECTRONICS
PAGE 6
D

NO REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION
NOTES UNLESS SPECIFIED		MATERIAL LIST	
1. DIMENSIONS 2. 1/2" DIA 3. 1/2" DIA 4. 1/2" DIA 5. 1/2" DIA 6. 1/2" DIA 7. 1/2" DIA 8. 1/2" DIA 9. 1/2" DIA 10. 1/2" DIA 11. 1/2" DIA 12. 1/2" DIA 13. 1/2" DIA 14. 1/2" DIA 15. 1/2" DIA 16. 1/2" DIA 17. 1/2" DIA 18. 1/2" DIA 19. 1/2" DIA 20. 1/2" DIA 21. 1/2" DIA 22. 1/2" DIA 23. 1/2" DIA 24. 1/2" DIA 25. 1/2" DIA 26. 1/2" DIA 27. 1/2" DIA 28. 1/2" DIA 29. 1/2" DIA 30. 1/2" DIA 31. 1/2" DIA 32. 1/2" DIA 33. 1/2" DIA 34. 1/2" DIA 35. 1/2" DIA 36. 1/2" DIA 37. 1/2" DIA 38. 1/2" DIA 39. 1/2" DIA 40. 1/2" DIA 41. 1/2" DIA 42. 1/2" DIA 43. 1/2" DIA 44. 1/2" DIA 45. 1/2" DIA 46. 1/2" DIA 47. 1/2" DIA 48. 1/2" DIA 49. 1/2" DIA 50. 1/2" DIA 51. 1/2" DIA 52. 1/2" DIA 53. 1/2" DIA 54. 1/2" DIA 55. 1/2" DIA 56. 1/2" DIA 57. 1/2" DIA 58. 1/2" DIA 59. 1/2" DIA 60. 1/2" DIA 61. 1/2" DIA 62. 1/2" DIA 63. 1/2" DIA 64. 1/2" DIA 65. 1/2" DIA 66. 1/2" DIA 67. 1/2" DIA 68. 1/2" DIA 69. 1/2" DIA 70. 1/2" DIA 71. 1/2" DIA 72. 1/2" DIA 73. 1/2" DIA 74. 1/2" DIA 75. 1/2" DIA 76. 1/2" DIA 77. 1/2" DIA 78. 1/2" DIA 79. 1/2" DIA 80. 1/2" DIA 81. 1/2" DIA 82. 1/2" DIA 83. 1/2" DIA 84. 1/2" DIA 85. 1/2" DIA 86. 1/2" DIA 87. 1/2" DIA 88. 1/2" DIA 89. 1/2" DIA 90. 1/2" DIA 91. 1/2" DIA 92. 1/2" DIA 93. 1/2" DIA 94. 1/2" DIA 95. 1/2" DIA 96. 1/2" DIA 97. 1/2" DIA 98. 1/2" DIA 99. 1/2" DIA 100. 1/2" DIA 101. 1/2" DIA 102. 1/2" DIA 103. 1/2" DIA 104. 1/2" DIA 105. 1/2" DIA 106. 1/2" DIA 107. 1/2" DIA 108. 1/2" DIA 109. 1/2" DIA 110. 1/2" DIA 111. 1/2" DIA 112. 1/2" DIA 113. 1/2" DIA 114. 1/2" DIA 115. 1/2" DIA 116. 1/2" DIA 117. 1/2" DIA 118. 1/2" DIA 119. 1/2" DIA 120. 1/2" DIA 121. 1/2" DIA 122. 1/2" DIA 123. 1/2" DIA 124. 1/2" DIA 125. 1/2" DIA 126. 1/2" DIA 127. 1/2" DIA 128. 1/2" DIA 129. 1/2" DIA 130. 1/2" DIA 131. 1/2" DIA 132. 1/2" DIA 133. 1/2" DIA 134. 1/2" DIA 135. 1/2" DIA 136. 1/2" DIA 137. 1/2" DIA 138. 1/2" DIA 139. 1/2" DIA 140. 1/2" DIA 141. 1/2" DIA 142. 1/2" DIA 143. 1/2" DIA 144. 1/2" DIA 145. 1/2" DIA 146. 1/2" DIA 147. 1/2" DIA 148. 1/2" DIA 149. 1/2" DIA 150. 1/2" DIA 151. 1/2" DIA 152. 1/2" DIA 153. 1/2" DIA 154. 1/2" DIA 155. 1/2" DIA 156. 1/2" DIA 157. 1/2" DIA 158. 1/2" DIA 159. 1/2" DIA 160. 1/2" DIA 161. 1/2" DIA 162. 1/2" DIA 163. 1/2" DIA 164. 1/2" DIA 165. 1/2" DIA 166. 1/2" DIA 167. 1/2" DIA 168. 1/2" DIA 169. 1/2" DIA 170. 1/2" DIA 171. 1/2" DIA 172. 1/2" DIA 173. 1/2" DIA 174. 1/2" DIA 175. 1/2" DIA 176. 1/2" DIA 177. 1/2" DIA 178. 1/2" DIA 179. 1/2" DIA 180. 1/2" DIA 181. 1/2" DIA 182. 1/2" DIA 183. 1/2" DIA 184. 1/2" DIA 185. 1/2" DIA 186. 1/2" DIA 187. 1/2" DIA 188. 1/2" DIA 189. 1/2" DIA 190. 1/2" DIA 191. 1/2" DIA 192. 1/2" DIA 193. 1/2" DIA 194. 1/2" DIA 195. 1/2" DIA 196. 1/2" DIA 197. 1/2" DIA 198. 1/2" DIA 199. 1/2" DIA 200. 1/2" DIA 201. 1/2" DIA 202. 1/2" DIA 203. 1/2" DIA 204. 1/2" DIA 205. 1/2" DIA 206. 1/2" DIA 207. 1/2" DIA 208. 1/2" DIA 209. 1/2" DIA 210. 1/2" DIA 211. 1/2" DIA 212. 1/2" DIA 213. 1/2" DIA 214. 1/2" DIA 215. 1/2" DIA 216. 1/2" DIA 217. 1/2" DIA 218. 1/2" DIA 219. 1/2" DIA 220. 1/2" DIA 221. 1/2" DIA 222. 1/2" DIA 223. 1/2" DIA 224. 1/2" DIA 225. 1/2" DIA 226. 1/2" DIA 227. 1/2" DIA 228. 1/2" DIA 229. 1/2" DIA 230. 1/2" DIA 231. 1/2" DIA 232. 1/2" DIA 233. 1/2" DIA 234. 1/2" DIA 235. 1/2" DIA 236. 1/2" DIA 237. 1/2" DIA 238. 1/2" DIA 239. 1/2" DIA 240. 1/2" DIA 241. 1/2" DIA 242. 1/2" DIA 243. 1/2" DIA 244. 1/2" DIA 245. 1/2" DIA 246. 1/2" DIA 247. 1/2" DIA 248. 1/2" DIA 249. 1/2" DIA 250. 1/2" DIA 251. 1/2" DIA 252. 1/2" DIA 253. 1/2" DIA 254. 1/2" DIA 255. 1/2" DIA 256. 1/2" DIA 257. 1/2" DIA 258. 1/2" DIA 259. 1/2" DIA 260. 1/2" DIA 261. 1/2" DIA 262. 1/2" DIA 263. 1/2" DIA 264. 1/2" DIA 265. 1/2" DIA 266. 1/2" DIA 267. 1/2" DIA 268. 1/2" DIA 269. 1/2" DIA 270. 1/2" DIA 271. 1/2" DIA 272. 1/2" DIA 273. 1/2" DIA 274. 1/2" DIA 275. 1/2" DIA 276. 1/2" DIA 277. 1/2" DIA 278. 1/2" DIA 279. 1/2" DIA 280. 1/2" DIA 281. 1/2" DIA 282. 1/2" DIA 283. 1/2" DIA 284. 1/2" DIA 285. 1/2" DIA 286. 1/2" DIA 287. 1/2" DIA 288. 1/2" DIA 289. 1/2" DIA 290. 1/2" DIA 291. 1/2" DIA 292. 1/2" DIA 293. 1/2" DIA 294. 1/2" DIA 295. 1/2" DIA 296. 1/2" DIA 297. 1/2" DIA 298. 1/2" DIA 299. 1/2" DIA 300. 1/2" DIA 301. 1/2" DIA 302. 1/2" DIA 303. 1/2" DIA 304. 1/2" DIA 305. 1/2" DIA 306. 1/2" DIA 307. 1/2" DIA 308. 1/2" DIA 309. 1/2" DIA 310. 1/2" DIA 311. 1/2" DIA 312. 1/2" DIA 313. 1/2" DIA 314. 1/2" DIA 315. 1/2" DIA 316. 1/2" DIA 317. 1/2" DIA 318. 1/2" DIA 319. 1/2" DIA 320. 1/2" DIA 321. 1/2" DIA 322. 1/2" DIA 323. 1/2" DIA 324. 1/2" DIA 325. 1/2" DIA 326. 1/2" DIA 327. 1/2" DIA 328. 1/2" DIA 329. 1/2" DIA 330. 1/2" DIA 331. 1/2" DIA 332. 1/2" DIA 333. 1/2" DIA 334. 1/2" DIA 335. 1/2" DIA 336. 1/2" DIA 337. 1/2" DIA 338. 1/2" DIA 339. 1/2" DIA 340. 1/2" DIA 341. 1/2" DIA 342. 1/2" DIA 343. 1/2" DIA 344. 1/2" DIA 345. 1/2" DIA 346. 1/2" DIA 347. 1/2" DIA 348. 1/2" DIA 349. 1/2" DIA 350. 1/2" DIA 351. 1/2" DIA 352. 1/2" DIA 353. 1/2" DIA 354. 1/2" DIA 355. 1/2" DIA 356. 1/2" DIA 357. 1/2" DIA 358. 1/2" DIA 359. 1/2" DIA 360. 1/2" DIA 361. 1/2" DIA 362. 1/2" DIA 363. 1/2" DIA 364. 1/2" DIA 365. 1/2" DIA 366. 1/2" DIA 367. 1/2" DIA 368. 1/2" DIA 369. 1/2" DIA 370. 1/2" DIA 371. 1/2" DIA 372. 1/2" DIA 373. 1/2" DIA 374. 1/2" DIA 375. 1/2" DIA 376. 1/2" DIA 377. 1/2" DIA 378. 1/2" DIA 379. 1/2" DIA 380. 1/2" DIA 381. 1/2" DIA 382. 1/2" DIA 383. 1/2" DIA 384. 1/2" DIA 385. 1/2" DIA 386. 1/2" DIA 387. 1/2" DIA 388. 1/2" DIA 389. 1/2" DIA 390. 1/2" DIA 391. 1/2" DIA 392. 1/2" DIA 393. 1/2" DIA 394. 1/2" DIA 395. 1/2" DIA 396. 1/2" DIA 397. 1/2" DIA 398. 1/2" DIA 399. 1/2" DIA 400. 1/2" DIA 401. 1/2" DIA 402. 1/2" DIA 403. 1/2" DIA 404. 1/2" DIA 405. 1/2" DIA 406. 1/2" DIA 407. 1/2" DIA 408. 1/2" DIA 409. 1/2" DIA 410. 1/2" DIA 411. 1/2" DIA 412. 1/2" DIA 413. 1/2" DIA 414. 1/2" DIA 415. 1/2" DIA 416. 1/2" DIA 417. 1/2" DIA 418. 1/2" DIA 419. 1/2" DIA 420. 1/2" DIA 421. 1/2" DIA 422. 1/2" DIA 423. 1/2" DIA 424. 1/2" DIA 425. 1/2" DIA 426. 1/2" DIA 427. 1/2" DIA 428. 1/2" DIA 429. 1/2" DIA 430. 1/2" DIA 431. 1/2" DIA 432. 1/2" DIA 433. 1/2" DIA 434. 1/2" DIA 435. 1/2" DIA 436. 1/2" DIA 437. 1/2" DIA 438. 1/2" DIA 439. 1/2" DIA 440. 1/2" DIA 441. 1/2" DIA 442. 1/2" DIA 443. 1/2" DIA 444. 1/2" DIA 445. 1/2" DIA 446. 1/2" DIA 447. 1/2" DIA 448. 1/2" DIA 449. 1/2" DIA 450. 1/2" DIA 451. 1/2" DIA 452. 1/2" DIA 453. 1/2" DIA 454. 1/2" DIA 455. 1/2" DIA 456. 1/2" DIA 457. 1/2" DIA 458. 1/2" DIA 459. 1/2" DIA 460. 1/2" DIA 461. 1/2" DIA 462. 1/2" DIA 463. 1/2" DIA 464. 1/2" DIA 465. 1/2" DIA 466. 1/2" DIA 467. 1/2" DIA 468. 1/2" DIA 469. 1/2" DIA 470. 1/2" DIA 471. 1/2" DIA 472. 1/2" DIA 473. 1/2" DIA 474. 1/2" DIA 475. 1/2" DIA 476. 1/2" DIA 477. 1/2" DIA 478. 1/2" DIA 479. 1/2" DIA 480. 1/2" DIA 481. 1/2" DIA 482. 1/2" DIA 483. 1/2" DIA 484. 1/2" DIA 485. 1/2" DIA 486. 1/2" DIA 487. 1/2" DIA 488. 1/2" DIA 489. 1/2" DIA 490. 1/2" DIA 491. 1/2" DIA 492. 1/2" DIA 493. 1/2" DIA 494. 1/2" DIA 495. 1/2" DIA 496. 1/2" DIA 497. 1/2" DIA 498. 1/2" DIA 499. 1/2" DIA 500. 1/2" DIA 501. 1/2" DIA 502. 1/2" DIA 503. 1/2" DIA 504. 1/2" DIA 505. 1/2" DIA 506. 1/2" DIA 507. 1/2" DIA 508. 1/2" DIA 509. 1/2" DIA 510. 1/2" DIA 511. 1/2" DIA 512. 1/2" DIA 513. 1/2" DIA 514. 1/2" DIA 515. 1/2" DIA 516. 1/2" DIA 517. 1/2" DIA 518. 1/2" DIA 519. 1/2" DIA 520. 1/2" DIA 521. 1/2" DIA 522. 1/2" DIA 523. 1/2" DIA 524. 1/2" DIA 525. 1/2" DIA 526. 1/2" DIA 527. 1/2" DIA 528. 1/2" DIA 529. 1/2" DIA 530. 1/2" DIA 531. 1/2" DIA 532. 1/2" DIA 533. 1/2" DIA 534. 1/2" DIA 535. 1/2" DIA 536. 1/2" DIA 537. 1/2" DIA 538. 1/2" DIA 539. 1/2" DIA 540. 1/2" DIA 541. 1/2" DIA 542. 1/2" DIA 543. 1/2" DIA 544. 1/2" DIA 545. 1/2" DIA 546. 1/2" DIA 547. 1/2" DIA 548. 1/2" DIA 549. 1/2" DIA 550. 1/2" DIA 551. 1/2" DIA 552. 1/2" DIA 553. 1/2" DIA 554. 1/2" DIA 555. 1/2" DIA 556. 1/2" DIA 557. 1/2" DIA 558. 1/2" DIA 559. 1/2" DIA 560. 1/2" DIA 561. 1/2" DIA 562. 1/2" DIA 563. 1/2" DIA 564. 1/2" DIA 565. 1/2" DIA 566. 1/2" DIA 567. 1/2" DIA 568. 1/2" DIA 569. 1/2" DIA 570. 1/2" DIA 571. 1/2" DIA 572. 1/2" DIA 573. 1/2" DIA 574. 1/2" DIA 575. 1/2" DIA 576. 1/2" DIA 577. 1/2" DIA 578. 1/2" DIA 579. 1/2" DIA 580. 1/2" DIA 581. 1/2" DIA 582. 1/2" DIA 583. 1/2" DIA 584. 1/2" DIA 585. 1/2" DIA 586. 1/2" DIA 587. 1/2" DIA 588. 1/2" DIA 589. 1/2" DIA 590. 1/2" DIA 591. 1/2" DIA 592. 1/2" DIA 593. 1/2" DIA 594. 1/2" DIA 595. 1/2" DIA 596. 1/2" DIA 597. 1/2" DIA 598. 1/2" DIA 599. 1/2" DIA 600. 1/2" DIA 601. 1/2" DIA 602. 1/2" DIA 603. 1/2" DIA 604. 1/2" DIA 605. 1/2" DIA 606. 1/2" DIA 607. 1/2" DIA 608. 1/2" DIA 609. 1/2" DIA 610. 1/2" DIA 611. 1/2" DIA 612. 1/2" DIA 613. 1/2" DIA 614. 1/2" DIA 615. 1/2" DIA 616. 1/2" DIA 617. 1/2" DIA 618. 1/2" DIA 619. 1/2" DIA 620. 1/2" DIA 621. 1/2" DIA 622. 1/2" DIA 623. 1/2" DIA 624. 1/2" DIA 625. 1/2" DIA 626. 1/2" DIA 627. 1/2" DIA 628. 1/2" DIA 629. 1/2" DIA 630. 1/2" DIA 631. 1/2" DIA 632. 1/2" DIA 633. 1/2" DIA 634. 1/2" DIA 635. 1/2" DIA 636. 1/2" DIA 637. 1/2" DIA 638. 1/2" DIA 639. 1/2" DIA 640. 1/2" DIA 641. 1/2" DIA 642. 1/2" DIA 643. 1/2" DIA 644. 1/2" DIA 645. 1/2" DIA 646. 1/2" DIA 647. 1/2" DIA 648. 1/2" DIA 649. 1/2" DIA 650. 1/2" DIA 651. 1/2" DIA 652. 1/2" DIA 653. 1/2" DIA 654. 1/2" DIA 655. 1/2" DIA 656. 1/2" DIA 657. 1/2" DIA 658. 1/2" DIA 659. 1/2" DIA 660. 1/2" DIA 661. 1/2" DIA 662. 1/2" DIA 663. 1/2" DIA 664. 1/2" DIA 665. 1/2" DIA 666. 1/2" DIA 667. 1/2" DIA 668. 1/2" DIA 669. 1/2" DIA 670. 1/2" DIA 671. 1/2" DIA 672. 1/2" DIA 673. 1/2" DIA 674. 1/2" DIA 675. 1/2" DIA 676. 1/2" DIA 677. 1/2" DIA 678. 1/2" DIA 679. 1/2" DIA 680. 1/2" DIA 681. 1/2" DIA 682. 1/2" DIA 683. 1/2" DIA 684. 1/2" DIA 685. 1/2" DIA 686. 1/2" DIA 687. 1/2" DIA 688. 1/2" DIA 689. 1/2" DIA 690. 1/2" DIA 691. 1/2" DIA 692. 1/2" DIA 693. 1/2" DIA 694. 1/2" DIA 695. 1/2" DIA 696. 1/2" DIA 697. 1/2" DIA 698. 1/2" DIA 699. 1/2" DIA 700. 1/2" DIA 701. 1/2" DIA 702. 1/2" DIA 703. 1/2" DIA 704. 1/2" DIA 705. 1/2" DIA 706. 1/2" DIA 707. 1/2" DIA 708. 1/2" DIA 709. 1/2" DIA 710. 1/2" DIA 711. 1/2" DIA 712. 1/2" DIA 713. 1/2" DIA 714. 1/2" DIA 715. 1/2" DIA 716. 1/2" DIA 717. 1/2" DIA 718. 1/2" DIA 719. 1/2" DIA 720. 1/2" DIA 721. 1/2" DIA 722. 1/2" DIA 723. 1/2" DIA 724. 1/2" DIA 725. 1/2" DIA 726. 1/2" DIA 727. 1/2" DIA 728. 1/2" DIA 729. 1/2" DIA 730. 1/2" DIA 731. 1/2" DIA 732. 1/2" DIA 733. 1/2" DIA 734. 1/2" DIA 735. 1/2" DIA 736. 1/2" DIA 737. 1/2" DIA 738. 1/2" DIA 739. 1/2" DIA 740. 1/2" DIA 741. 1/2" DIA 742. 1/2" DIA 743. 1/2" DIA 744. 1/2" DIA 745. 1/2" DIA 746. 1/2" DIA 747. 1/2" DIA 748. 1/2" DIA 749. 1/2" DIA 750. 1/2" DIA 751. 1/2" DIA 752. 1/2" DIA 753. 1/2" DIA 754. 1/2" DIA 755. 1/2" DIA 756. 1/2" DIA 757. 1/2" DIA 758. 1/2" DIA 759. 1/2" DIA 760. 1/2" DIA 761. 1/2" DIA 762. 1/2" DIA 763. 1/2" DIA 764. 1/2" DIA 765. 1/2" DIA 766. 1/2" DIA 767. 1/2" DIA 768. 1/2" DIA 769. 1/2" DIA 770. 1/2" DIA 771. 1/2" DIA 772. 1/2" DIA 773. 1/2" DIA 774. 1/2" DIA 775. 1/2" DIA 776. 1/2" DIA 777. 1/2" DIA 778. 1/2" DIA 779. 1/2" DIA 780. 1/2" DIA 781. 1/2" DIA 782. 1/2" DIA 783. 1/2" DIA 784. 1/2" DIA 785. 1/2" DIA 786. 1/2" DIA 787. 1/2" DIA 788. 1/2" DIA 789. 1/2" DIA 790. 1/2" DIA 791. 1/2" DIA 792. 1/2" DIA 793. 1/2" DIA 794. 1/2" DIA 795. 1/2" DIA 796. 1/2" DIA 797. 1/2" DIA 798. 1/2" DIA 799. 1/2" DIA 800. 1/2" DIA 801. 1/2" DIA 802. 1/2" DIA 803. 1/2" DIA 804. 1/2" DIA 805. 1/2" DIA 806. 1/2" DIA 807. 1/2" DIA 808. 1/2" DIA 809. 1/2" DIA 810. 1/2" DIA 811. 1/2" DIA 812. 1/2" DIA 813. 1/2" DIA 814. 1/2" DIA 815. 1/2" DIA 816. 1/2" DIA 817. 1/2" DIA 818. 1/2" DIA 819. 1/2" DIA 820. 1/2" DIA 821. 1/2" DIA 822. 1/2" DIA 823. 1/2" DIA 824. 1/2" DIA 825. 1/2" DIA 826. 1/2" DIA 827. 1/2" DIA 828. 1/2" DIA 829. 1/2" DIA 830. 1/2" DIA 831. 1/2" DIA 832. 1/2" DIA 833. 1/2" DIA 834. 1/2" DIA 835. 1/2" DIA 836. 1/2" DIA 837. 1/2" DIA 838. 1/2" DIA 839. 1/2" DIA 840. 1/2" DIA 841. 1/2" DIA 842. 1/2" DIA 843. 1/2" DIA 844. 1/2" DIA 845. 1/2" DIA 846. 1/2" DIA 847. 1/2" DIA 848. 1/2" DIA 849. 1/2" DIA 850. 1/2" DIA 851. 1/2" DIA 852. 1/2" DIA 853. 1/2" DIA 854. 1/2" DIA 855. 1/2" DIA 856. 1/2" DIA 857. 1/2" DIA 858. 1/2" DIA 859. 1/2" DIA 860. 1/2" DIA 861. 1/2" DIA 862. 1/2" DIA 863. 1/2" DIA 864. 1/2" DIA 865. 1/2" DIA 866. 1/2" DIA 867. 1/2" DIA 868. 1/2" DIA 869. 1/2" DIA 870. 1/2" DIA 871. 1/2" DIA 872. 1/2" DIA 873. 1/2" DIA 874. 1/2" DIA 875. 1/2" DIA 876. 1/2" DIA 877. 1/2" DIA 878. 1/2" DIA 879. 1/2" DIA 880. 1/2" DIA 881. 1/2" DIA 882. 1/2" DIA 883. 1/2" DIA 884. 1/2" DIA 885. 1/2" DIA 886. 1/2" DIA 887. 1/2" DIA 888. 1/2" DIA 889. 1/2" DIA 890. 1/2" DIA 891. 1/2" DIA 892. 1/2" DIA 893. 1/2" DIA 894. 1/2" DIA 895. 1/2" DIA 896. 1/2" DIA 897. 1/2" DIA 898. 1/2" DIA 899. 1/2" DIA 900. 1/2" DIA 901. 1/2" DIA 902. 1/2" DIA 903. 1/2" DIA 904. 1/2" DIA 905. 1/2" DIA 906. 1/2" DIA 907. 1/2" DIA 908. 1/2" DIA 909. 1/2" DIA 910. 1/2" DIA 911. 1/2" DIA 912. 1/2" DIA 913. 1/2" DIA 914. 1/2" DIA 915. 1/2" DIA 916. 1/2" DIA 917. 1/2" DIA 918. 1/2" DIA 919. 1/2" DIA 920. 1/2" DIA 921. 1/2" DIA 922. 1/2" DIA 923. 1/2" DIA 924. 1/2" DIA 925. 1/2" DIA 926. 1/2" DIA 927. 1/2" DIA 928. 1/2" DIA 929. 1/2" DIA 930. 1/2" DIA 931. 1/2" DIA 932. 1/2" DIA 933. 1/2" DIA 934. 1/2" DIA 935. 1/2" DIA 936. 1/2" DIA 937. 1/2" DIA 938. 1/2" DIA 939. 1/2" DIA 940. 1/2" DIA 941. 1/2" DIA 942. 1/2" DIA 943. 1/2" DIA 944. 1/2" DIA 945. 1/2" DIA 946. 1/2" DIA 947. 1/2" DIA 948. 1/2" DIA 949. 1/2" DIA 950. 1/2" DIA 951. 1/2" DIA 952. 1/2" DIA 953. 1/2" DIA 954. 1/2" DIA 955. 1/2" DIA 956. 1/2" DIA 957. 1/2" DIA 958. 1/2" DIA 959. 1/2" DIA 960. 1/2" DIA 961. 1/2" DIA 962. 1/2" DIA 963. 1/2" DIA 964. 1/2" DIA 965. 1/2" DIA 966. 1/2" DIA 967. 1/2" DIA 968. 1/2" DIA 969. 1/2" DIA 970. 1/2" DIA 971. 1/2" DIA 972. 1/2" DIA 973. 1/2" DIA 974. 1/2" DIA 975. 1/2" DIA 976. 1/2" DIA 977. 1/2" DIA 978. 1/2" DIA 979. 1/2" DIA 980. 1/2" DIA 981. 1/2" DIA 982. 1/2" DIA 983. 1/2" DIA 984. 1/2" DIA 985. 1/2" DIA 986. 1/2" DIA 987. 1/2" DIA 988. 1/2" DIA 989. 1/2" DIA 990. 1/2" DIA 991. 1/2" DIA 992. 1/2" DIA 993. 1/2" DIA 994. 1/2" DIA 995. 1/2" DIA 996. 1/2" DIA 997. 1/2" DIA 998. 1/2" DIA 999. 1/2" DIA 1000. 1/2" DIA 1001. 1/2" DIA 1002. 1/2" DIA 1003. 1/2" DIA 1004. 1/2" DIA 1005. 1/2" DIA 1006. 1/2" DIA 1007. 1/2" DIA 1008. 1/2" DIA 1009. 1/2" DIA 1010. 1/2" DIA 1011. 1/2" DIA 1012. 1/2" DIA 1013. 1/2" DIA 1014. 1/2" DIA 1015. 1/2" DIA 1016. 1/2" DIA 1017. 1/2" DIA 1018. 1/2" DIA 1019. 1/2" DIA 1020. 1/2" DIA 1021. 1/2" DIA 1022. 1/2" DIA 1023. 1/2" DIA 1024. 1/2" DIA 1025. 1/2" DIA 1026. 1/2" DIA 1027. 1/2" DIA 1028. 1/2" DIA 1029. 1/2" DIA 1030. 1/2" DIA 1031. 1/2" DIA 1032. 1/2" DIA 1033.			

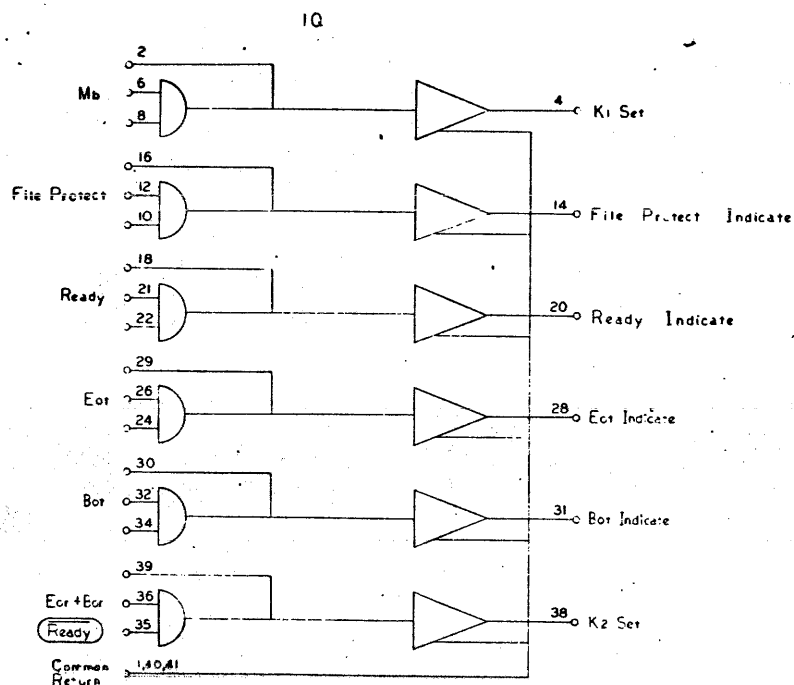


9.16A
9246P
TAPE ELECTRONICS
Page 7
D

REV	DESCRIPTION	DATE	BY	CHKD	APPD
1	REL TO MFG	11/1/74	11/1/74	11/1/74	11/1/74
2	SEE REV E.C.	11/1/74	11/1/74	11/1/74	11/1/74
3	SEE REV E.C.	11/1/74	11/1/74	11/1/74	11/1/74

REV	DRAWING NO	DESCRIPTION	DATE	BY	CHKD	APPD
1	9246	DIAGRAM, LOGIC, MAG TAPE UNIT	11/1/74	11/1/74	11/1/74	11/1/74
2	103258					

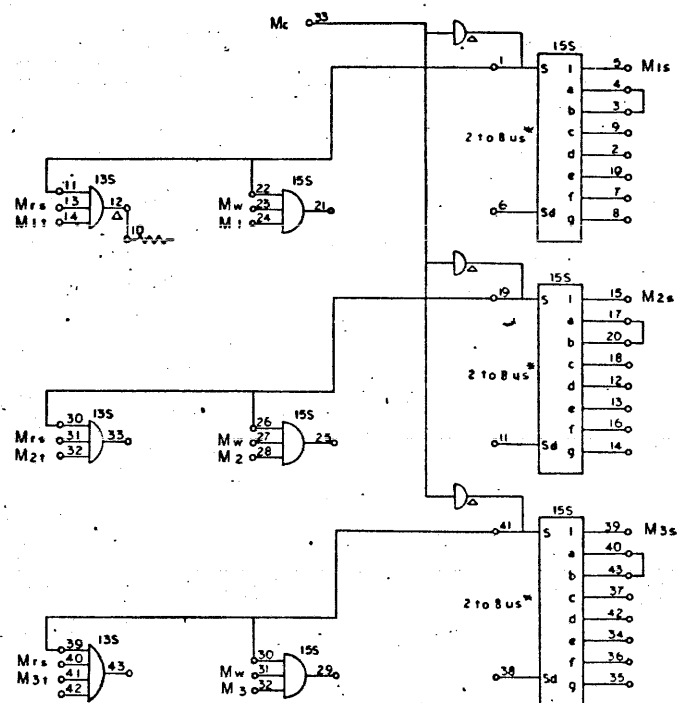
REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG	1/7/68	3/2
C	SEE REV. E.O.		
D	SEE REV E.O.		



9246A
9246P
TAPE ELECTRONICS
PAGE 8
D

REV	DRAWING NO	DATE	DESCRIPTION	APPROVED
1	103258	1/7/68	DIAGRAM, LOGIC, MAG TAPE UNIT	3/2
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				
61				
62				
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
75				
76				
77				
78				
79				
80				
81				
82				
83				
84				
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				

REV.	DESCRIPTION	DATE	BY	103258
A	REL TO MFG	1/1/63	1/1/63	1/1/63
C	SEE REV. E.O.			
D	SEE REV E.O.			

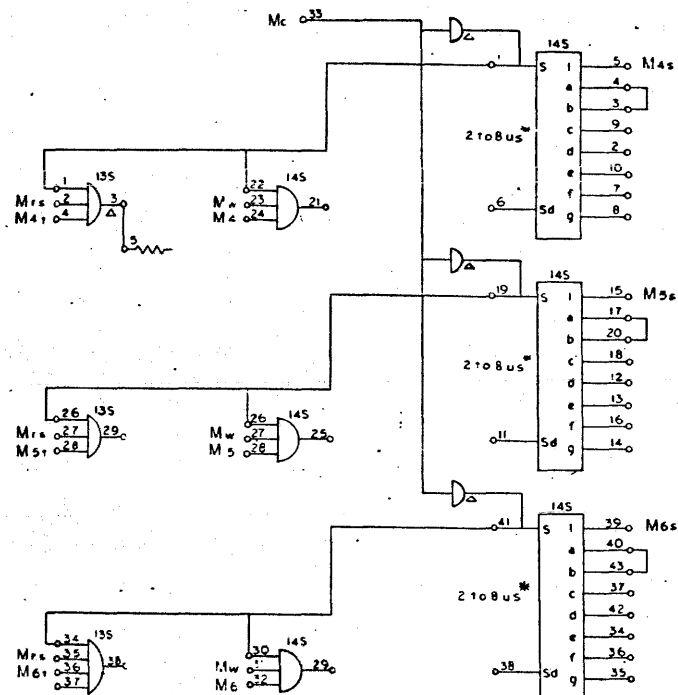


* SEE CALIBRATION PROCEDURE

9246A
9246P
TAPE ELECTRONICS
PAGE 9
D

NO.	REV.	DESCRIPTION	REFERENCE DESIGNATION
1	1	103258	103258
2	2	103258	103258
3	3	103258	103258
4	4	103258	103258
5	5	103258	103258
6	6	103258	103258
7	7	103258	103258
8	8	103258	103258
9	9	103258	103258
10	10	103258	103258
11	11	103258	103258
12	12	103258	103258
13	13	103258	103258
14	14	103258	103258
15	15	103258	103258
16	16	103258	103258
17	17	103258	103258
18	18	103258	103258
19	19	103258	103258
20	20	103258	103258
21	21	103258	103258
22	22	103258	103258
23	23	103258	103258
24	24	103258	103258
25	25	103258	103258
26	26	103258	103258
27	27	103258	103258
28	28	103258	103258
29	29	103258	103258
30	30	103258	103258
31	31	103258	103258
32	32	103258	103258
33	33	103258	103258
34	34	103258	103258
35	35	103258	103258
36	36	103258	103258
37	37	103258	103258
38	38	103258	103258
39	39	103258	103258
40	40	103258	103258
41	41	103258	103258
42	42	103258	103258
43	43	103258	103258
44	44	103258	103258
45	45	103258	103258
46	46	103258	103258
47	47	103258	103258
48	48	103258	103258
49	49	103258	103258
50	50	103258	103258
51	51	103258	103258
52	52	103258	103258
53	53	103258	103258
54	54	103258	103258
55	55	103258	103258
56	56	103258	103258
57	57	103258	103258
58	58	103258	103258
59	59	103258	103258
60	60	103258	103258
61	61	103258	103258
62	62	103258	103258
63	63	103258	103258
64	64	103258	103258
65	65	103258	103258
66	66	103258	103258
67	67	103258	103258
68	68	103258	103258
69	69	103258	103258
70	70	103258	103258
71	71	103258	103258
72	72	103258	103258
73	73	103258	103258
74	74	103258	103258
75	75	103258	103258
76	76	103258	103258
77	77	103258	103258
78	78	103258	103258
79	79	103258	103258
80	80	103258	103258
81	81	103258	103258
82	82	103258	103258
83	83	103258	103258
84	84	103258	103258
85	85	103258	103258
86	86	103258	103258
87	87	103258	103258
88	88	103258	103258
89	89	103258	103258
90	90	103258	103258
91	91	103258	103258
92	92	103258	103258
93	93	103258	103258
94	94	103258	103258
95	95	103258	103258
96	96	103258	103258
97	97	103258	103258
98	98	103258	103258
99	99	103258	103258
100	100	103258	103258

REV.	DESCRIPTION	DATE	APPROVED
A	SEL TO MFG	1/1/68	
C	SEE REV. E.O.	1/1/68	
D	SEE REV. E.O.	1/1/68	

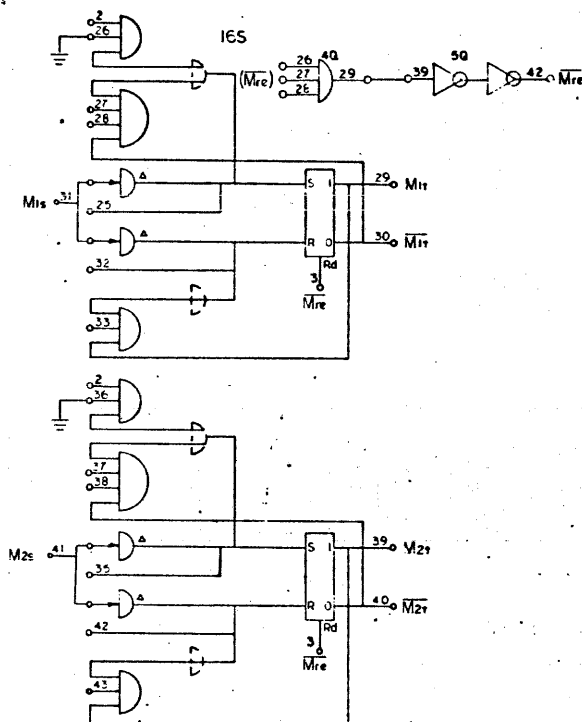
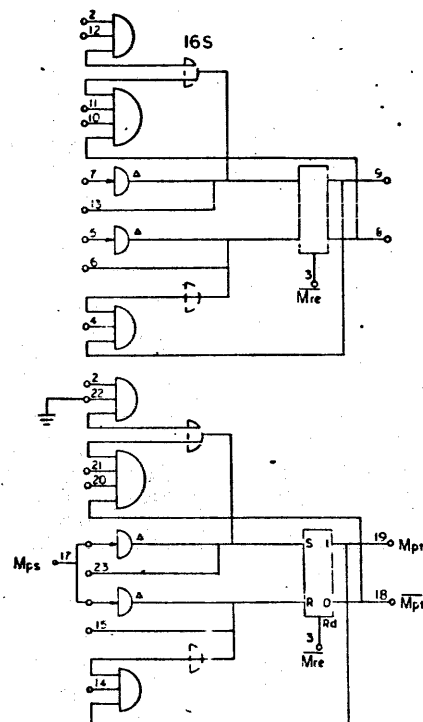


* SEE CALIBRATION PROCEDURE

9246A
9246P
TAPE ELECTRONICS
PAGE 10
D

DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION
9246	DIAGRAM, LOGIC, MAG TAPE UNIT	
REV. NO.	DATE	APPROVED
1	1/1/68	
2	1/1/68	
3	1/1/68	
4	1/1/68	
5	1/1/68	
6	1/1/68	
7	1/1/68	
8	1/1/68	
9	1/1/68	
10	1/1/68	
11	1/1/68	
12	1/1/68	
13	1/1/68	
14	1/1/68	
15	1/1/68	
16	1/1/68	
17	1/1/68	
18	1/1/68	
19	1/1/68	
20	1/1/68	
21	1/1/68	
22	1/1/68	
23	1/1/68	
24	1/1/68	
25	1/1/68	
26	1/1/68	
27	1/1/68	
28	1/1/68	
29	1/1/68	
30	1/1/68	
31	1/1/68	
32	1/1/68	
33	1/1/68	
34	1/1/68	
35	1/1/68	
36	1/1/68	
37	1/1/68	
38	1/1/68	
39	1/1/68	
40	1/1/68	
41	1/1/68	
42	1/1/68	
43	1/1/68	
44	1/1/68	
45	1/1/68	
46	1/1/68	
47	1/1/68	
48	1/1/68	
49	1/1/68	
50	1/1/68	
51	1/1/68	
52	1/1/68	
53	1/1/68	
54	1/1/68	
55	1/1/68	
56	1/1/68	
57	1/1/68	
58	1/1/68	
59	1/1/68	
60	1/1/68	
61	1/1/68	
62	1/1/68	
63	1/1/68	
64	1/1/68	
65	1/1/68	
66	1/1/68	
67	1/1/68	
68	1/1/68	
69	1/1/68	
70	1/1/68	
71	1/1/68	
72	1/1/68	
73	1/1/68	
74	1/1/68	
75	1/1/68	
76	1/1/68	
77	1/1/68	
78	1/1/68	
79	1/1/68	
80	1/1/68	
81	1/1/68	
82	1/1/68	
83	1/1/68	
84	1/1/68	
85	1/1/68	
86	1/1/68	
87	1/1/68	
88	1/1/68	
89	1/1/68	
90	1/1/68	
91	1/1/68	
92	1/1/68	
93	1/1/68	
94	1/1/68	
95	1/1/68	
96	1/1/68	
97	1/1/68	
98	1/1/68	
99	1/1/68	
100	1/1/68	

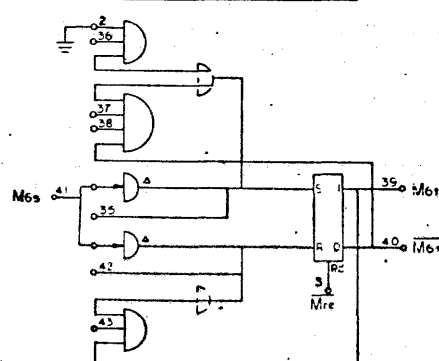
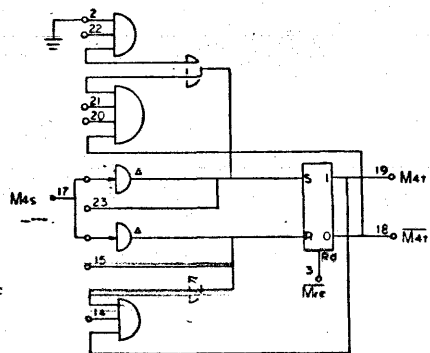
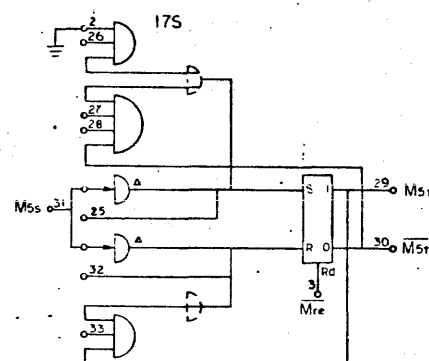
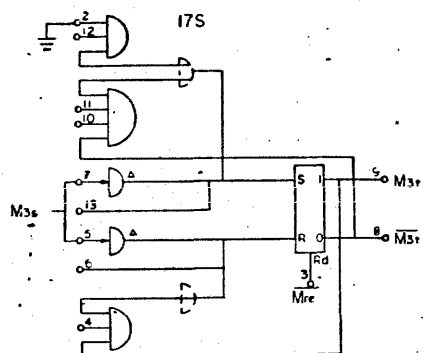
REVISIONS				IC3258
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL TO MFG			
C	SEE REV. E.O.			
D	SEE REV. F.O.			



9246A
9246P
TAPE ELECTRONICS
PAGE 11
D

[illegible]

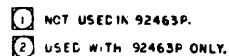
REV		DESCRIPTION	DATE	APPROVED
A		REL TO MFG	11/2/63	
C		SEE REV. E.O.	11/2/63	
D		SEE REV E.O.	11/2/63	



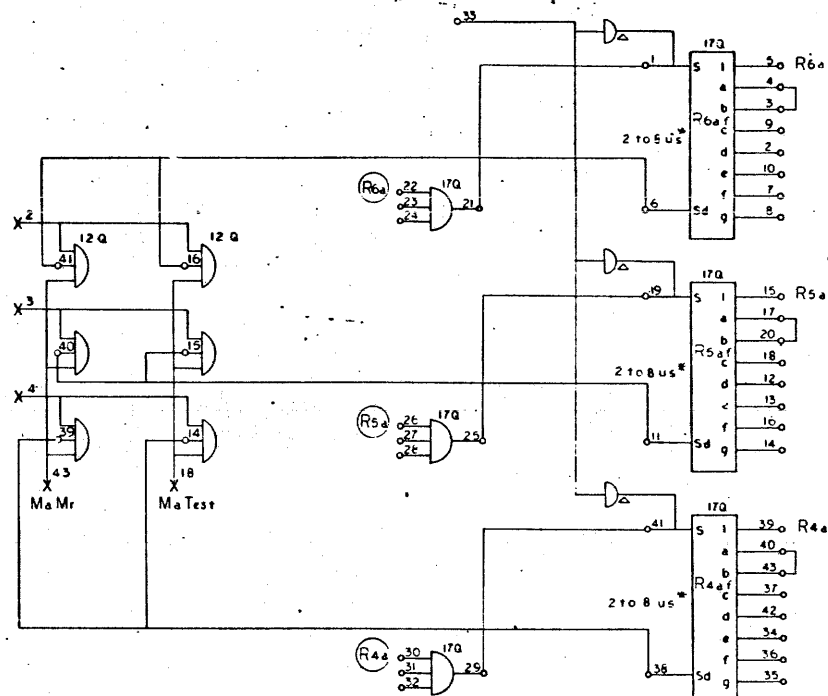
9246A
9246P
TAPE ELECTRONICS
PAGE 12
D

DWG NO	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION	REV
NOTES UNLESS SPECIFIED		MATERIAL LIST		
1. DIMENSIONS ALL IN INCHES UNLESS OTHERWISE SPECIFIED		SDS 1000 PATELLO STREET, SANTA MONICA, CALIFORNIA		
2. DIMENSIONS ALL SHOWN UNLESS OTHERWISE SPECIFIED		TITLE DIAGRAM, LOGIC, MAG TAPE UNIT		
3. DIMENSIONS ALL SHOWN UNLESS OTHERWISE SPECIFIED		MODEL NO 9246		
4. ALL DIM IN INCHES		REV D		
NEXT ASBY		103258		
		SCALE DO NOT SCALE DRAWING		
		SHEET 1/2		

0 962501

81

REVISING		C3250
REV	DESCRIPTION	CHK DATE APPROVED
A	REL TO MFG	
C	SEE REV. E.O.	
D	SEE REV E.O.	

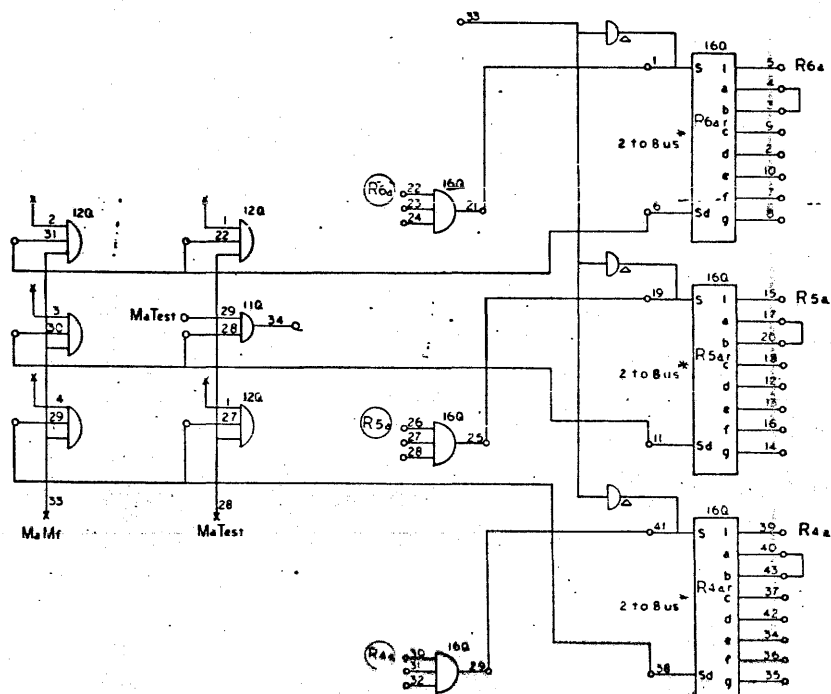


* SEE CALIBRATION PROCEDURE

9246A
9246P
TAPE ELECTRONICS
PAGE 14
D

NO REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION	ITEM NO
MATERIAL LIST				
NOTES UNLESS SPECIFIED		DRAWN	 SCIENTIFIC DATA SYSTEMS 141 FIFTEENTH STREET, SANTA ANITA, CALIFORNIA	
1. PRELIMINARY BY: J. B. B. DATE: 1-1-74	CHECKED	DATE: 1-1-74	TITLE	
2. SPECIAL ALL SHARP CORNERS AND POINTS	APPROVED	DATE: 1-1-74	DIAGRAM, LOGIC, MAG TAPE UNIT	
3. HATCH SURFACES				
4. ALL DIM. IN INCHES				
MODEL NO	9246	SIZE	8 1/2" X 11"	1
HEET AMOUNT			DATE	103258
		SCALE	DO NOT SCALE DRAWING	SHEET 1

REVISIONS			103258	2
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL TO MFG		7/17/62	
C	SEE REV. E.O.		7/10/62	
D	SEE REV E.O.		7/10/62	

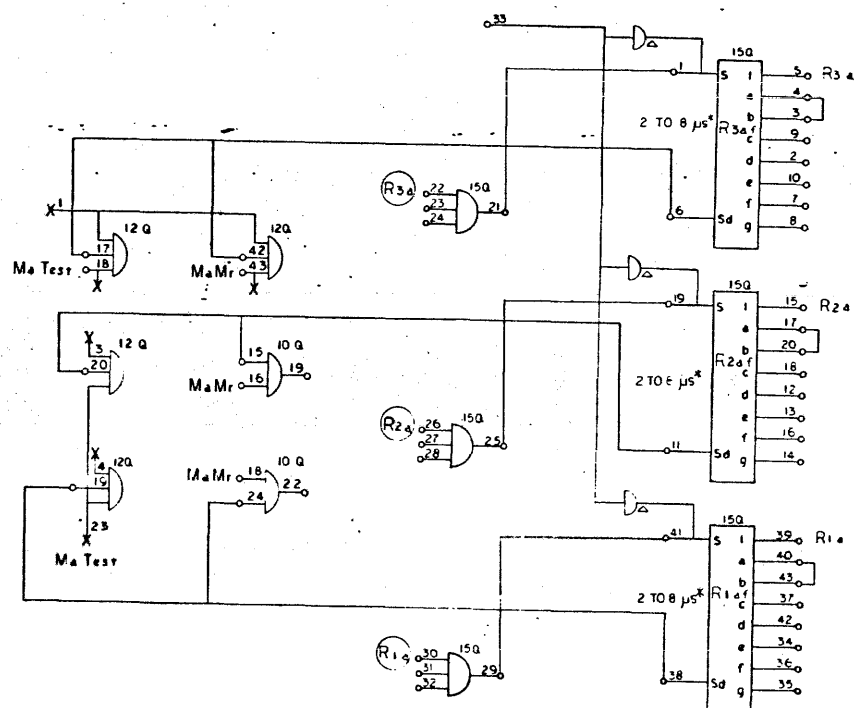


* SEE CALIBRATION PROCEDURE

9246A
9246P
TAPE ELECTRONICS
PAGE 15
D

REV	DESCRIPTION	DATE	APPROVED
1	9246A	7/17/62	
2	9246P	7/17/62	
3	9246A	7/17/62	
4	9246P	7/17/62	
5	9246A	7/17/62	
6	9246P	7/17/62	
7	9246A	7/17/62	
8	9246P	7/17/62	
9	9246A	7/17/62	
10	9246P	7/17/62	
11	9246A	7/17/62	
12	9246P	7/17/62	
13	9246A	7/17/62	
14	9246P	7/17/62	
15	9246A	7/17/62	
16	9246P	7/17/62	
17	9246A	7/17/62	
18	9246P	7/17/62	
19	9246A	7/17/62	
20	9246P	7/17/62	
21	9246A	7/17/62	
22	9246P	7/17/62	
23	9246A	7/17/62	
24	9246P	7/17/62	
25	9246A	7/17/62	
26	9246P	7/17/62	
27	9246A	7/17/62	
28	9246P	7/17/62	
29	9246A	7/17/62	
30	9246P	7/17/62	
31	9246A	7/17/62	
32	9246P	7/17/62	
33	9246A	7/17/62	
34	9246P	7/17/62	
35	9246A	7/17/62	
36	9246P	7/17/62	
37	9246A	7/17/62	
38	9246P	7/17/62	
39	9246A	7/17/62	
40	9246P	7/17/62	
41	9246A	7/17/62	
42	9246P	7/17/62	
43	9246A	7/17/62	
44	9246P	7/17/62	
45	9246A	7/17/62	
46	9246P	7/17/62	
47	9246A	7/17/62	
48	9246P	7/17/62	
49	9246A	7/17/62	
50	9246P	7/17/62	
51	9246A	7/17/62	
52	9246P	7/17/62	
53	9246A	7/17/62	
54	9246P	7/17/62	
55	9246A	7/17/62	
56	9246P	7/17/62	
57	9246A	7/17/62	
58	9246P	7/17/62	
59	9246A	7/17/62	
60	9246P	7/17/62	
61	9246A	7/17/62	
62	9246P	7/17/62	
63	9246A	7/17/62	
64	9246P	7/17/62	
65	9246A	7/17/62	
66	9246P	7/17/62	
67	9246A	7/17/62	
68	9246P	7/17/62	
69	9246A	7/17/62	
70	9246P	7/17/62	
71	9246A	7/17/62	
72	9246P	7/17/62	
73	9246A	7/17/62	
74	9246P	7/17/62	
75	9246A	7/17/62	
76	9246P	7/17/62	
77	9246A	7/17/62	
78	9246P	7/17/62	
79	9246A	7/17/62	
80	9246P	7/17/62	
81	9246A	7/17/62	
82	9246P	7/17/62	
83	9246A	7/17/62	
84	9246P	7/17/62	
85	9246A	7/17/62	
86	9246P	7/17/62	
87	9246A	7/17/62	
88	9246P	7/17/62	
89	9246A	7/17/62	
90	9246P	7/17/62	
91	9246A	7/17/62	
92	9246P	7/17/62	
93	9246A	7/17/62	
94	9246P	7/17/62	
95	9246A	7/17/62	
96	9246P	7/17/62	
97	9246A	7/17/62	
98	9246P	7/17/62	
99	9246A	7/17/62	
100	9246P	7/17/62	

REV	DESCRIPTION	DATE	APPROVED
1	REL TO MFG	10/25/63	1
2	SEE REV. E.O.	10/25/63	1
3	SEE REV. E.O.	10/25/63	1



*SEE CALIBRATION PROCEDURE

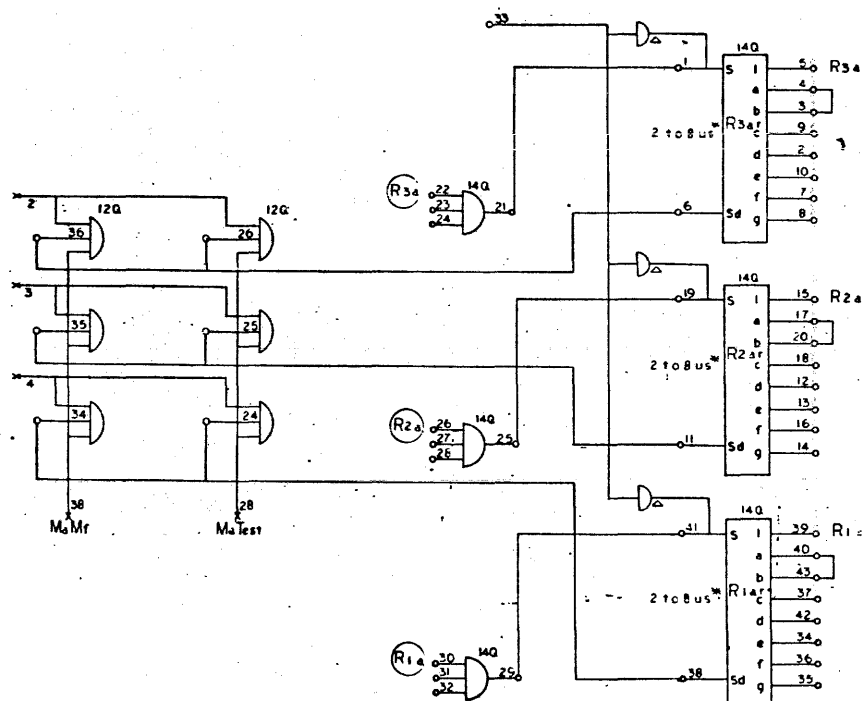
9246A
9246P
TAPE ELECTRONICS
PAGE 16
D

REV	DESCRIPTION	DATE	APPROVED
1	REL TO MFG	10/25/63	1
2	SEE REV. E.O.	10/25/63	1
3	SEE REV. E.O.	10/25/63	1

MODEL NO	9246	REV	D
DATE	10/25/63	DATE	10/25/63
BY	10/25/63	BY	10/25/63
CHECKED	10/25/63	CHECKED	10/25/63
APPROVED	10/25/63	APPROVED	10/25/63

SDS	DIAGRAM, LOGIC, MAG, TAPE UNIT
-----	-----------------------------------

REVISIONS				103258
REV	DESCRIPTION	DATE	APPROVED	
A	REL TO MFG	11/1/68		
C	SEE REV. E.O.	11/1/68		
D	SEE REV E.O.	11/1/68		

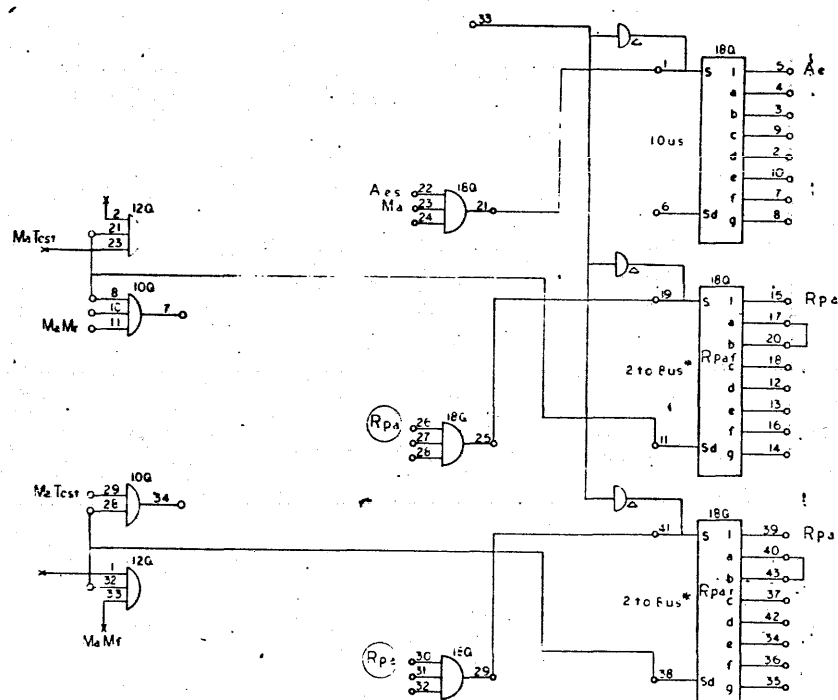


*SEE CALBRATION PROCEDURE

9246A
9246P
TAPE ELECTRONICS
PAGE 17
D

NO	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION
1	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
2	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
3	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
4	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
5	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
6	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
7	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
8	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
9	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
10	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
11	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
12	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
13	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
14	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
15	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
16	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
17	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
18	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
19	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
20	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
21	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
22	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
23	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
24	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
25	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
26	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
27	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
28	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
29	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
30	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
31	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
32	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
33	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
34	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
35	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
36	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
37	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
38	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
39	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
40	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
41	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
42	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
43	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
44	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
45	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
46	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
47	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
48	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
49	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	
50	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	

REV.	DESCRIPTION	DATE	APPROVED
A	REL TO MFG	10/25/68	
C	SEE REV. E.O.		
D	SEE REV. E.O.		



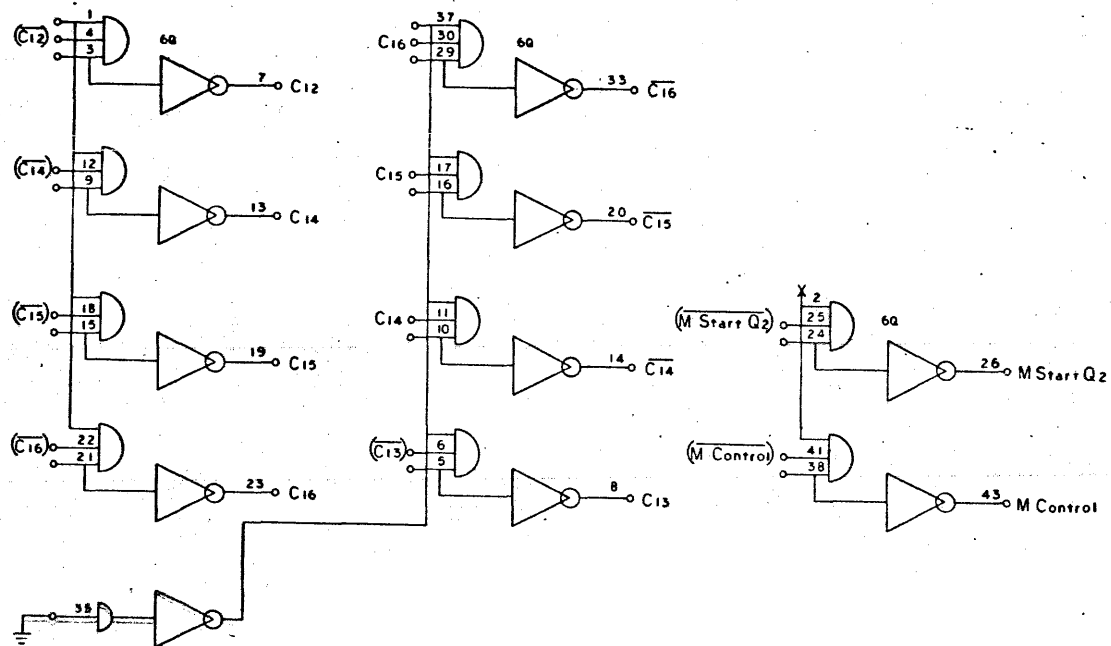
* SEE CALIBRATION PROCEDURE

9246A
9246P
TAPE ELECTRONICS
PAGE 18
D

NO.	REV.	DESCRIPTION	DATE	APPROVED
1		REL TO MFG	10/25/68	
2		SEE REV. E.O.		
3		SEE REV. E.O.		
4		SEE REV. E.O.		

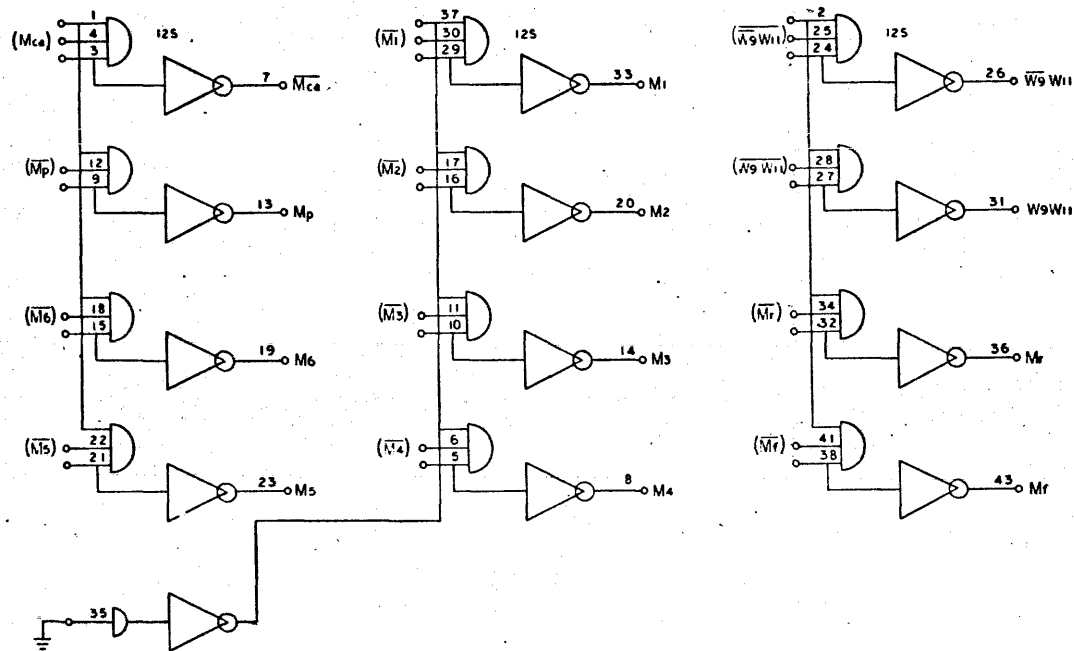
MODEL NO.	9246	DATE	10/25/68	BY	D
DESCRIPTION		SDS MAG TAPE UNIT			

REV	DESCRIPTION	DATE	BY	APP'D
A	RFL TO MFG			
C	SEE REV. E.O.			
D	SEE REV. E.O.			



9246A
9246P
TAPE ELECTRONICS
PAGE 20
D

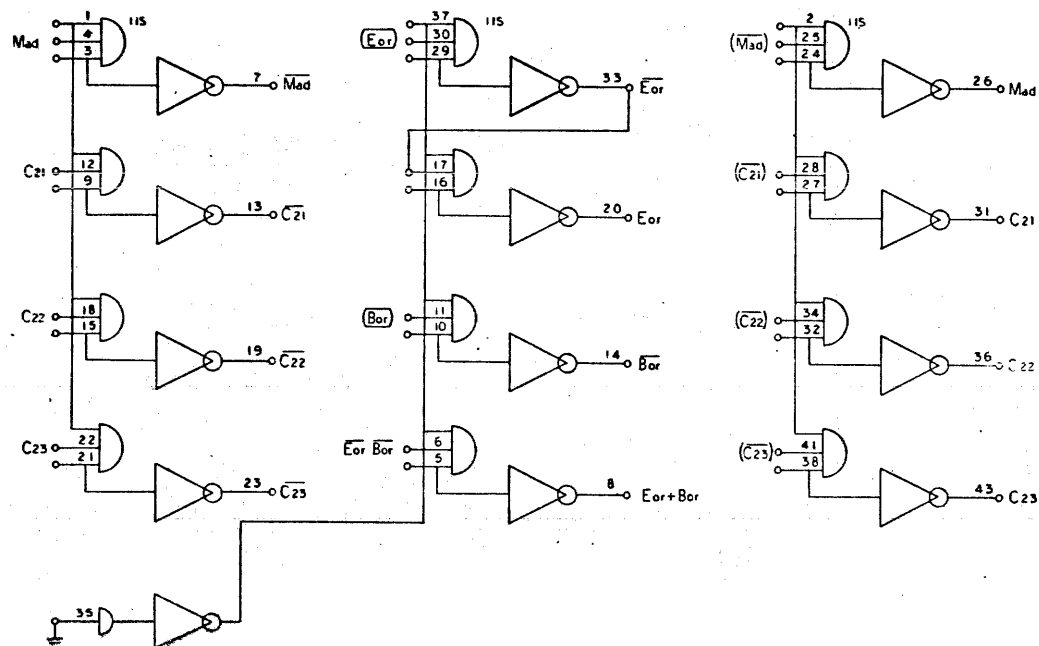
NO. REV	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV. NO.
NOTES UNLESS SPECIFIED				
1. THIS DRAWING IS A REVISION OF 9246A	CHECK	DATE	BY	
2. WORKING DRAWING	APPROV	DATE	BY	
3. WORKING DRAWING				
4. THIS DRAWING IS A REVISION OF 9246A				
SDS SYSTEMS DATA SYSTEMS 1000 CALIFORNIA STREET, SAN JOSE, CALIFORNIA 95128				
TITLE DIAGRAM, LOGIC, MAG TAPE UNIT				
MODEL NO. 9246		REV. NO. D 103258 D		
MFG. APPR.		SCALE DO NOT SCALE DRAWING		
		SHEET 20		



9246A
9246P
TAPE ELECTRONICS
PAGE 21
D

REV	DESCRIPTION	DATE	BY	APP'D	REFERENCE DESIGNATION	FILE
A	REL TO MFG	7/12/63	J. J. H.			
C	SEE REV. E.O.	7/12/63	J. J. H.			
D	SEE REV E.O.	7/12/63	J. J. H.			

DRAWING NO.		DESCRIPTION		REFERENCE DESIGNATION		FILE
9246		DIAGRAM, LOGIC, MAG TAPE UNIT				
9246						
9246						

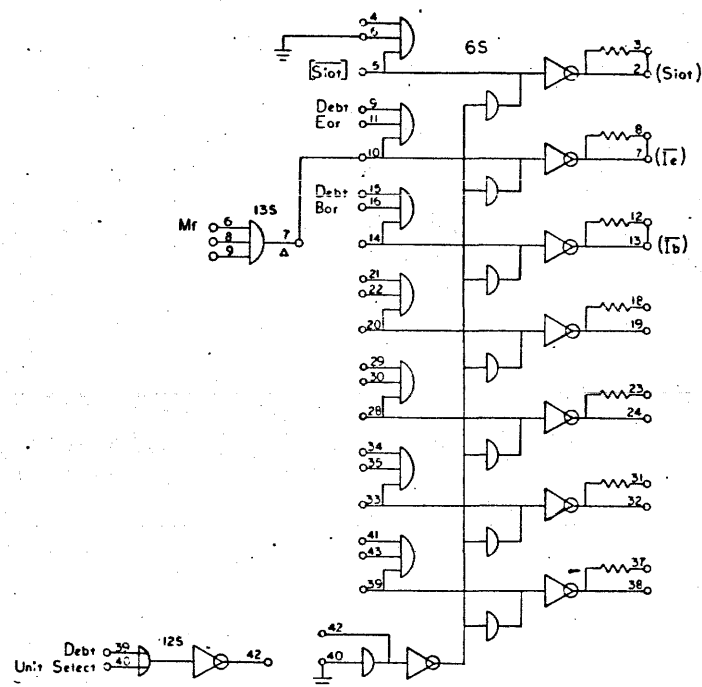


REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG	1/1/73	
C	SEE REV. E.O.		
D	SEE REV. E.O.		

9246A
9246P
TAPE ELECTRONICS
PAGE 22
D

NO	DRAWING NO	DESCRIPTION	REFERENCE IDENTIFICATION	ITEM
NOTES UNLESS SPECIFIED				
1. TO SPECIFY	DRAWN	DATE	SDS SCIENTIFIC DATA SYSTEMS	
2. TO SPECIFY	CHECKED	DATE		
3. TO SPECIFY	APPROVED	DATE	TITLE	
4. SPECIFY ALL QUANTITIES			DIAGRAM, LOGIC,	
5. SPECIFY ALL QUANTITIES			MAG TAPE UNIT	
6. SPECIFY ALL QUANTITIES				
7. SPECIFY ALL QUANTITIES				
8. SPECIFY ALL QUANTITIES				
9. SPECIFY ALL QUANTITIES				
10. SPECIFY ALL QUANTITIES				
11. SPECIFY ALL QUANTITIES				
12. SPECIFY ALL QUANTITIES				
13. SPECIFY ALL QUANTITIES				
14. SPECIFY ALL QUANTITIES				
15. SPECIFY ALL QUANTITIES				
16. SPECIFY ALL QUANTITIES				
17. SPECIFY ALL QUANTITIES				
18. SPECIFY ALL QUANTITIES				
19. SPECIFY ALL QUANTITIES				
20. SPECIFY ALL QUANTITIES				
21. SPECIFY ALL QUANTITIES				
22. SPECIFY ALL QUANTITIES				
23. SPECIFY ALL QUANTITIES				
24. SPECIFY ALL QUANTITIES				
25. SPECIFY ALL QUANTITIES				
26. SPECIFY ALL QUANTITIES				
27. SPECIFY ALL QUANTITIES				
28. SPECIFY ALL QUANTITIES				
29. SPECIFY ALL QUANTITIES				
30. SPECIFY ALL QUANTITIES				
31. SPECIFY ALL QUANTITIES				
32. SPECIFY ALL QUANTITIES				
33. SPECIFY ALL QUANTITIES				
34. SPECIFY ALL QUANTITIES				
35. SPECIFY ALL QUANTITIES				
36. SPECIFY ALL QUANTITIES				
37. SPECIFY ALL QUANTITIES				
38. SPECIFY ALL QUANTITIES				
39. SPECIFY ALL QUANTITIES				
40. SPECIFY ALL QUANTITIES				
41. SPECIFY ALL QUANTITIES				
42. SPECIFY ALL QUANTITIES				
43. SPECIFY ALL QUANTITIES				
44. SPECIFY ALL QUANTITIES				
45. SPECIFY ALL QUANTITIES				
46. SPECIFY ALL QUANTITIES				
47. SPECIFY ALL QUANTITIES				
48. SPECIFY ALL QUANTITIES				
49. SPECIFY ALL QUANTITIES				
50. SPECIFY ALL QUANTITIES				
51. SPECIFY ALL QUANTITIES				
52. SPECIFY ALL QUANTITIES				
53. SPECIFY ALL QUANTITIES				
54. SPECIFY ALL QUANTITIES				
55. SPECIFY ALL QUANTITIES				
56. SPECIFY ALL QUANTITIES				
57. SPECIFY ALL QUANTITIES				
58. SPECIFY ALL QUANTITIES				
59. SPECIFY ALL QUANTITIES				
60. SPECIFY ALL QUANTITIES				
61. SPECIFY ALL QUANTITIES				
62. SPECIFY ALL QUANTITIES				
63. SPECIFY ALL QUANTITIES				
64. SPECIFY ALL QUANTITIES				
65. SPECIFY ALL QUANTITIES				
66. SPECIFY ALL QUANTITIES				
67. SPECIFY ALL QUANTITIES				
68. SPECIFY ALL QUANTITIES				
69. SPECIFY ALL QUANTITIES				
70. SPECIFY ALL QUANTITIES				
71. SPECIFY ALL QUANTITIES				
72. SPECIFY ALL QUANTITIES				
73. SPECIFY ALL QUANTITIES				
74. SPECIFY ALL QUANTITIES				
75. SPECIFY ALL QUANTITIES				
76. SPECIFY ALL QUANTITIES				
77. SPECIFY ALL QUANTITIES				
78. SPECIFY ALL QUANTITIES				
79. SPECIFY ALL QUANTITIES				
80. SPECIFY ALL QUANTITIES				
81. SPECIFY ALL QUANTITIES				
82. SPECIFY ALL QUANTITIES				
83. SPECIFY ALL QUANTITIES				
84. SPECIFY ALL QUANTITIES				
85. SPECIFY ALL QUANTITIES				
86. SPECIFY ALL QUANTITIES				
87. SPECIFY ALL QUANTITIES				
88. SPECIFY ALL QUANTITIES				
89. SPECIFY ALL QUANTITIES				
90. SPECIFY ALL QUANTITIES				
91. SPECIFY ALL QUANTITIES				
92. SPECIFY ALL QUANTITIES				
93. SPECIFY ALL QUANTITIES				
94. SPECIFY ALL QUANTITIES				
95. SPECIFY ALL QUANTITIES				
96. SPECIFY ALL QUANTITIES				
97. SPECIFY ALL QUANTITIES				
98. SPECIFY ALL QUANTITIES				
99. SPECIFY ALL QUANTITIES				
100. SPECIFY ALL QUANTITIES				

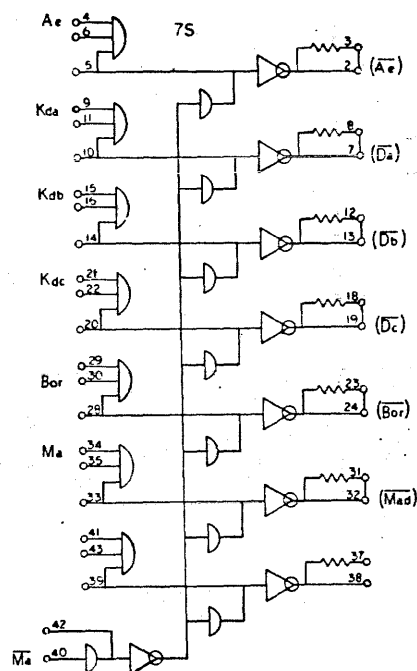
REVISIONS		103258	D
REV	DESCRIPTION	DATE	BY
A	REL TO MFG.	7/12/63	WFE
B	SEE REV E.O.		
C	SEE REV E.O.		
D	SEE REV E.O.		



9246A
9246P
TAPE ELECTRONICS
PAGE 23
D

REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION	DATE
		MATERIAL LIST		
NOTES UNLESS SPECIFIED		SDS		
1. RELAYED BY: 176		MAGNETIC TAPE UNIT		
2. CHECK: 7/12/63		TITLE		
3. APPRO: WFE		DIAGRAM, LOGIC, MAG TAPE UNIT		
4. ALL DIM IN INCHES				
MODEL NO	9246	REV	D	103258
NEXT ASSY		SCALE	DO NOT SCALE DRAWING	SHEET 3

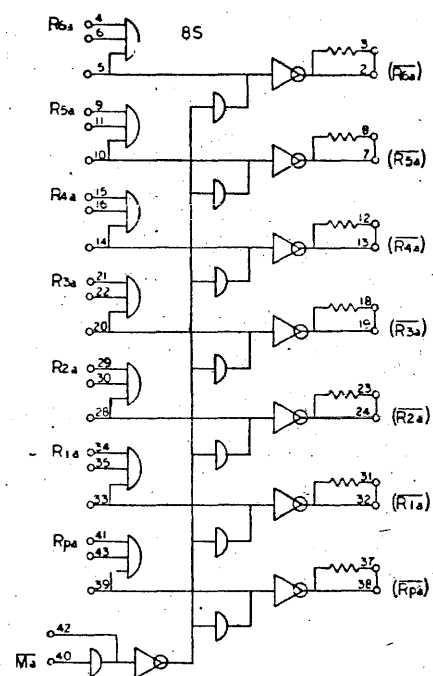
REVISIONS			IC3258
REV.	DESCRIPTION	CHK.	DATE
A	REL TO MFG		10/15/64
C	SEE REV. E.O.		10/15/64
D	SEE REV E.O.		10/15/64



9246A
9246F
TAPE ELECTRONICS
PAGE 24
D

NO.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV.
NOTES UNLESS SPECIFIED				
1. DIMENSIONS		DRAWN	SDS	
2. TOLERANCES		CHECK	SDS	
3. MATERIALS		APPR	SDS	
4. FINISHES		TITLE		
5. ASSEMBLY		DIAGRAM, LOGIC, MAG TAPE UNIT		
6. PALETTE		SCALE		
7. OTHER		DO NOT SCALE DRAWING		
8. OTHER		DO NOT SCALE DRAWING		
9. OTHER		DO NOT SCALE DRAWING		
10. OTHER		DO NOT SCALE DRAWING		
11. OTHER		DO NOT SCALE DRAWING		
12. OTHER		DO NOT SCALE DRAWING		
13. OTHER		DO NOT SCALE DRAWING		
14. OTHER		DO NOT SCALE DRAWING		
15. OTHER		DO NOT SCALE DRAWING		
16. OTHER		DO NOT SCALE DRAWING		
17. OTHER		DO NOT SCALE DRAWING		
18. OTHER		DO NOT SCALE DRAWING		
19. OTHER		DO NOT SCALE DRAWING		
20. OTHER		DO NOT SCALE DRAWING		
21. OTHER		DO NOT SCALE DRAWING		
22. OTHER		DO NOT SCALE DRAWING		
23. OTHER		DO NOT SCALE DRAWING		
24. OTHER		DO NOT SCALE DRAWING		
25. OTHER		DO NOT SCALE DRAWING		
26. OTHER		DO NOT SCALE DRAWING		
27. OTHER		DO NOT SCALE DRAWING		
28. OTHER		DO NOT SCALE DRAWING		
29. OTHER		DO NOT SCALE DRAWING		
30. OTHER		DO NOT SCALE DRAWING		
31. OTHER		DO NOT SCALE DRAWING		
32. OTHER		DO NOT SCALE DRAWING		
33. OTHER		DO NOT SCALE DRAWING		
34. OTHER		DO NOT SCALE DRAWING		
35. OTHER		DO NOT SCALE DRAWING		
36. OTHER		DO NOT SCALE DRAWING		
37. OTHER		DO NOT SCALE DRAWING		
38. OTHER		DO NOT SCALE DRAWING		
39. OTHER		DO NOT SCALE DRAWING		
40. OTHER		DO NOT SCALE DRAWING		
41. OTHER		DO NOT SCALE DRAWING		
42. OTHER		DO NOT SCALE DRAWING		
43. OTHER		DO NOT SCALE DRAWING		
44. OTHER		DO NOT SCALE DRAWING		
45. OTHER		DO NOT SCALE DRAWING		
46. OTHER		DO NOT SCALE DRAWING		
47. OTHER		DO NOT SCALE DRAWING		
48. OTHER		DO NOT SCALE DRAWING		
49. OTHER		DO NOT SCALE DRAWING		
50. OTHER		DO NOT SCALE DRAWING		
51. OTHER		DO NOT SCALE DRAWING		
52. OTHER		DO NOT SCALE DRAWING		
53. OTHER		DO NOT SCALE DRAWING		
54. OTHER		DO NOT SCALE DRAWING		
55. OTHER		DO NOT SCALE DRAWING		
56. OTHER		DO NOT SCALE DRAWING		
57. OTHER		DO NOT SCALE DRAWING		
58. OTHER		DO NOT SCALE DRAWING		
59. OTHER		DO NOT SCALE DRAWING		
60. OTHER		DO NOT SCALE DRAWING		
61. OTHER		DO NOT SCALE DRAWING		
62. OTHER		DO NOT SCALE DRAWING		
63. OTHER		DO NOT SCALE DRAWING		
64. OTHER		DO NOT SCALE DRAWING		
65. OTHER		DO NOT SCALE DRAWING		
66. OTHER		DO NOT SCALE DRAWING		
67. OTHER		DO NOT SCALE DRAWING		
68. OTHER		DO NOT SCALE DRAWING		
69. OTHER		DO NOT SCALE DRAWING		
70. OTHER		DO NOT SCALE DRAWING		
71. OTHER		DO NOT SCALE DRAWING		
72. OTHER		DO NOT SCALE DRAWING		
73. OTHER		DO NOT SCALE DRAWING		
74. OTHER		DO NOT SCALE DRAWING		
75. OTHER		DO NOT SCALE DRAWING		
76. OTHER		DO NOT SCALE DRAWING		
77. OTHER		DO NOT SCALE DRAWING		
78. OTHER		DO NOT SCALE DRAWING		
79. OTHER		DO NOT SCALE DRAWING		
80. OTHER		DO NOT SCALE DRAWING		
81. OTHER		DO NOT SCALE DRAWING		
82. OTHER		DO NOT SCALE DRAWING		
83. OTHER		DO NOT SCALE DRAWING		
84. OTHER		DO NOT SCALE DRAWING		
85. OTHER		DO NOT SCALE DRAWING		
86. OTHER		DO NOT SCALE DRAWING		
87. OTHER		DO NOT SCALE DRAWING		
88. OTHER		DO NOT SCALE DRAWING		
89. OTHER		DO NOT SCALE DRAWING		
90. OTHER		DO NOT SCALE DRAWING		
91. OTHER		DO NOT SCALE DRAWING		
92. OTHER		DO NOT SCALE DRAWING		
93. OTHER		DO NOT SCALE DRAWING		
94. OTHER		DO NOT SCALE DRAWING		
95. OTHER		DO NOT SCALE DRAWING		
96. OTHER		DO NOT SCALE DRAWING		
97. OTHER		DO NOT SCALE DRAWING		
98. OTHER		DO NOT SCALE DRAWING		
99. OTHER		DO NOT SCALE DRAWING		
100. OTHER		DO NOT SCALE DRAWING		

REV	DESCRIPTION	DATE	BY
A	RFL TO MFG	7/1/64	W. J. H.
C	SEE REV. E.O.	7/1/64	W. J. H.
D	SEE REV. E.O.	7/1/64	W. J. H.

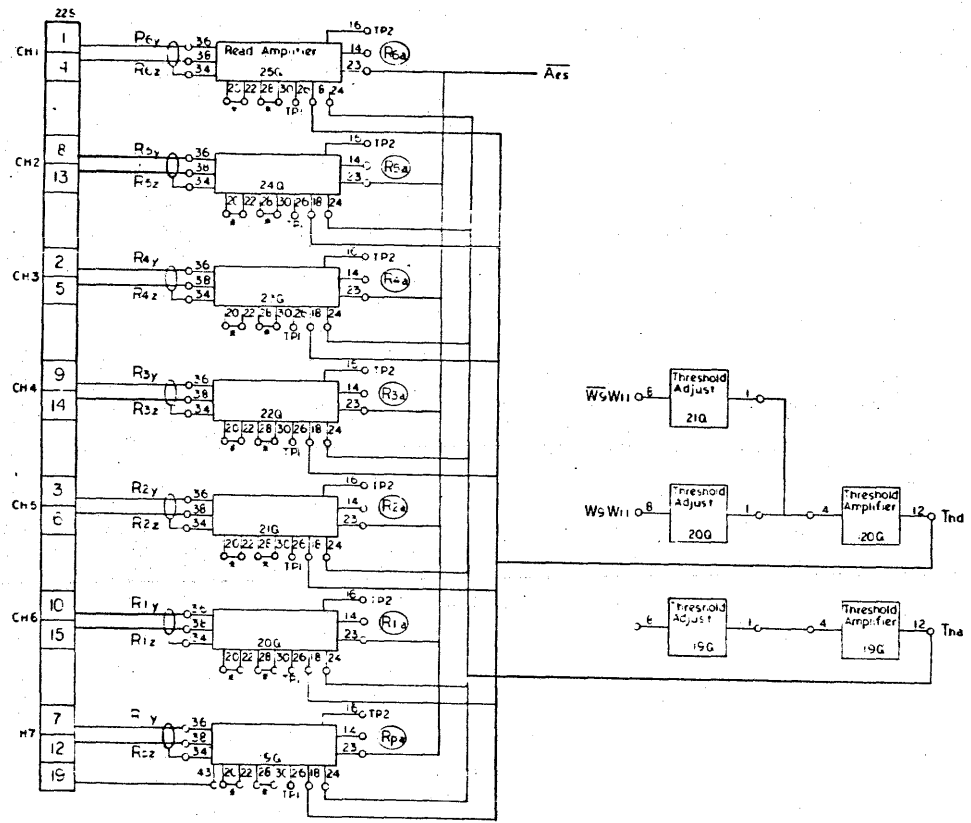


9246A
9246P
TAPE ELECTRONICS
PAGE 25
D

NO.	REV.	DRAWING NO.	DESCRIPTION	DIFFERENCE DESCRIPTION
NOTES UNLESS SPECIFIED 1. TOLERANCES 2. DIMENSIONS 3. ALL DIMENSIONS IN INCHES 4. ALL DIMENSIONS IN MILLIMETERS				
MODEL NO. 9246		DRAWN: [Signature] CHECK: [Signature] APPR: [Signature]		
NEXT ASSY		DATE: 7/1/64 BY: W. J. H. SD/S RECOMMENDED DATA SYSTEMS DIAGRAM, LOGIC, MAG TAPE UNIT		
SCALE		DO NOT SCALE DRAWING		

103258 [D]

REV. 10/60	SEE REV. E.O.
REV. 10/60	SEE REV. E.O.



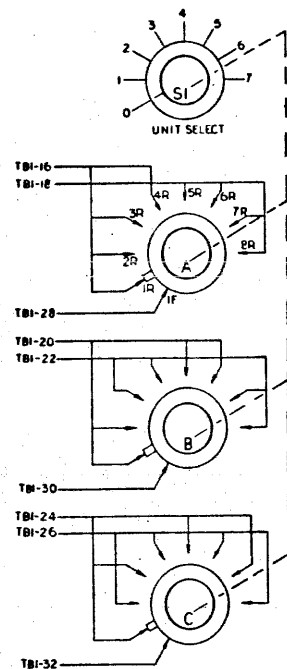
* CAPS 20-22 AND 28-30 ARE NOT USED IN 92463P.

9246A
9246P
TAPE ELECTRONICS
PAGE 26
D

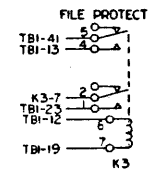
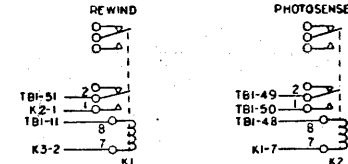
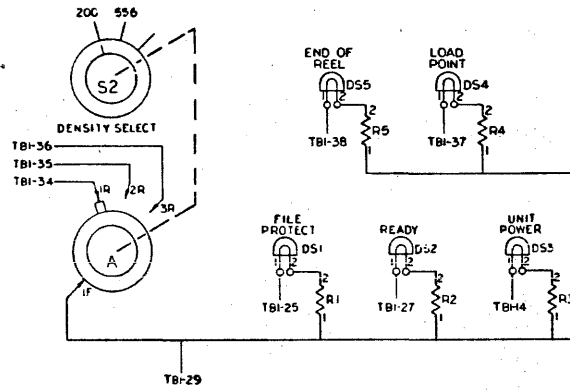
NO. REV.	DRAWING NO.	DESCRIPTION	DATE	BY
1	9246	DIAGRAM, LOGIC, MAG TAPE UNIT	10/60	D
2	103258			

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REL TO MFG	3/27/73	12
C	SEE REV. E.O.	3/27/73	12
D	SEE REV E.O.	3/27/73	12

	TBI-1
	TBI-2
	TBI-3
	TBI-4
P42-119	TBI-5
P3-R	TBI-6
P42-121	TBI-8
P3-M	TBI-9
P42-115	TBI-10
P3-X	TBI-11
P42-116	TBI-12
P3-J	TBI-13
P42-100	TBI-14
P3-A	TBI-15
P42-92	TBI-16
P42-140	TBI-17
P42-58	TBI-18
P42-139	TBI-19
P42-96	TBI-20
P42-138	TBI-21
P42-131	TBI-22
P42-137	TBI-23
P42-129	TBI-24
P42-136	TBI-25
P42-142	TBI-26
P42-135	TBI-27
P42-141	TBI-28
P42-134	TBI-29
P42-94	TBI-30
P42-133	TBI-31
P3-K	TBI-32
P42-132	TBI-33
	TBI-34
P42-127	TBI-35
P42-125	TBI-36
P42-123	TBI-37
P42-103	TBI-38
P42-101	TBI-39
FSI-5	TBI-40
FSI-6	TBI-41
FSI SHIELD	TBI-42
P42-104	TBI-43
TBI-4	TBI-44
P42-105-FSI-1	TBI-45
P42-109-FSI-2	TBI-46
P42-107-FSI-3	TBI-47
P42-111-FSI-4	TBI-48
P42-114	TBI-49
TBI-2	TBI-50
TBI-1	TBI-51
TBI-3	TBI-52

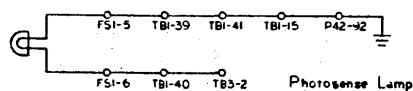
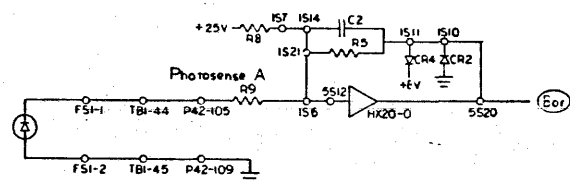
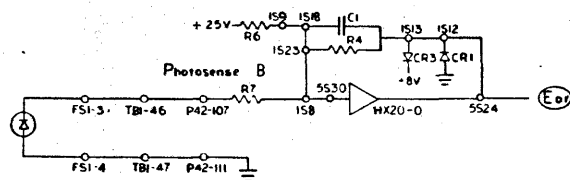


TB2
PHOTOSENSE
CONTROL
ASSY.
(SEE PAGE
29)



9246A
TAPE ELECTRONICS
PAGE 27
D

DRAWING NO.		REVISIONS		DATE		APPROVED	
9246		A		3/27/73		12	
DESCRIPTION		MATERIAL		DATE		APPROVED	
DIAGRAM, LOGIC, MAG TAPE UNIT		C/LD		3/27/73		12	
9246		D		103258		D	

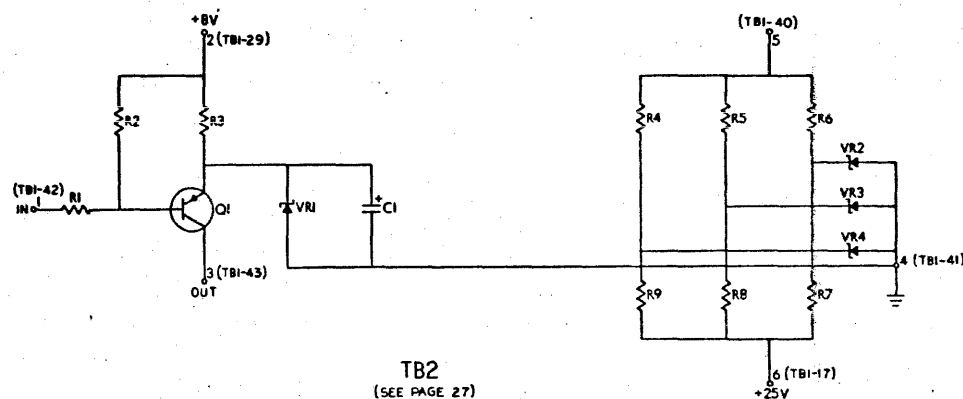


REVISIONS			103258	3
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL TO MFG.		1/1/78	WFS
C	SEE REV. E.O.		1/1/78	WFS
D	SEE REV. E.O.		1/1/78	WFS

9246A
TAPE ELECTRONICS
PAGE 28
D

NO. REV	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV
NOTES UNLESS SPECIFIED				
1. TOLERANCES R 1/16 R 1/32 R 1/64	2. DIMENSIONS 1/16 1/32 1/64	3. MATERIAL LIST	SDS SCIENTIFIC DATA SYSTEMS 1000 PATENT STREET, SANTA MONICA, CALIFORNIA	
4. CHECK ALL DIMENSIONS 5. CHECK ALL DIMENSIONS 6. CHECK ALL DIMENSIONS	7. CHECK ALL DIMENSIONS	8. CHECK ALL DIMENSIONS		
MODEL NO. 9246			REV. NO. D	103258
SHEET 8			SCALE	DO NOT SCALE DRAWING

REVISIONS			
REV	DESCRIPTION	CHK	DATE
A	REL TO MFG		
C	SEE REV. E.O.		
D	SEE REV E.O.		



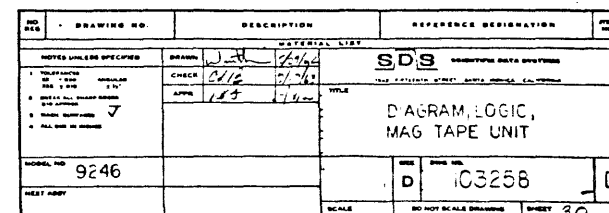
TB2
(SEE PAGE 27)

9246A,
MAG TAPE UNIT
PAGE 29
D

NO. 103258	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV.
NOTES UNLESS SPECIFIED				
DESIGN		MATERIAL LIST		
CHECK		SDS		
APPV		TITLE		
9246		DIAGRAM, LOGIC MAG TAPE UNIT		
9246		D 103258 D		
NEXT UNIT		SCALE		
		DO NOT SCALE DRAWING		

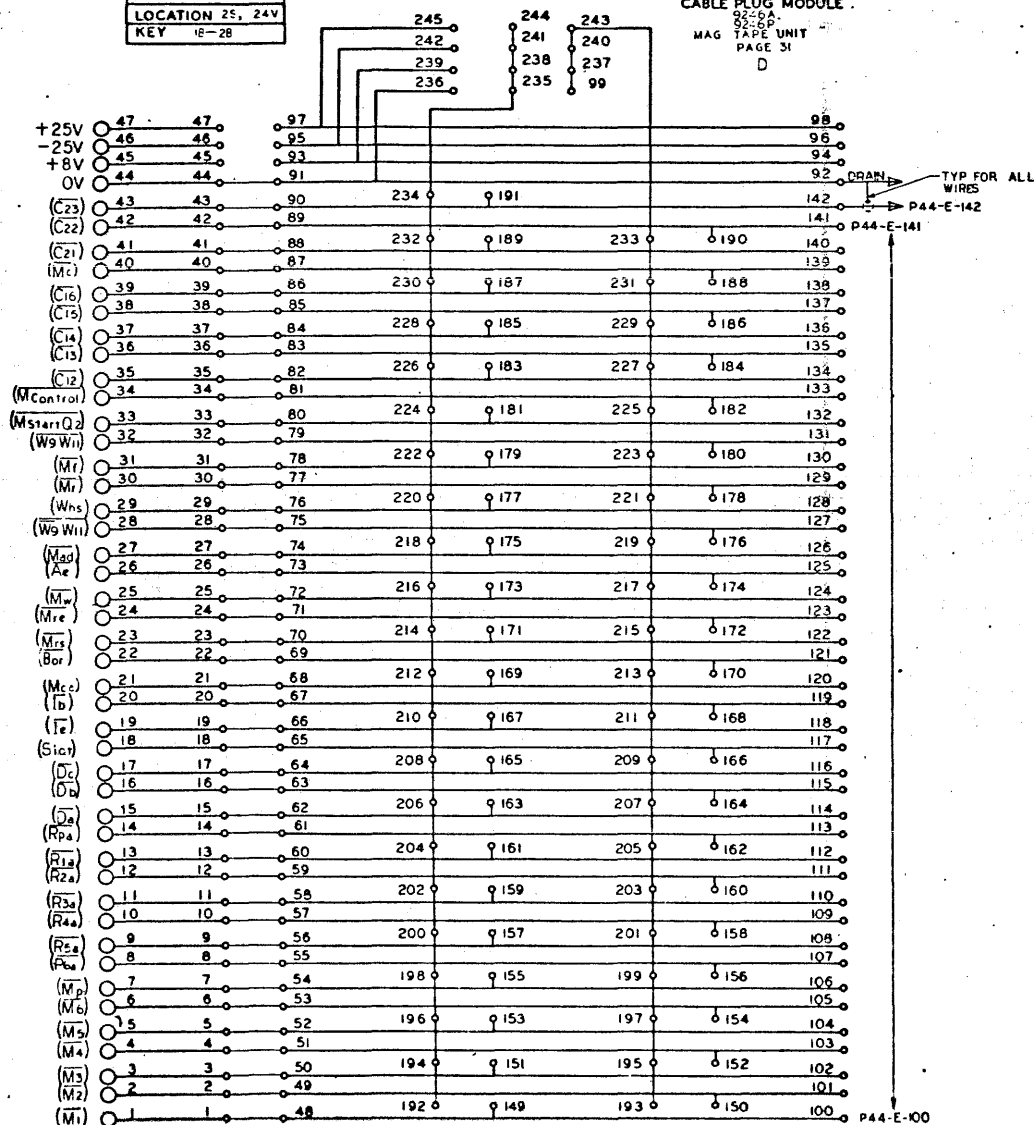
DESIGNATION	P42
LOCATION	'S
KEY	18-26

CABLE PLUG MODULE
9246A
MAG TAPE UNIT
PAGE 30
D



DESIGNATION P43
LOCATION 25, 24V
KEY 12-28

CABLE PLUG MODULE
MAG TAPE UNIT
PAGE 51
D



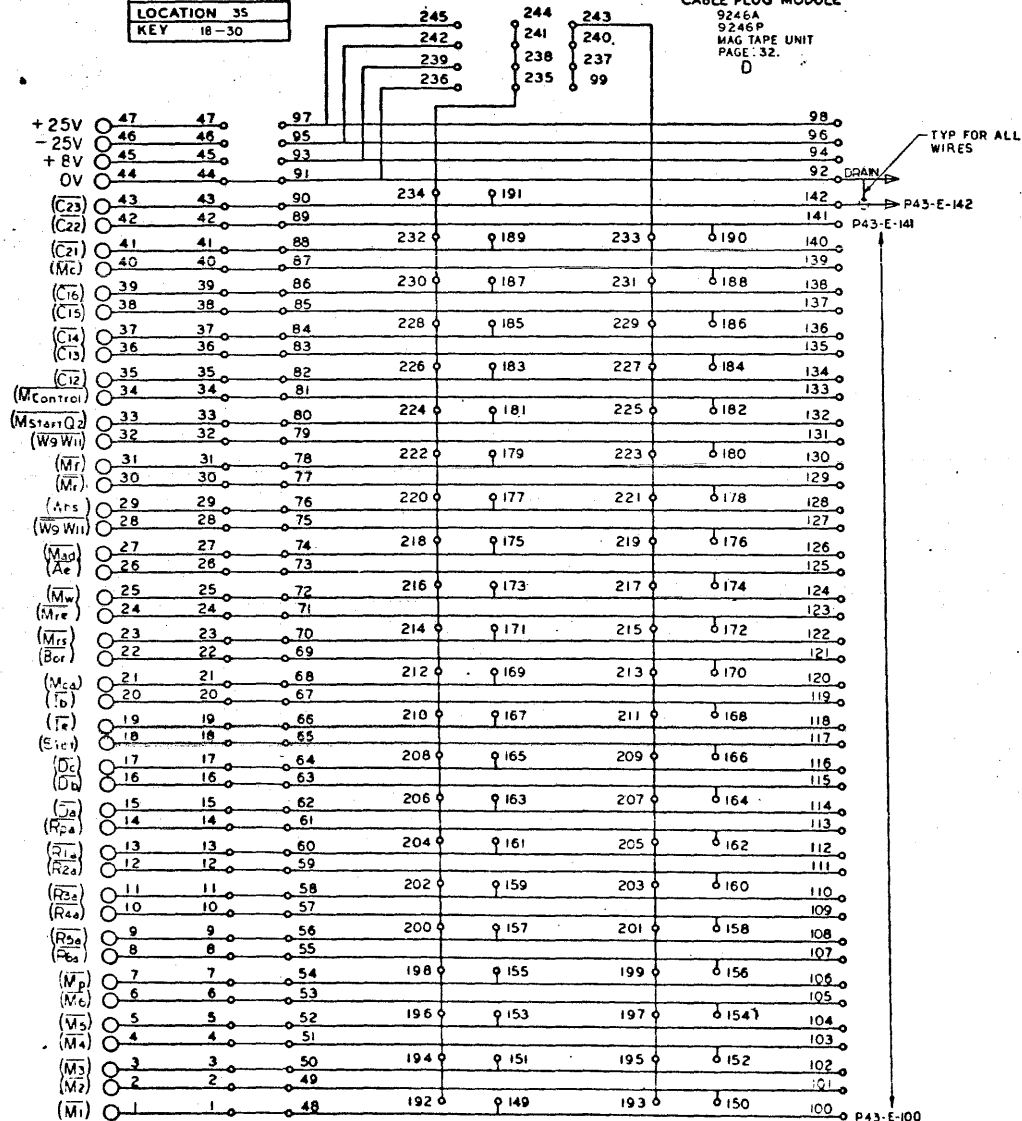
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL. TO MFG.			
C	SEE REV. E.O.			
D	SEE REV. E.O.			

REV	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION
1	9246	DIAGRAM, LOGIC, MAG TAPE UNIT	
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
50			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
63			
64			
65			
66			
67			
68			
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			

DESIGNATION P44
LOCATION 35
KEY 18-30

CABLE PLUG MODULE
9246A
9246P
MAG TAPE UNIT
PAGE 32.
D

REVISIONS			
REV	DESCRIPTION	CHK	DATE
A	REL. TO MFG.		
C	SEE REV. E.O.		
D	SEE REV. E.O.		



DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV.
9246	DIAGRAM, LOGIC, MAG TAPE UNIT		D
DATE	103258		D
SCALE	NO NOT SCALE DRAWING		

REVISIONS			103258	D
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL TO MFG			
C	SEE REV. E.O.			
D	SEE REV E.O.			

MODULE LIST

ITEM	DESCRIPTION	MODEL	QTY.
1	WRITE DRIVER	AK52	2
2	CABLE DRIVER	AX14	3
3	AND/OR BUFFER AMP	BC10	4
4	UNIVERSAL F.F.	FC17	2
5	GATE EXPANDER	GC10	3
6	GATE EXPANDER	GC11	1
7	OPERATIONAL AMP	HX20-C	1
8	READ AMP	HK60	7
9	AND INVERTER	IC12	3
10	ONE SHOT MULT.	OX13	8
11	RELAY DRIVER	RX10	1
12	RESISTOR	ZK51	2
13	TERM. MODULE	ZK56	1
14	TERM. MODULE	ZK57	1
15	TERM. MODULE	ZK58	1
16	AND INVERTER	IK12	1
17	UNIVERSAL F.F.	FH17	1

REPLACEMENT PARTS LIST

ITEM	DESCRIPTION	DESIGNATION	QTY.	SUPPLIER CODE (SEE INDEX)
1	RESISTOR, 3.3K $\pm 2\%$	(P42) R1, R2, R3	3	16, 17
2	1 MEG Ω	(P42) R4, R5, R6, R8	4	16, 17
3	1K	(P42) R7, R9	2	16, 17
4	RESISTOR, 8.2K $\pm 2\%$	(P42) R10, R11, R12, R13	4	16, 17
5	CAPACITOR, MYLAR .0033 μ F $\pm 10\%$	(P42) C1, C2	2	26, 27, 74
6	CAPACITOR, MYLAR .0068 μ F $\pm 10\%$	(P42) C3, C4	2	26, 27, 74
7	CAPACITOR, TANTALUM 47 μ F $\pm 20\%$, 50V	(P42) C5	1	23, 77
8	DIODE, SILICON SWITCHING 1N914A	(P42) CR1 THRU CR7	7	4, 12, 13, 14
9	CONNECTOR, SOLDER TAIL 47 CONTACT #7005-47	J(10) THRU J(25Q) J(15) THRU J(20S) J(24S), J(25S)	47	82
10	RESISTOR, 1.8K $\pm 2\%$	(TB2) R1	1	16, 17
11	15K	(TB2) R2	1	
12	180 Ω	(TB2) R3	1	
13	390 Ω	(TB2) R4, R5, R6	3	
14	RESISTOR, 470 Ω $\pm 2\%$	(TB2) R7, R8, R9	3	16, 17
15	DIODE, VOLTAGE REGULATOR 1N752	(TB2) VR1	1	2, 12, 13, 14
16	DIODE, VOLTAGE REGULATOR 1N964A	(TB2) VR2, VR3, VR4	3	2, 6, 14, 65
17	CAPACITOR, TANTALUM 47 μ F $\pm 20\%$, 50V	(TB2) C1	1	23, 77
18	TRANSISTOR, SILICON SWITCHING 2N1132	(TB2) Q1	1	3, 10, 11
19	RECEPTACLE, 19 PIN #RSK 19-315L	J1	1	134
20	PLUG, 19 PIN #SK 19-325	J2	1	134
21	SWITCH, ROTARY #102163	S1, S2	2	SDS
22	LAMP, INCANDESCENT #47	DS1 THRU DS5	5	84
23	RESISTOR, WW 10 Ω $\pm 5\%$	R1 THRU R5	5	99, 100
24	RELAY, DPDT #DOSX-7T #80-6A/115VAC	K1 THRU K4	4	78 79
25	SWITCH, TOGGLE DPDT #B3054-SE	S1(S)	1	106
26	CAPACITOR, TANTALUM 47 μ F $\pm 20\%$, 50V	C1(Q)	1	23, 77

9246A,
MAG TAPE UNIT
PAGE 34
D

DWG NO.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV
9246		DIAGRAM, LOGIC MAG TAPE UNIT		D
103258				D

NOTES UNLESS SPECIFIED:

1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED

2. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

3. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

4. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

5. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

6. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

7. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

8. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

9. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

10. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

11. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

12. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

13. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

14. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

15. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

16. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

17. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

18. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

19. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

20. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

21. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

22. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

23. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

24. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

25. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

26. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

27. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

28. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

29. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

30. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

31. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

32. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

33. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

34. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

35. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

36. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

37. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

38. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

39. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

40. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

41. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

42. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

43. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

44. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

45. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

46. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

47. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

48. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

49. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

50. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

51. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

52. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

53. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

54. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

55. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

56. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

57. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

58. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

59. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

60. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

61. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

62. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

63. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

64. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

65. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

66. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

67. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

68. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

69. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

70. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

71. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

72. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

73. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

74. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

75. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

76. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

77. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

78. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

79. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

80. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

81. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

82. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

83. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

84. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

85. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

86. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

87. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

88. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

89. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

90. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

91. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

92. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

93. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

94. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

95. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

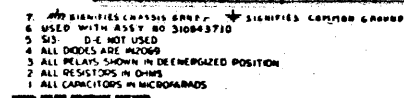
96. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

97. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

98. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

99. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED

100. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED



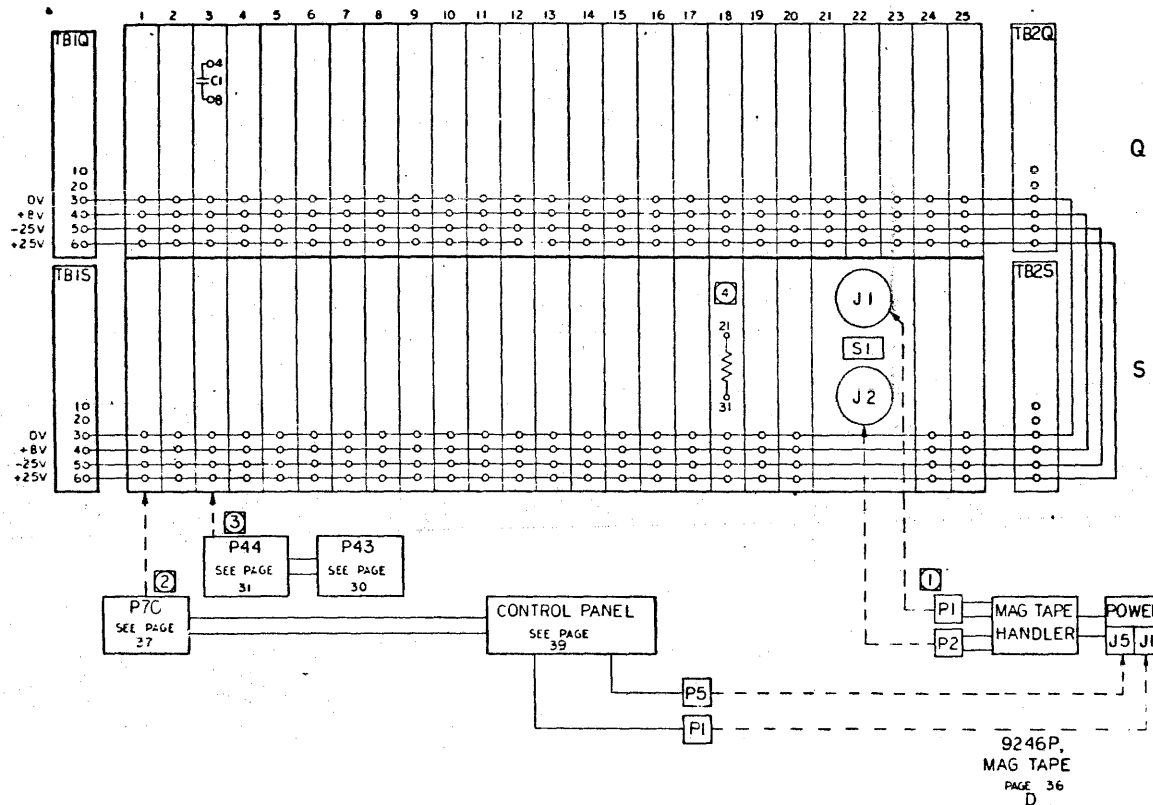
9246A,
MAG TAPE UNIT
PAGE 35
D

Q50	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	Q51
MATERIAL LIST				
NOTED UNLESS SPECIFIED		QUANTITY	 CHEMTRONICS DATA SYSTEMS 2000 UNIVERSITY STREET, SANTA CLARA, CALIFORNIA 95050	TITLE
1. PAPER: DRAWING		CHECK		
2. 1/2" X 11" 100% WHITE		APPROV		
3. MATERIAL: 100% WHITE				
4. PAPER: 100% WHITE				
5. PAPER: 100% WHITE			DIAGRAM, LOGIC MAG TAPE UNIT	
6. PAPER: 100% WHITE				
7. PAPER: 100% WHITE				
8. PAPER: 100% WHITE				
9. PAPER: 100% WHITE				
10. PAPER: 100% WHITE				
11. PAPER: 100% WHITE				
12. PAPER: 100% WHITE				
13. PAPER: 100% WHITE				
14. PAPER: 100% WHITE				
15. PAPER: 100% WHITE				
16. PAPER: 100% WHITE				
17. PAPER: 100% WHITE				
18. PAPER: 100% WHITE				
19. PAPER: 100% WHITE				
20. PAPER: 100% WHITE				
21. PAPER: 100% WHITE				
22. PAPER: 100% WHITE				
23. PAPER: 100% WHITE				
24. PAPER: 100% WHITE				
25. PAPER: 100% WHITE				
26. PAPER: 100% WHITE				
27. PAPER: 100% WHITE				
28. PAPER: 100% WHITE				
29. PAPER: 100% WHITE				
30. PAPER: 100% WHITE				
31. PAPER: 100% WHITE				
32. PAPER: 100% WHITE				
33. PAPER: 100% WHITE				
34. PAPER: 100% WHITE				
35. PAPER: 100% WHITE				
36. PAPER: 100% WHITE				
37. PAPER: 100% WHITE				
38. PAPER: 100% WHITE				
39. PAPER: 100% WHITE				
40. PAPER: 100% WHITE				
41. PAPER: 100% WHITE				
42. PAPER: 100% WHITE				
43. PAPER: 100% WHITE				
44. PAPER: 100% WHITE				
45. PAPER: 100% WHITE				
46. PAPER: 100% WHITE				
47. PAPER: 100% WHITE				
48. PAPER: 100% WHITE				
49. PAPER: 100% WHITE				
50. PAPER: 100% WHITE				
51. PAPER: 100% WHITE				
52. PAPER: 100% WHITE				
53. PAPER: 100% WHITE				
54. PAPER: 100% WHITE				
55. PAPER: 100% WHITE				
56. PAPER: 100% WHITE				
57. PAPER: 100% WHITE				
58. PAPER: 100% WHITE				
59. PAPER: 100% WHITE				
60. PAPER: 100% WHITE				
61. PAPER: 100% WHITE				
62. PAPER: 100% WHITE				
63. PAPER: 100% WHITE				
64. PAPER: 100% WHITE				
65. PAPER: 100% WHITE				
66. PAPER: 100% WHITE				
67. PAPER: 100% WHITE				
68. PAPER: 100% WHITE				
69. PAPER: 100% WHITE				
70. PAPER: 100% WHITE				
71. PAPER: 100% WHITE				
72. PAPER: 100% WHITE				
73. PAPER: 100% WHITE				
74. PAPER: 100% WHITE				
75. PAPER: 100% WHITE				
76. PAPER: 100% WHITE				
77. PAPER: 100% WHITE				
78. PAPER: 100% WHITE				
79. PAPER: 100% WHITE				
80. PAPER: 100% WHITE				
81. PAPER: 100% WHITE				
82. PAPER: 100% WHITE				
83. PAPER: 100% WHITE				
84. PAPER: 100% WHITE				
85. PAPER: 100% WHITE				
86. PAPER: 100% WHITE				
87. PAPER: 100% WHITE				
88. PAPER: 100% WHITE				
89. PAPER: 100% WHITE				
90. PAPER: 100% WHITE				
91. PAPER: 100% WHITE				
92. PAPER: 100% WHITE				
93. PAPER: 100% WHITE				
94. PAPER: 100% WHITE				
95. PAPER: 100% WHITE				
96. PAPER: 100% WHITE				
97. PAPER: 100% WHITE				
98. PAPER: 100% WHITE				
99. PAPER: 100% WHITE				
100. PAPER: 100% WHITE				

NOTES: UNLESS OTHERWISE SPECIFIED

- ③ RECEPTACLE J(5S) IS PROVIDED FOR THE P44 TO P43 CABLE. P43 CONNECTS TO RECEPTACLE J(24V) OF THE MODEL 9248 CONTROL UNIT OR TO J(2S) OF A SECOND MODEL 9246.
- ④ USED ON 92463P ONLY, RESISTOR 100680-750.
- ① RECEPTACLES J1&J2 ARE PROVIDED FOR CONNECTION TO THE READ&WRITE HEADS OF THE MAG TAPE UNIT.
- ② RECEPTACLE J(5S) IS PROVIDED FOR P70 FROM CONTROL PANEL.

REV	DESCRIPTION	DATE	APPROVED
C	SEE REV. E.O.		
D	SEE REV E.O.		



DWG NO	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION
1032581D1	103258	DIAGRAM, LOGIC MAG TAPE	
9246	103258		

103258 10

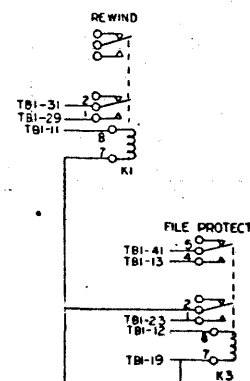
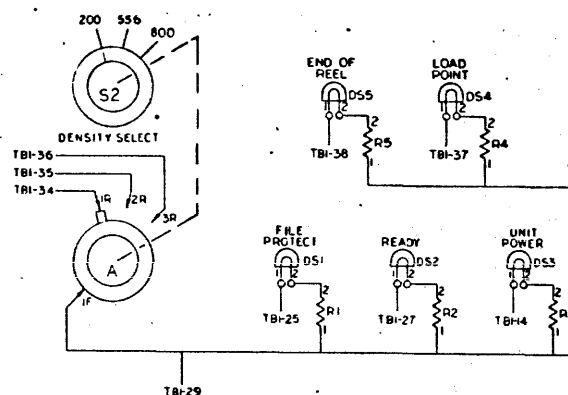
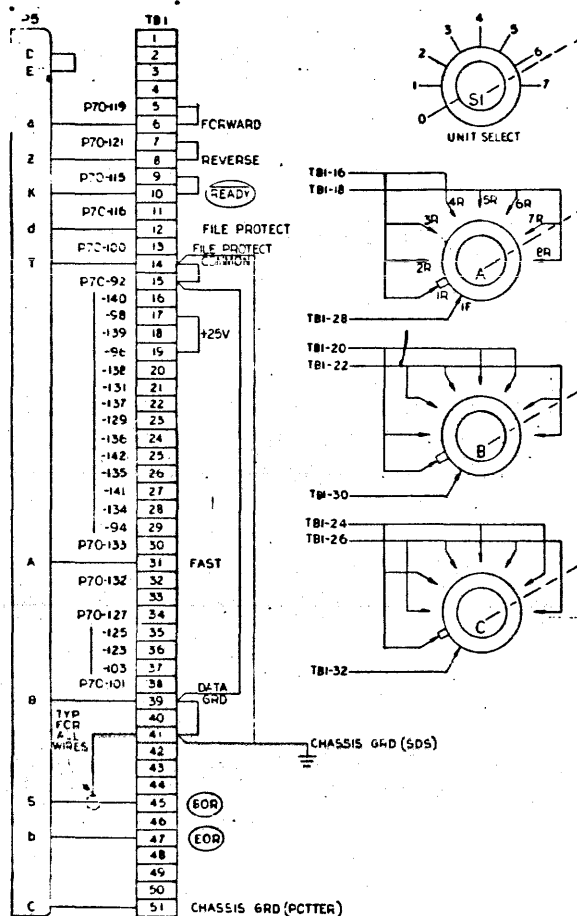
103258	D
--------	---

ITEM	DESCRIPTION	MODEL	QTY
1	WRITE DRIVER	AK52	2
2	CABLE DRIVER	AX14	3
3	AND/OR BUFFER AMP	BC10	4
4	UNIVERSAL F.F.	FC17	2
5	GATE EXPANDER	GC10	3
6	GATE EXPANDER	GC11	1
7	READ AMP	HL60	7
8	AND INVERTER	IC12	3
9	ONE SHOT MULT.	OY13	8
10	RELAY DRIVER	RY10	1
11	RESISTOR	ZK51	2
12	TERM. MODULE	ZK56	1
13	TERM. MODULE	ZK57	1
14	TERM. MODULE	ZK58	1
15	AND INVERTER	IH12	1
16	UNIVERSAL F.F.	FH17	1

ITEM	DESCRIPTION	DESIGNATION	QTY.	SUPPLIER CODE (SEE INDEX)
1	RESISTOR, 3.3 K $\pm$ 2%	(P70) R1, R2, R3	3	16, 17
2	RESISTOR, 1.0 K $\pm$ 2%	(P70) R6, R7	2	16, 17
3	RESISTOR, 0.2 K $\pm$ 2%	(P70) R4, R8, R9	3	16, 17
4	CAPACITOR, MYLAR 0.048 μ F $\pm$ 10%	(P70) C1, C2	2	26, 27, 74
5	CAPACITOR, MYLAR 0.033 μ F $\pm$ 10%	(P70) C4, C5	2	26, 27, 74
6	DIODE, SILICON SWITCHING IN914A	(P70) CR1 THRU CR3	3	4, 12, 13, 14
7	INDUCTOR, MOLDED 1000 μ H $\pm$ 5%	(P70) L2, L3	2	42, 90, 91
8	RECEPTACLE, 19 PIN #85K 19-315L	J1	1	134
9	PLUG, 19 PIN #SK19-325	J2	1	134
10	SWITCH, ROTARY #102163	S101, S102	2	5D5
11	RESISTOR, WW 10 Ω $\pm$ 5%	R1 THRU R5	5	99, 100
12	RELAY, DPDT #D5X-7T #80-6A 115VAC	K1, K3	2	78 79
13	SWITCH, TOGGLE DPDT #B3054-5E	S1 (K3)	1	106
14	CAPACITOR, TANTALUM 4.7 μ F $\pm$ 20% 50V	C1 (Q)	1	23, 77
15	CONNECTOR, SOLDER TAIL 47 CONTACT #700B-47	J(1Q) THRU J(25Q) J(5) THRU J(20) J(245) J(255)	47	82
16	LAMP, MINIATURE #32B	DS101 THRU DS105	20	83, 84
17	INDUCTOR, MOLDED 330 μ H $\pm$ 5%	(P70) L1	1	42, 90, 91
18	RESISTOR, 560 Ω $\pm$ 2%	(P70) R5	1	16, 17
19	CAPACITOR, MYLAR, 0.01 μ F $\pm$ 10%	(P70) C3	1	26, 27, 74

✖ NOT USED ON 92463P

[illegible]

03258 21

9246P.
TAPE ELECTRONICS
PAGE 39
D

[illegible]

CONTENTS

Item	Page No.
1. Revision Level Indicator	1
2. Cabling Diagram, Ampex System	2
3. Signal Directory	3
4. Logic Diagrams	4 thru 26
5. Auxiliary Control Panel, Ampex System	27 thru 30
6. Cable P43 - P44	31, 32
7. Module Locator	33
8. Replacement Parts, Ampex System	34
9. Control Panel, Ampex System	35
10. Cabling Diagram, Potter System	36
11. Auxiliary Control Panel, Potter System	37 & 39
12. Replacement Parts, Potter System	38
13. Termination Modules Schematic	
a) ZK51	
b) ZK56	
c) ZK57	
d) ZK58	
e) ZK67 & 68	

Module Changes

9248	92481	92482	92483	9348	Coordinate With EO	Module Change		
EO 103514	EO 107535	EO 107536	EO 107537	EO 107538		From	To	Loca.
B					EO 103403B	OX13	CK52	5V
D					NONE	OX11	OX13	2K
D					NONE	OX11	OX13	3K
D					NONE	OX11	OX13	9K
D					NONE	OX11	OX13	4V
D					NONE	OX11	OX13	6V
E					EO 103403S	FC17	FH17	1K
E					EO 107514H	FC17	FH17	15K
E						FC17	FH17	19K
E						FC17	FH17	20K
F	B	B	B	B		GC10	GH10	10K
F	B	B	B	B		GC10	GH10	11K
G	B	B	C	B		GC10	GH10	17K
G	B	B	C	B		GC10	GH10	18K
G	B	B	C	B		IC12	IH12	16V
H	C				EO 107514H	OX13	OX14	9K
		C	A	C	EO 103043S	OX13	OX14	2V
		C	A	C	EO 107514H	OX13	OX14	9K

PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG
1	E								
2	C								
3	C								
4	C								
5	E								
6	E								
7	E								
8	E								
9	E								
10	C								
11	C								
12	C								
13	E								
14	C								
15	C								
16	C								
17	C								
18	C								
19	C								
20	C								
21	C								
22	E								
23	E								
24	E								
25	E								
26	L								
27	C								
28	D								
29	C								
30	E								
31	E								
32	E								
33	E								
34	E								
35	D								
36	E								
37	E								
38	E								
39	D								

NOTES:
1. REV LETTERS LISTED INDICATE STATUS OF EACH SHEET OF THIS MULTIPLE SHEET DRAWING.
2. CHECK INDIVIDUAL SHEETS FOR REVISION LETTER AGAINST THIS SHEET BEFORE USING THIS DRAWING.

REFERENCE DESIGNATIONS ARE ABBREVIATED. PREFIX THE DESIGNATION WITH UNIT NUMBER OR ASSEMBLY DESIGNATION OR BOTH. (MIL. STD. 16B)

NOTE:

THIS DWG APPLIES TO BOTH THE AMPLEX (A) & POTTER (P) MAG TAPE UNITS. FOR SIMPLICITY ONLY 9246A AND/OR 9246P DESIGNATIONS ARE SHOWN ON INDIVIDUAL PAGES. 9246A IMPLIES 9246A, 9246IA, 92462A, & 9346A. 9246P IMPLIES 9246P, 9246IP, 92462P & 92463P. THE FOLLOWING CHART INDICATES THE EFFECTIVITY OF INDIVIDUAL PAGES.

PAGE NO	AMPLEX ONLY	POTTER ONLY	BOTH	92462P/3P VARIATIONS
1			X	
2	X			
3			X	
4			X	
5			X	
6			X	
7			X	
8			X	
9			X	
10			X	
11			X	
12			X	
13			X	X
14			X	
15			X	
16			X	
17			X	
18			X	
19			X	
20			X	
21			X	
22			X	
23			X	
24			X	
25			X	
26			X	X
27	X			
28	X			
29	X			
30	X			
31			X	
32			X	
33			X	
34	X			
35	X			
36		X		X
37		X		
38		X		
39		X		

9246A, 9246P
MAG TAPE UNIT
PAGE 1
E

REV	DESCRIPTION	CHK	DATE	APPROVED
1	INITIAL MAG			
2	SEE REV E.O.			
3	SEE REV E.O.			
4	SEE SEE E.O.			
5	SEE REV E.O.			

LOGIC

103258 E

WIRE LIST

103404 M

DRAWING NO.		DESCRIPTION		REFERENCE DESIGNATION	
NOTES UNLESS SPECIFIED		MATERIAL LIST		SDS SHORTCUT DATA SYSTEMS	
1. TOLERANCES UNLESS SPECIFIED ARE 1/16"	DRAWN	CHECK	DATE	WIRE	
2. DIMENSIONS UNLESS SPECIFIED ARE IN INCHES	APPR	DATE	DATE	WIRE	
3. DIMENSIONS UNLESS SPECIFIED ARE IN INCHES		DIAGRAM, LOGIC MAG TAPE UNIT			
MODEL NO	9246	REV	D	DWG NO	103258
TEST UNIT		SCALE	DO NOT SCALE DRAWING	SHEET	1 OF 2

EO 103062 REVISION CHASSIS ASSEMBLY

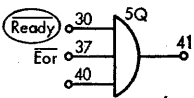
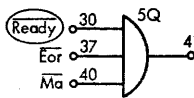
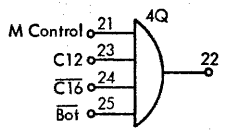
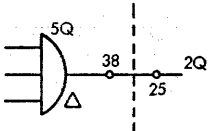
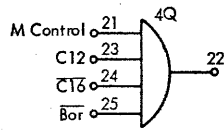
Adds C1 capacitor to chassis Q J3. Capacitor part No. 100311-475.
See logic diagram Page 5.

Reason: To fire 1 second delay (Dr) and hold off ready until delay runs out.

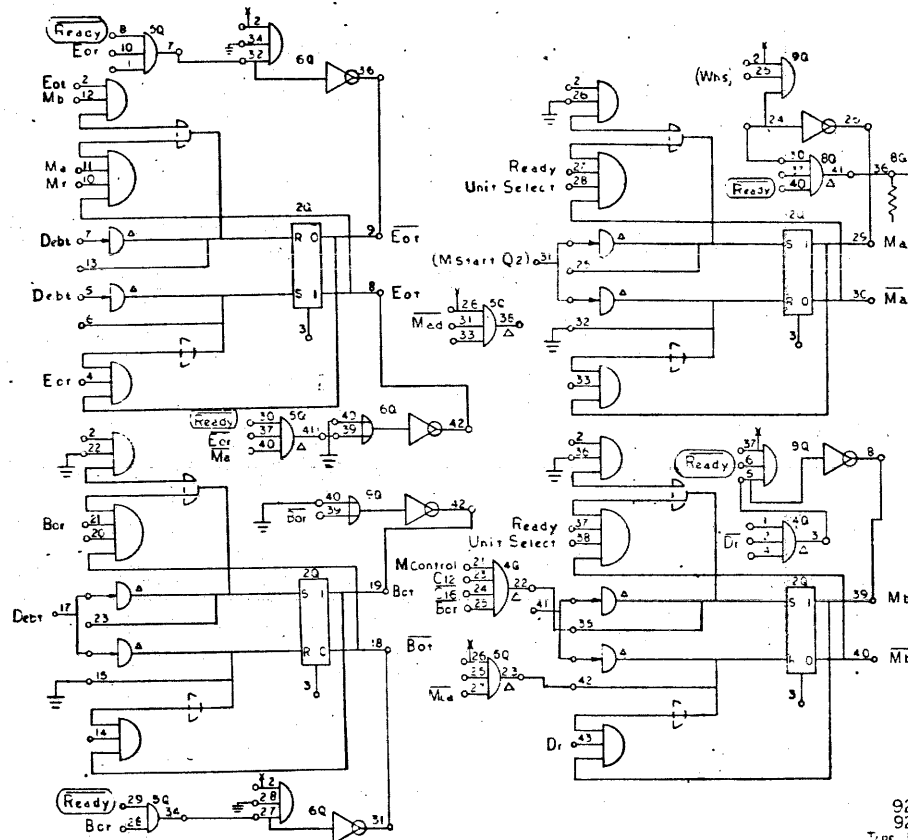
Tape units without capacitor added when performing a reverse scan and reaching load point (Bor) become immediately ready. Forward command can be issued before unit is capable of accepting it and will hang up.

Signal	Logic Pages	Signal	Logic Pages	Signal	Logic Pages	Signal	Logic Pages	Signal	Logic Pages
Ae	18, 24	(Db)	24, 31	(Mca)	30, 21	M5	12, 10, 13	R4af	14
Ae	24, 31	(Dc)	24, 31	Mca	4, 5, 21	M6t	12, 10, 13	R5af	14
Aes	6, 18	Debt	4, 5, 23	M Control	20, 4	M1w	13	R6af	14
Aes	6, 26	Dr	5, 4, 6	M Control	31, 20	M2w	13	R1ar	17
(Bor)	22, 28, 31, 37	Dr	6, 4	Mf	30, 21, 23	M3w	13	R2ar	17
Bor	4, 5, 6, 7, 19, 23, 24	(Eor)	28, 30, 22	(Mf)	30, 21	M4w	13	R3ar	17
Bor	4, 22, 30	Eor	4, 5, 19, 22, 23, 30, 37	Mp	31, 21, 5	M5w	13	R4ar	15
(Bor)	24	Eor	22	(Mp)	31, 21	M6w	13	R5ar	15
Bot	4, 8	Eor + Bor	22, 8	Mps	5, 11, 19	Photosense A, B	28, 29, 30	R6ar	15
Bot	4, 5	EOR + BOR	29, 35 Aonly	Mpt	11, 5, 13	(Ready)	30, 4, 6, 8, 37	R1y	26
Bot Indicate	8, 37, 30	Eor Bor	19, 22, 29, 30, 37	Mpw	13	Ready	6, 4, 7, 8	R2y	26
Ch 1 Read	26	Eot	4, 5, 7, 8	Mr	30, 4, 19, 21	(Ready)	6	R3y	26
Ch 2 Read	26	Eot	4, 5	(Mr)	31, 21	Ready Indicate	8, 30, 37	R4y	26
Ch 3 Read	26	Eot Indicate	8, 30, 37	Mre	31, 11, 12	Reverse Actuate	13, 30, 37	R5y	26
Ch 4 Read	26	File Protect	30, 37, 7, 8	Mrs	5, 6, 9, 10	Rpa	18, 19, 25	R6y	26
Ch 5 Read	26	File Protect Indicate	8, 30, 37	Mrs	6, 31	(Rpa)	25, 31	R1z	26
Ch 6 Read	26	Forward Actuate	13, 30, 37	M Start Q2	20, 4	(Rpa)	26, 18	R2z	26
Ch 7 Read	26	(Ib)	23, 31	(M Start Q2)	31, 20	Rpaf	18	R3z	26
Ch 1 Write	13	(Ie)	23, 31	Mw	6, 5, 9, 10	Rpar	18	R4z	26
Ch 2 Write	13	Kc21	27, 39, 6, 30, 37	(Mw)	31, 6	Rpy	26	R5z	26
Ch 3 Write	13	Kc22	27, 39, 6, 30, 37	M1	21, 9	Rpz	26	R6z	26
Ch 4 Write	13	Kc23	27, 39, 6, 30, 37	(M1)	31, 21	R1a	16, 17, 19, 25	(Siot)	23, 31
Ch 5 Write	13	Kda	27, 24, 30, 37, 7, 39	M2	21, 9	R2a	16, 17, 19, 25	(Siot)	7, 23
Ch 6 Write	13	Kdb	27, 24, 30, 37, 7, 39	(M2)	31, 21	R3a	16, 17, 19, 25	Test	13, 19, 30, 37
Ch 7 Write	13	Kdc	27, 24, 30, 37, 7, 39	M3	21, 9	R4a	14, 15, 19, 25	Test	13, 19, 30, 37
C12	20, 7	K1 Set	8, 30, 37	(M3)	31, 21	R5a	14, 15, 19, 25	Tha	26
C12	30, 20	K2 Set	8, 30, 37	M4	21, 10	R6a	14, 15, 19, 25	Thd	26
C13	20, 7	Ma	4, 18, 19, 24	(M4)	31, 21	R1a	25, 31	Unit Select	6, 4, 7, 23
C13	30, 20	Ma	4, 6, 24, 25	M5	21, 10	R2a	25, 31	Write Activate	13
C14	20, 7	Mad	22	(M5)	31, 21	R3a	25, 31	W9 W11	21, 13, 26
C14	30, 20, 7	Mad	22, 4	M6	21, 10	R4a	25, 31	(W9 W11)	31, 21
C15	20, 7	(Mad)	24	M6	31, 21	R5a	25, 31	(W9 W11)	21, 26
C15	30, 20, 7	Ma Mf	19, 13, 15, 17, 18, 5	M1s	9, 11, 19	R6a	25, 31	(W9 W11)	31, 21
C16	20, 7	Ma Mr	19, 14, 16, 18, 5	M2s	9, 11, 19	(R1a)	26, 16, 17	Whs	32, 4, 31
C16	30, 20, 7, 4	Ma Mr + Mb	19, 5, 13	M3s	9, 12, 19	(R2a)	26, 16, 17		
C21	22, 27, 30, 37, 39	Ma Test	19, 14, 15, 16, 17, 18	M4s	10, 12, 19	(R3a)	26, 16, 17		
C21	31, 27, 37, 39, 22, 30	Ma Test*	19	M5s	10, 12, 19	(R4a)	26, 14, 15		
C22	22, 27, 37, 30, 39	Ma Test	19, 13	M6s	10, 12, 19	(R5a)	26, 14, 15		
C22	31, 37, 30, 39, 27, 22	Mb	4, 5, 8, 19	M1t	11, 9, 13	(R6a)	26, 14, 15		
C23	22, 27, 37, 30, 39	Mb	4, 6	M2t	11, 9, 13	R1af	16		
C23	31, 30, 37, 39, 27, 22	Mc	6, 5, 9, 10	M3t	12, 9, 13	R2af	16		
(Da)	24, 31	Mc	6	M4t	12, 10, 13	R3af	16		

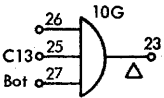
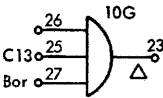
9246A
9246P
PAGE 3
E

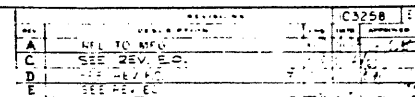
From	To	Reason
<u>103258A</u> 	<u>103758B</u> 	<u>Wire list EO 103404B</u> Adds $\overline{Ma}$ term to eliminate resetting Eor Flip-Flop due to noise on ready line.
<u>103258D</u>  	<u>103258E</u>  Remove connection 5Q 38 to 2Q 25	<u>Wire list EO 103404H</u> Changes $\overline{Bot}$ term to $\overline{Bot}$ driving set side of Mb Flip-Flop. For reverse scan and rewind problems at beginning of tape. Noise on the $\overline{Mad}$ line setting Ma. Also $\overline{Mad}$ is redundant. EOM's can only legally select one unit at a time.

REV	DESCRIPTION	DATE	BY	CHKD	APP'D
1	HEL TO MFL				
2	SEE REV E				
3	SEE REV E				
4	SEE REV E				
5	SEE REV E				
6	SEE REV E				

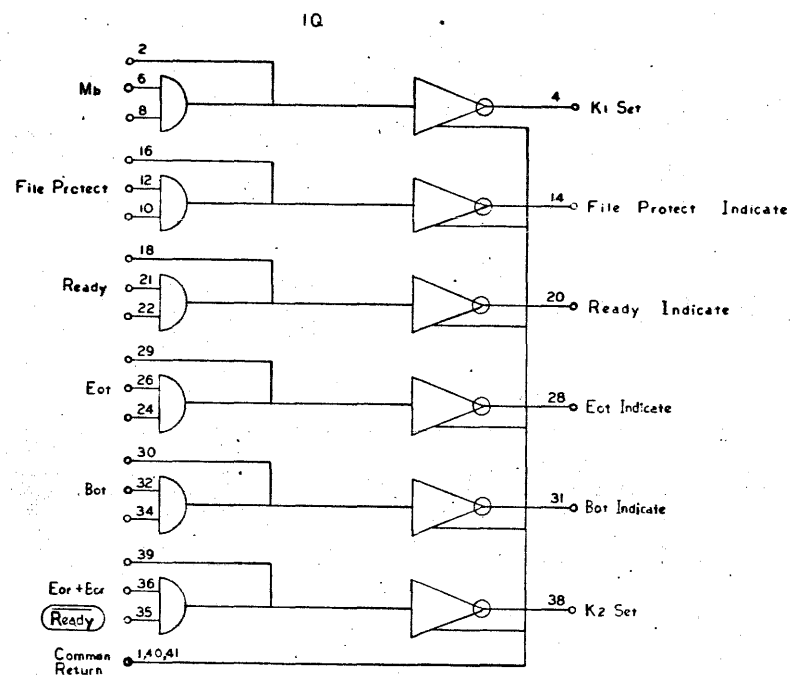


From	To	Reason
<u>103258D</u>	<u>103258E</u>	<u>103404H</u> $\overline{BOT}$ sets 1 sec delay for reverse scan and rewind problems at beginning of tape.

From	To	Reason
<u>103258D</u> 	<u>103258E</u> 	<u>EO 103404L</u> Bot term replaced by Bor term for early indication of load point.

[illegible]

REV.	DESCRIPTION	DATE	BY
1	REL TO MFG		
2	SEE REV. E.D.		
3	SEE REV. E.D.		
4	SEE REV. E.D.		
5	SEE REV. E.D.		



9246A
 9246P
 TAPE ELECTRONICS
 PAGE 8
 E

REV.	DESCRIPTION	DATE	BY
1	REL TO MFG		
2	SEE REV. E.D.		
3	SEE REV. E.D.		
4	SEE REV. E.D.		
5	SEE REV. E.D.		

NOTES UNLESS OTHERWISE SPECIFIED	DATE	BY
1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED	7/1/63	C/13
2. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED	7/1/63	C/13
3. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED	7/1/63	C/13
4. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED	7/1/63	C/13
5. ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE SPECIFIED	7/1/63	C/13

MODEL NO.	9246	DATE	7/1/63	BY	C/13
REVISION		DATE		BY	
REVISION		DATE		BY	
REVISION		DATE		BY	
REVISION		DATE		BY	

SDS	DIAGRAM, LOGIC, MAG TAPE UNIT
D	103258
E	

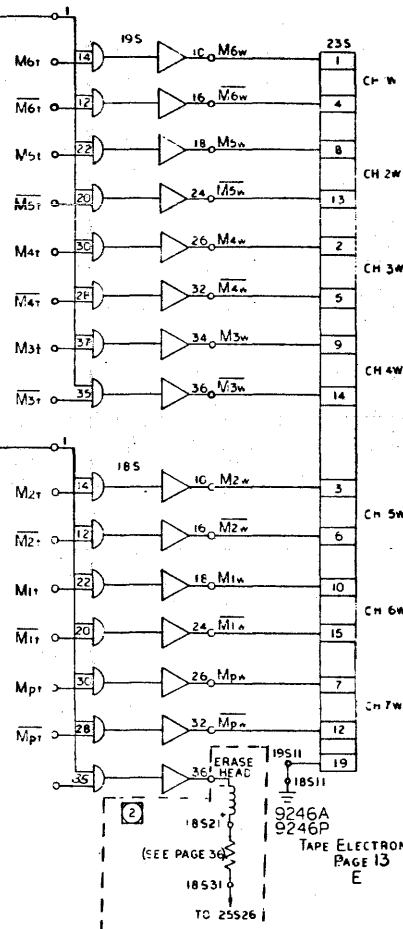
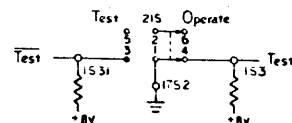
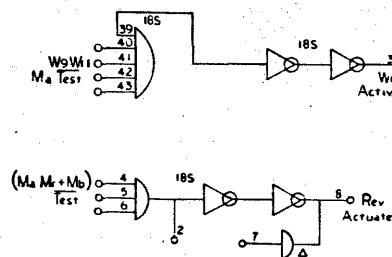
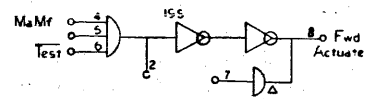
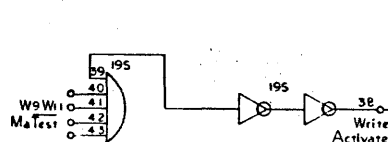
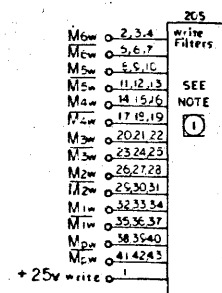
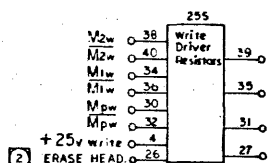
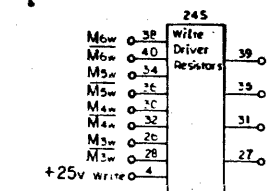
The following chart shows the pin numbers for the head wiring on a Potter unit.

(PICO = Potter Instrument Co.)

<u>PICO Channel</u>	<u>PICO Connector</u>	<u>SDS Connector</u>	<u>SDS Channel</u>
1	A - C	7 - 12	7
2	B - D	10 - 15	6
3	E - F	3 - 6	5
4	J - K	9 - 14	4
5	L - M	2 - 5	3
6	R - S	8 - 13	2
7	Y - Z	1 - 4	1

Blk | Wht

Blk | Wht

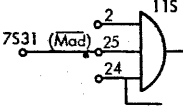
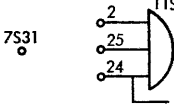


- NOTES:
- 1 NOT USED IN 92463P.
 - 2 USED WITH 92463P ONLY.

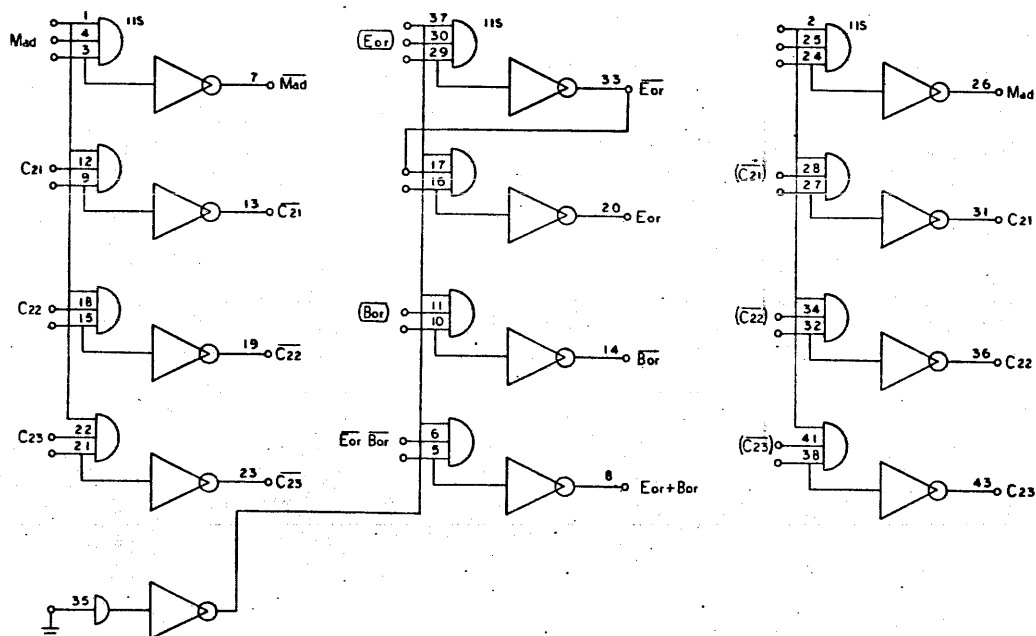
REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION
1	103258	DIAGRAM, LOGIC, MAG TAPE UNIT	E

NOTES UNLESS SPECIFIED	DATE	BY	CHKD	APPD
1. DIMENSIONS ARE IN INCHES	1/15	1/15	1/15	1/15
2. DIMENSIONS ARE IN MILLIMETERS				
3. DIMENSIONS ARE IN MILLIMETERS				
4. DIMENSIONS ARE IN MILLIMETERS				

MODEL NO	9246	REV	D	DATE	103258	E
----------	------	-----	---	------	--------	---

From	To	Reason
<u>103258D</u> 	<u>103258E</u> 	<u>EO 103404H</u> Eliminates $\overline{(\text{Mad})}$ Buss. See page 4 addendum for explanation.

REV	03256
1	REL TO MFG
2	SEE DEV. E.O.
3	SEE REV. E.O.
4	SEE REV. E.O.

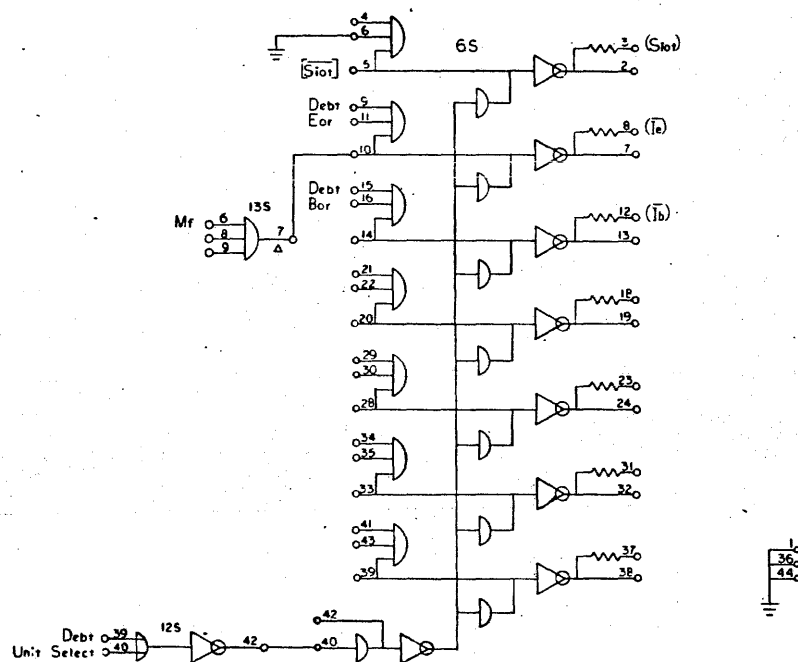


9246A
9246P
TAPE ELECTRONICS
PAGE 22
E

NO	REV	DESCRIPTION	DATE	BY
1		NOTES UNLESS SPECIFIED		
2		CHECK	1/10	1/10
3		APPROV	1/10	1/10
4		DATE	1/10	1/10
5		TIME	1/10	1/10
6		SDS		
7		DIAGRAM, LOGIC,		
8		MAG TAPE UNIT		
9		MODEL NO	9246	
10		REV	D	
11		NO. 103258		
12		E		

From	To	Reason
<u>103258A</u>	<u>103258B</u>	<u>EO 103404 B</u> Allows Eor interrupt in forward direction only.
<u>103258B</u>	<u>103258D</u>	<u>EO 103404 E</u> Prevents Siot from floating. Eliminating False SKS Answers.
<u>103258D</u> Wires 652 to 653 657 to 658 6512 to 6513	<u>103258E</u> Deleted Wires and Added Ground to 6S Pins 1 and 36 from 6S Pin 44	<u>EO 103404 H</u> To allow Logic operation with new ZK57 and ZK58 Terminators. ZK57 - 103471-D ZK58 - 103474-B See Page 40 and 41

REV	DESCRIPTION	DATE	BY
1	REL TO MFG	1/1/64	103258
2	SEE REV E.O.		
3	SEE REV E.O.		
4	SEE REV E.O.		
5	SEE REV E.O.		

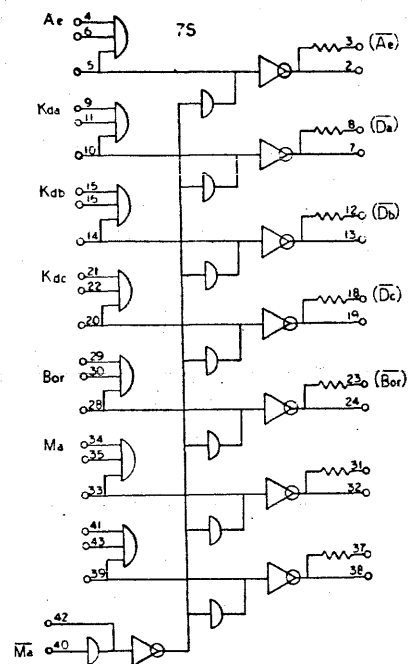


9246A
9246P
TAPE ELECTRONICS
PAGE 23
E

REV	DRAWING NO	DESCRIPTION	REVISIONS	DATE
1	9246	DIAGRAM, LOGIC, MAG TAPE UNIT		
2				
3				
4				
5				

From	To	Reason
<u>103258D</u> Wires • 7S2 to 7S3 7S7 to 7S8 7S12 to 7S13 7S18 to 7S19 7S23 to 7S24 7S31 to 7S32 (Mad) connected to 7S pin 32	<u>103258E</u> Deleted wires and added ground to pins 1 & 36 from pin 44, 7S deleted (Mad) term from 7S pin 32	<u>EO 103404H</u> See page 23, Item 3 addendum for explanations. See Page 4 addendum for explanation.

REV	DATE	BY	CHKD	APPD	103258
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					

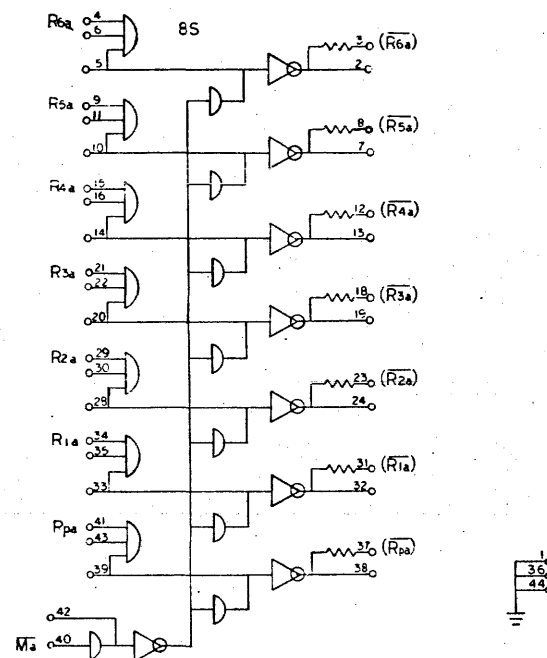


9246A
9246P
TAPE ELECTRONICS
PAGE 24
E

REV	DATE	BY	CHKD	APPD	103258
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					

From	To	Reason
<u>103258D</u> Wires 852 to 853 857 to 858 8512 to 8513 8518 to 8519 8523 to 8524 8531 to 8532 8537 to 8538	<u>103258E</u> } deleted wires and added ground to 8S pins 1 & 36 from pin 44.	<u>EO 103404H</u> See Page 23 Addendum Item 3 for explanation.

REV	DATE	BY	CHKD
A	SEE TO MFG		
B	SEE REV E.O.		
C	SEE REV E.O.		
D	SEE REV E.O.		
E	SEE REV E.O.		



9246A
9246F
TAPE ELECTRONICS
PAGE 25
E

NO REV	DRAWING NO	DESCRIPTION	DATE	BY
NOTES UNLESS SPECIFIED		DESIGN	DATE	BY
1. DIMENSIONS		CHKD	DATE	BY
2. TOLERANCES		APPD	DATE	BY
3. SURFACE FINISH		TITLE		
4. MATERIAL		DIAGRAM, LOGIC, MAG TAPE UNIT		
5. FINISH		DATE		
6. FINISH		DATE		
MODEL NO		REV NO		REV
9246		D		103258 E
NEXT ASSY		DATE		BY

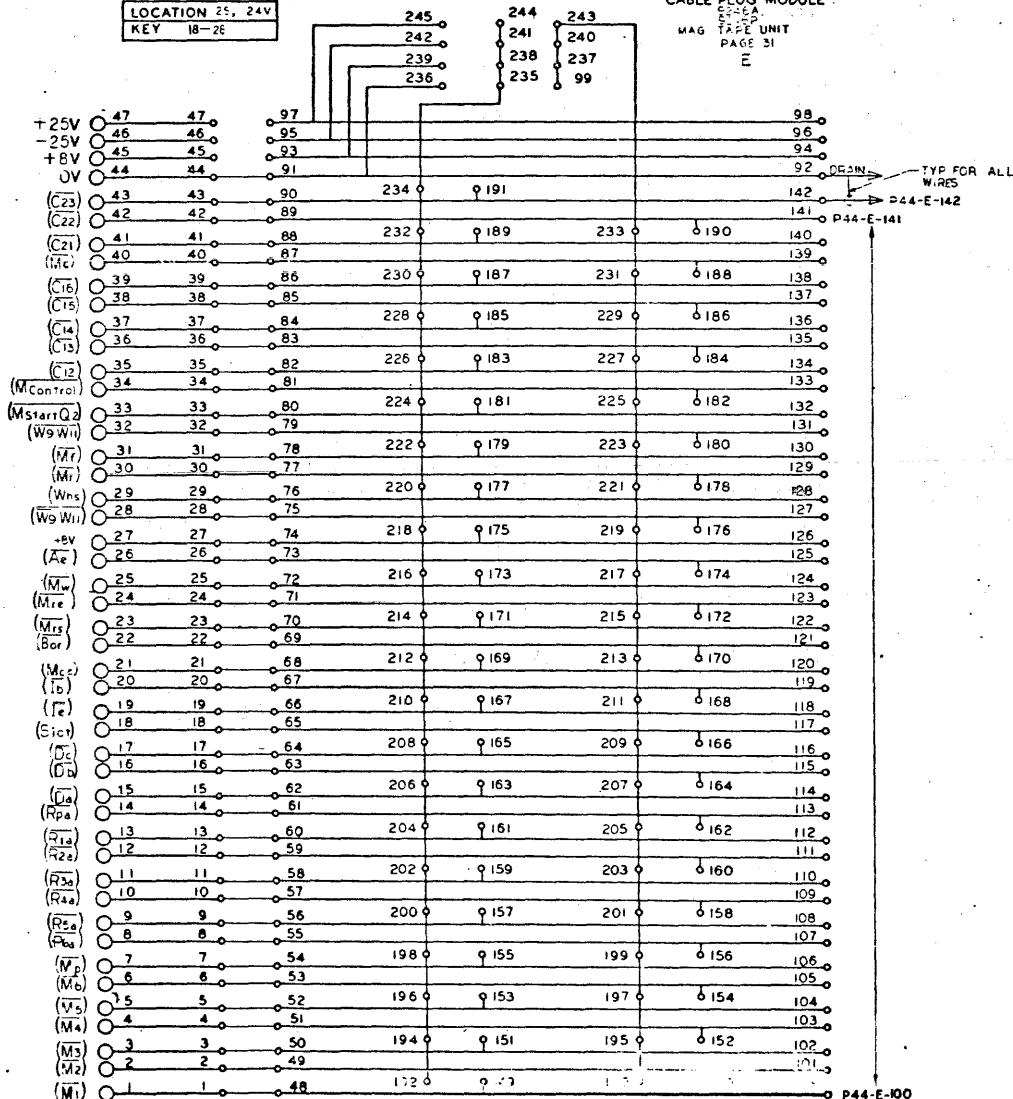
From	To	Reason
<u>103258D</u>	<u>103258E</u> Added Resistors R14 thru R22. 470 ohms $\pm 2\%$ SDS Part #100111-471	<u>EO 103140</u> Additional pull-up on C lines, to reduce noise.

103258 1 E103258 1 E

From	To	Reason
Pin 27 of P43 ($\overline{\text{Mad}}$) signal.	Deleted ($\overline{\text{Mad}}$) signal from pin 27 of P43. Add +8v to pin 27 of P43.	Coordinate with EO 103404H. See Page 23 Addendum Item 3 for explanation.

DESIGNATION P43
LOCATION 25, 24V
KEY 18-26

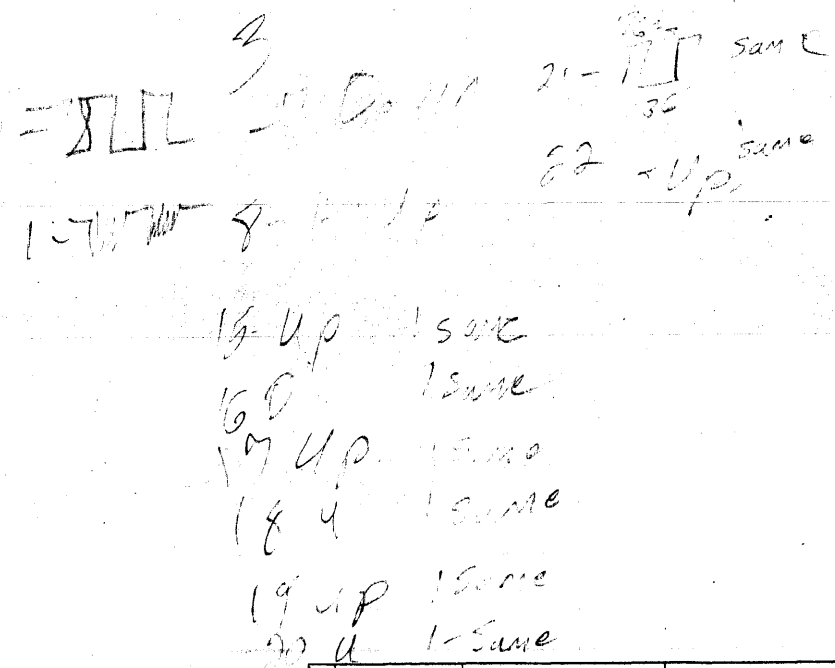
CABLE PLUG MODULE
MAG TAPE UNIT
PAGE 31
E



NO	DESCRIPTION	REV	DATE	APP	REV
1	WIRING				
2	WIRING				
3	WIRING				
4	WIRING				
5	WIRING				
6	WIRING				
7	WIRING				
8	WIRING				
9	WIRING				
10	WIRING				

NO	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION
1	P43	WIRING	E
SDS DIAGRAM, LOGIC, MAG TAPE UNIT 103258 E			

REPORT NO.			
NO.	DESCRIPTION	DATE	APPROVED
1	REF. NO. 100		
2	SEE REF. NO. 100		
3	SEE REF. NO. 100		
4	SEE REF. NO. 100		

[illegible]

REV	DESCRIPTION	DATE	BY
A	WFL TO MFG		
C	SEE REV. E.O.		
D	SEE REV E.O.		
E	SEE REV E.O.		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Q	RX 10	FX 17	OX 13	GC 10	BC 10	1H 12	GC 10	BC 10	IC 12	BC 10	BC 10	GC 11		OX 13	OX 13	OX 13	OX 13	OX 13	HK 60	HK 60	HK 60	HK 60	HK 60	HK 60	HK 60
S	P42 (A) UNITS P70 (P) UNITS	P43 ZK 57	P44	ZK 58	HX20 (NOT USED ON "P" UNITS)	AX 14	AX 14	AX 14				IC 12	IC 12	GC 10	OX 13	OX 13	FC 17	FC 17	AK 52	AK 52	ZK 56			ZK 51	ZK 51
																								ZK 67	ZK 67
																								ZK 68	ZK 68
Q	FC 17	OX 11			IC 12									OX 11	OX 11	OX 11	OX 11	OX 11							
S														OX 11	OX 11										

Q

S

Q

S

9246A
9246PTAPE ELECTRONICS
PAGE 33
E

- ZK 51 MODULES TO BE REPLACED FOR 800 BPI OPERATION:
 → ZK 67 FOR "P" UNITS WITH ERASE HEADS.
 → ZK 68 FOR "A" OR "P" UNITS WITHOUT ERASE HEADS.

MODULES IDENTIFIED WERE USED IN EARLY
9246A UNITS.

NO. REV.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV.
NOTES UNLESS SPECIFIED:		MATERIAL LIST		
1. TOLERANCES ALL - 1/16" FRACTIONS - 1/32" DECIMALS - 1/100"		CHECK	DATE	
2. REPLACE ALL BOLTED JOINTS WITH WASHERS		APPROV	DATE	
3. WASHERS SUPPLIED 4. ALL SHIP IN BOXES				
MODEL NO. 9246		SDS DIAGNOSTIC DATA SYSTEM		
NEXT ASSY		DIAGRAM, LOGIC, MAG TAPE UNIT		
		REV.	DATE	NO.
		D	103258	E
		DO NOT SCALE DIMENSIONS		

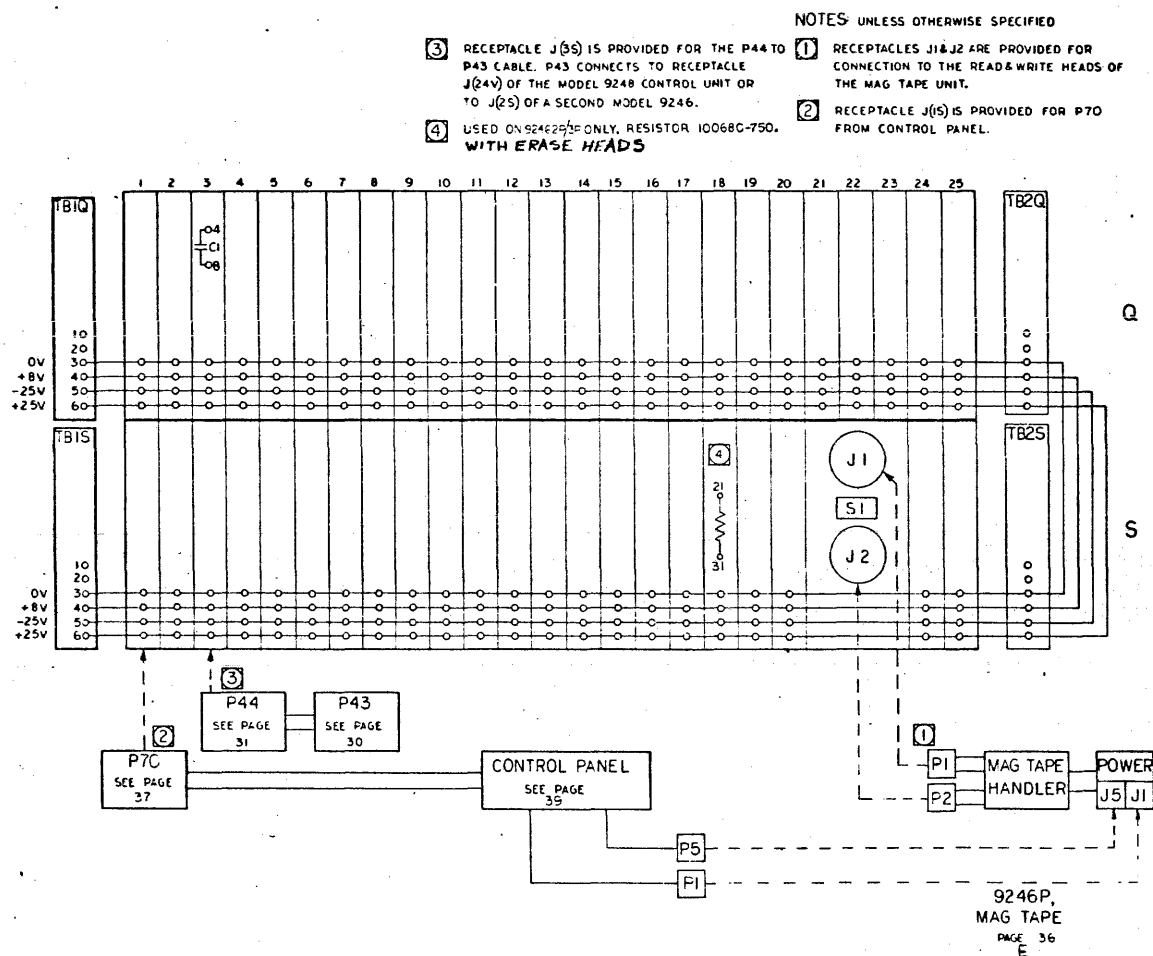
MODULE LIST			
ITEM	DESCRIPTION	MODEL	QTY.
1	WRITE DRIVER	AK52	2
2	CABLE DRIVER	AX14	3
3	AND/OR BUFFER AMP	BC10	4
4	UNIVERSAL F.F.	FC17	2
5	GATE EXPANDER	GC10	3
6	GATE EXPANDER	GC11	1
7	OPERATIONAL AMP	HX20-0	1
8	READ AMP	HK60	7
9	AND INVERTER	IC12	3
10	ONE SHOT MULT.	OX13	8
11	RELAY DRIVER	RX10	1
12	RESISTOR	ZK58	2
13	TERM. MODULE	ZK56	1
14	TERM. MODULE	ZK57	1
15	TERM. MODULE	ZK58	1
16	AND INVERTER	IM12	1
17	UNIVERSAL F.F.	FH17	1

9246A,
MAG TAPE UNIT
PAGE 34
E

REPLACEMENT PARTS LIST				
ITEM	DESCRIPTION	DESIGNATION	QTY.	SUPPLIER CODE (SEE INDEX)
1	RESISTOR, 3.3K $\pm 2\%$	(P42) R1, R2, R3	3	16, 17
2	1 MEG Ω	(P42) R4, R5, R6, R8	4	16, 17
3	1K	(P42) R7, R9	2	16, 17
4	RESISTOR, 8.2K $\pm 2\%$	(P42) R10, R11, R12, R13	4	16, 17
5	CAPACITOR, MYLAR .0033 μ F $\pm 10\%$	(P42) C1, C2	2	26, 27, 74
6	CAPACITOR, MYLAR .0068 μ F $\pm 10\%$	(P42) C3, C4	2	26, 27, 74
7	CAPACITOR, TANTALUM .47 μ F $\pm 20\%$, 50V	(P42) C5	1	23, 77
8	DIODE, SILICON SWITCHING 1N914A	(P42) CENTER JCR7	7	4, 12, 13, 14
9	CONNECTOR, SOLDER TAIL 47 CONTACT #7005-47	J(15) THRU J(25G) J(15) THRU J(20S) - (25S), J(25S)	47	82
10	RESISTOR, 1.8K $\pm 2\%$	(TB2) R1	1	16, 17
11	15K	(TB2) R2	1	
12	180 Ω	(TB2) R3	1	
13	390 Ω	(TB2) R4, R5, R6	3	
14	RESISTOR, 470 Ω $\pm 2\%$	(TB2) R7, R8, R9 (P42) R14 THRU R17	12	16, 17
15	DIODE, VOLTAGE REGULATOR 1N752	(TB2) VR1	1	2, 12, 13, 14
16	DIODE, VOLTAGE REGULATOR 1N964A	(TB2) VR2, VR3, VR4	3	2, 6, 14, 65
17	CAPACITOR, TANTALUM .47 μ F $\pm 20\%$, 50V	(TB2) C1	1	23, 77
18	TRANSISTOR, SILICON SWITCHING 2N1132	(TB2) Q1	1	3, 10, 11
19	RECEPTACLE, 19 PIN #RSK 19-315L	J1	1	134
20	PLUG, 19 PIN #SK 19-325	J2	1	134
21	SWITCH, ROTARY #102143	S1, S2	2	SDS
22	LAMP, INCANDESCENT #47	D51 THRU D55	5	84
23	RESISTOR, W.W. 10 Ω $\pm 5\%$	R1 THRU R5	5	59, 100
24	RELAY, DPDT #DOSX-7T #80-6A/115VAC	K1 THRU K4	4	78 79
25	SWITCH, TOGGLE DPDT #5305A-5E	S1(S)	1	106
26	CAPACITOR, TANTALUM 4.7 μ F $\pm 20\%$, 50V	C1(Q)	1	23, 77

REVISIONS		103258	E
REV.	DESCRIPTION	DATE	APPROVED
2	DEL. TO MFG		
3	SEE REV. E.D.		
D	SEE REV. E.D.		
E	SEE REV. E.D.		

NO.	REV.	DESCRIPTION	REFERENCE DESIGNATION	QTY.
NOTES UNLESS SPECIFIED				
1	DESIGNED BY	DATE	SDS	
2	CHECKED BY	DATE	TITLE	
3	APPROVED BY	DATE	DIAGRAM, LOGIC MAG TAPE UNIT	
MODEL NO.		9246	REV. NO.	D
NEXT ASSY			103258	E
SCALE			SHEET 34 OF 35	



REV	DESCRIPTION	DATE	APPROVED
C	SEE REV E.O.		
D	SEE REV E.O.		
E	SEE REV E.O.		

REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION
NOTES: UNLESS SPECIFIED			
1. TOLERANCES	DRAWN	DATE	103258
2. DIMENSIONS	CHECKED	DATE	
3. SPECIAL INSTRUCTIONS	APPROVED	DATE	
4. REVISIONS			
5. FULL SIZE IN INCHES			
MODEL NO	9246	REV	D
DRAWN		DATE	103258
			E
SCALE	NO NOT SCALE DRAWING		

POTTER

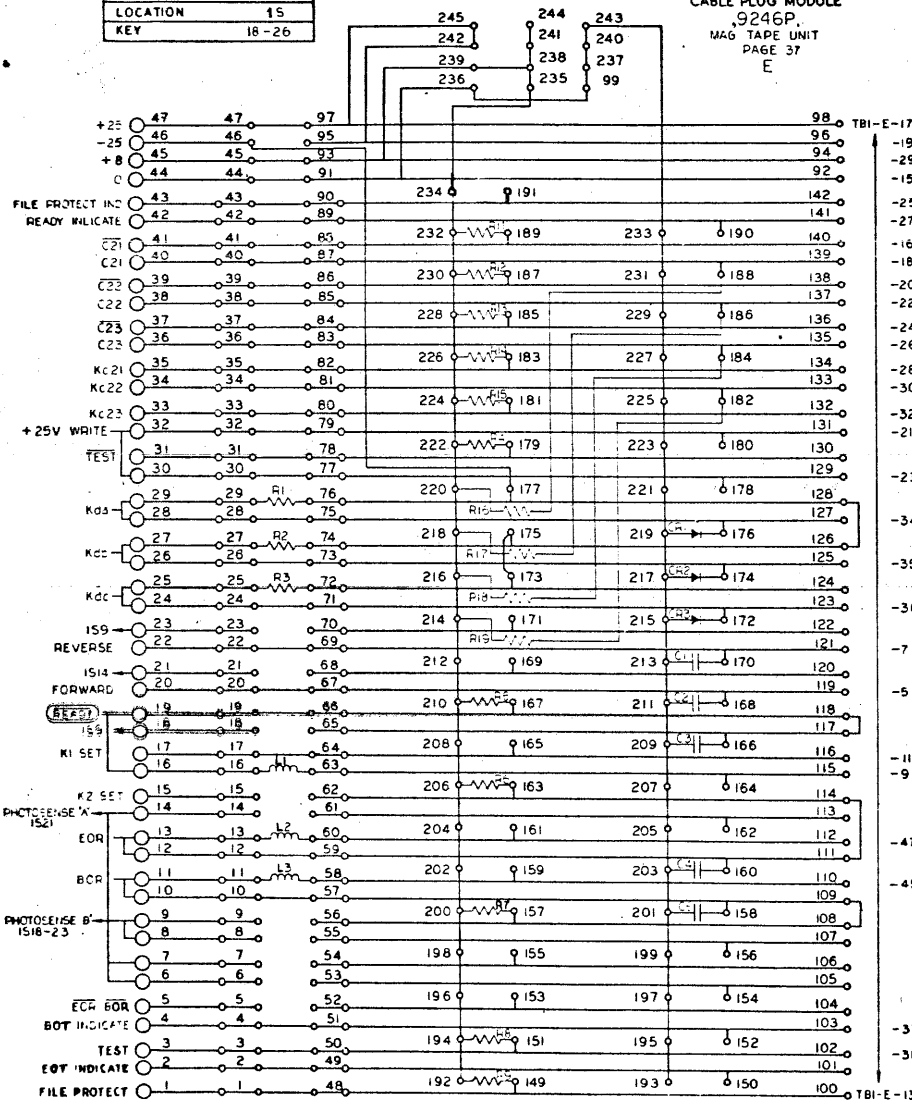
Addendum

From	To	Reason
<u>103258D</u>	<u>103258E</u> Added Resistors R11 thru R19. 470 ohms $\pm 2\%$ SDS Part #100111-471	<u>EO 103140</u> Additional pullups on C lines to reduce noise.

DESIGNATION	P70
LOCATION	1S
KEY	18-26

CABLE PLUG MODULE
9246P
MAG TAPE UNIT
PAGE 37
E

REV	DESCRIPTION	CHK	DATE	APPROVED
1	SEE REV E.O.			
2	SEE REV E.O.			
3	SEE REV E.O.			



POTTER

REV	DESCRIPTION	CHK	DATE	APPROVED
1	SEE REV E.O.			
2	SEE REV E.O.			
3	SEE REV E.O.			

NOTES UNLESS SPECIFIED	DRAWN	CHECK	APPD	FILE
1. PREFERRED 2. 1/2" DIA 3. 1/4" DIA 4. 1/8" DIA 5. 1/16" DIA 6. 1/32" DIA 7. 1/64" DIA 8. 1/128" DIA 9. 1/256" DIA 10. 1/512" DIA 11. 1/1024" DIA 12. 1/2048" DIA 13. 1/4096" DIA 14. 1/8192" DIA 15. 1/16384" DIA 16. 1/32768" DIA 17. 1/65536" DIA 18. 1/131072" DIA 19. 1/262144" DIA 20. 1/524288" DIA 21. 1/1048576" DIA 22. 1/2097152" DIA 23. 1/4194304" DIA 24. 1/8388608" DIA 25. 1/16777216" DIA 26. 1/33554432" DIA 27. 1/67108864" DIA 28. 1/134217728" DIA 29. 1/268435456" DIA 30. 1/536870912" DIA 31. 1/1073741824" DIA 32. 1/2147483648" DIA 33. 1/4294967296" DIA 34. 1/8589934592" DIA 35. 1/17179869184" DIA 36. 1/34359738368" DIA 37. 1/68719476736" DIA 38. 1/137438953472" DIA 39. 1/274877906944" DIA 40. 1/549755813888" DIA 41. 1/1099511627776" DIA 42. 1/2199023255552" DIA 43. 1/4398046511104" DIA 44. 1/8796093022208" DIA 45. 1/17592186044416" DIA 46. 1/35184372088832" DIA 47. 1/70368744177664" DIA 48. 1/140737488355328" DIA 49. 1/281474976710656" DIA 50. 1/562949953421312" DIA 51. 1/1125899906842624" DIA 52. 1/2251799813685248" DIA 53. 1/4503599627370496" DIA 54. 1/9007199254740992" DIA 55. 1/18014398509481984" DIA 56. 1/36028797018963968" DIA 57. 1/72057594037927936" DIA 58. 1/144115188075855872" DIA 59. 1/288230376151711744" DIA 60. 1/576460752303423488" DIA 61. 1/1152921504606846976" DIA 62. 1/2305843009213693952" DIA 63. 1/4611686018427387904" DIA 64. 1/9223372036854775808" DIA 65. 1/18446744073709551616" DIA 66. 1/36893488147419103232" DIA 67. 1/73786976294838206464" DIA 68. 1/147573952589676412928" DIA 69. 1/295147905179352825856" DIA 70. 1/590295810358705651712" DIA 71. 1/1180591620717411303424" DIA 72. 1/2361183241434822606848" DIA 73. 1/4722366482869645213696" DIA 74. 1/9444732965739290427392" DIA 75. 1/18889465931478580854784" DIA 76. 1/37778931862957161709568" DIA 77. 1/75557863725914323419136" DIA 78. 1/151115727451828646838272" DIA 79. 1/302231454903657293676544" DIA 80. 1/604462909807314587353088" DIA 81. 1/1208925819614629174706176" DIA 82. 1/2417851639229258349412352" DIA 83. 1/4835703278458516698824704" DIA 84. 1/9671406556917033397649408" DIA 85. 1/19342813113834066795298816" DIA 86. 1/38685626227668133590597632" DIA 87. 1/77371252455336267181195264" DIA 88. 1/154742504910672534362390528" DIA 89. 1/309485009821345068724781056" DIA 90. 1/618970019642690137449562112" DIA 91. 1/1237940039285380274899124224" DIA 92. 1/2475880078570760549798248448" DIA 93. 1/4951760157141521099596496896" DIA 94. 1/9903520314283042199192993792" DIA 95. 1/19807040628566084398385987584" DIA 96. 1/39614081257132168796771975168" DIA 97. 1/79228162514264337593543950336" DIA 98. 1/158456325028528675187087900672" DIA 99. 1/316912650057057350374175801344" DIA 100. 1/633825300114114700748351602688" DIA	W. J. W. E.	J. S. E.	J. S. E.	J. S. E.

MODEL NO	9246	REV	1	DATE	10/3/58	APPROVED	E
----------	------	-----	---	------	---------	----------	---

PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									

NOTES:

1. REV. LETTERS LISTED INDICATE STATUS OF EACH SHEET OF THIS MULTIPLE SHEET DRAWING.
2. CHECK INDIVIDUAL SHEETS FOR REVISION LETTER AGAINST THIS SHEET BEFORE USING THIS DRAWING.

* NOT USED ON 92481.

** NOT USED ON 92481, 9248.

REFERENCE DESIGNATIONS
ARE ABBREVIATED.
PREFIX THE DESIGNATION
WITH UNIT NUMBER
OR ASSEMBLY DESIGNATION
OR BOTH. (MIL. STD. 168)

9348.
92483.9248.92481.92482
MAG TAPE CONTROL UNIT
PAGE 1

E

REVISIONS			
REV	DESCRIPTION	CHK	DATE
A	DEL TO MFG		
B	SEE REV. E.O.		
C	SEE REV. E.O.		
D	SEE REV. E.O.		
E	SEE REV. E.O.		
F	SEE REV. E.O.		

NO. 100	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV. NO.
NOTES: 1. REV. LETTERS LISTED INDICATE STATUS OF EACH SHEET OF THIS MULTIPLE SHEET DRAWING. 2. CHECK INDIVIDUAL SHEETS FOR REVISION LETTER AGAINST THIS SHEET BEFORE USING THIS DRAWING.				
1. PREPARED BY: [Signature] DATE: 1/1/73 2. CHECKED BY: [Signature] DATE: 1/1/73 3. DESIGNED BY: [Signature] DATE: 1/1/73 4. ALL DIM. IN INCHES		SDS SYSTEMS DATA SYSTEMS 103257 DIAGRAM LOGIC MAG TAPE CONTROL UNIT		
MODEL NO. 9248 UNIT ASSY		REV. NO. D 103257 F SCALE: NO. 100 SCALE DRAWING		

[illegible]

④ CK55 USED 9348, CK56 USED ON 92483.

ADD SLIP	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV
MATERIAL LIST				
NOTES UNLESS SPECIFIED		DRAWN BY	 NON-PROTECTIVE PROGRAMS 1000 EASTERN AVENUE SUITE 1000 CHICAGO, ILL. 60611	
1. TOLERANCES: ANGLES 1/4° DIM. 1/16" 3"		CHECKED	TITLE DIAGRAM, LOGIC, MAG TAPE CONTROL UNIT	
2. DIMENSIONS UNLESS SPECIFIED ARE IN INCHES		APPROVED		
3. DIMENSIONS UNLESS SPECIFIED ARE IN MILLIMETERS				
MODEL NO.		SIZE	PROD. NO.	
9248		D	103257	F
NEXT ASSEMBLY				
		SCALE	DO NOT SCALE DRAWING. ☐ 1/2" = 1" ☐ 3/4" = 1"	

MODULE LIST

ITEM	DESCRIPTION	MODEL	QTY				
			9248	92481	92482	92483	9248
1	CABLE DRIVER	AK14	2	2	2	2	2
2	AND/OR BUFFER AMP	BC10	3	3	3	3	3
3	AND/OR BUFFER AMP	BH10	1	1	1	1	1
4	OR GATE BUFFER AMP	BH11	1	1	1	1	1
5	CRYSTAL CLOCK GEN	CK13	1	-	2	2	2
6	COUNTER F.F.	FH15	3	3	3	3	3
7	UNIVERSAL F.F.	FH17	5	5	5	5	5
8	GATE EXPANDER	GH11	1	1	1	1	1
9	GATE EXPANDER	GL10	3	8	8	8	8
10	AND/OR INVERT	IC10	2	2	2	2	2
11	AND INVERTER	IC12	4	4	4	4	4
12	AND INVERTER	IH12	2	2	2	2	2
13	ADDER MODULE	IK52	1	1	1	1	1
14	ONE SHOT MULT.	OK13	4	3	4	4	4
15	CLOCK & GAP DETECTOR	SK53	1	1	1	1	1
16	UNIVERSAL F.F.	FC17	1	1	1	1	1
17	ONE SHOT MULT.	OK14	1	1	2	2	2
18	CLOCK GEN	CK52	1	1	1	-	-
19	CLOCK GEN	CK55	-	-	-	-	1
20	CLOCK GEN	CK56	-	-	-	1	-
21	CABLE DRIVER	AK16	4	4	4	4	4

REPLACEMENT PARTS LIST

ITEM	DESCRIPTION	DESIGNATION	QTY	SUPPLIER CODE (SEE INDEX)
1	RESISTOR, 470 Ω $\pm$ 2%	(P40)R27 THRU R38	12	16, 17
2	INDUCTOR, MOLDED 220 μ H $\pm$ 5%	(P40)L1 THRU L26 (P41)L1 THRU L14	40	42, 99, 91
3	DIODE, SILICON SWITCHING IN 544A	(P40)CR1 THRU CR11	11	4, 12, 13, 14
4	CONNECTOR, SOLDER TAIL 47 CONTACT #7008-47	(J16) THRU J(25E) (J11) THRU J(251)	50	62

CABLE LENGTH

ITEM	DESCRIPTION	11'	20'	30'	40'	DESIGNATION	QTY	SUPPLIER CODE (SEE INDEX)
		350 Ω $\pm$ 2%	330 Ω $\pm$ 2%	270 Ω $\pm$ 2%	220 Ω $\pm$ 2%			
5	RESISTOR	(P40)R1 THRU R26 (P41)R1 THRU R14	40	16, 17				

9348,
92483, 9248, 92481, 92482
MAG TAPE CONTROL UNIT
PAGE 40
E

REVISIONS			03257	F
REV	DESCRIPTION	CHK	DATE	APPROVED
A	REL TO 17FG			
D	SEE REV E.O.			
E	SEE REV E.O.			
F	SEE REV E.O.			

REV	DRAWING NO	DESCRIPTION	REFERENCE DESIGNATION	FILE NO.
03257				
NOTED UNLESS SPECIFIED A. DIMENSIONS ALL DIMS UNLESS OTHERWISE SPECIFIED B. UNLESS ALL DIMENSIONS ARE SPECIFIED C. DIMENSIONS D. ALL DIMS IN INCHES				
CHECKED: <i>[Signature]</i> APPROVED: <i>[Signature]</i> TITLE: DIAGRAM, LOGIC MAG TAPE CONTROL UNIT				
MODEL NO.	9248	REV	D	03257
NEXT ASSY.		SCALE	DO NOT SCALE DRAWING	SHEET 40 OF 40

PAGE	CHG	PAGE	CHG	PAGE	CHG	PAGE	CHG
1	F						
2	C						
3	C						
4	E						
5	E						
6	C						
7	E						
8	E						
9	C						
10	C						
11	C						
12	C						
13	E						
14	C						
15	C						
16	C						
17	C						
18	C						
19	D						
20	C						
21	C						
22	E						
23	E						
24	E						
25	E						
26	C						
27	C						
28	C						
29	C						
30	E						
31	E						
32	E						
33	F						
34	F						
35	D						
36	E						
37	E						
38	F						
39	D						

- NOTES:
1. REV LETTERS LISTED INDICATE STATUS OF EACH SHEET OF THIS MULTIPLE SHEET DRAWING.
 2. CHECK INDIVIDUAL SHEETS FOR REVISION LETTER AGAINST THIS SHEET BEFORE USING THIS DRAWING.

REFERENCE DESIGNATIONS
ARE ABBREVIATED.
PREFIX THE DESIGNATION
WITH UNIT NUMBER
OR ASSEMBLY DESIGNATION
OR BOTH. (MIL. STD. 16B)

NOTE:

THIS DWG APPLIES TO BOTH THE AMPEX (A) & POTTER (P) MAG TAPE UNITS. FOR SIMPLICITY ONLY 9246A AND/OR 9246P DESIGNATIONS ARE SHOWN ON INDIVIDUAL PAGES. 9246A IMPLIES 9246A, 9246A1, 9246A2, & 9346A. 9246P IMPLIES 9246P, 9246P1, 9246P2 & 9246P3. THE FOLLOWING CHART INDICATES THE EFFECTIVITY OF INDIVIDUAL PAGES.

PAGE NO.	AMPEX ONLY	POTTER ONLY	BOTH	92462P/3P VARIATIONS
1			X	
2	X			
3				
4			X	
5			X	
6			X	
7			X	
8			X	
9			X	
10			X	
11			X	
12			X	
13			X	X
14			X	
15			X	
16			X	
17			X	
18			X	
19			X	
20			X	
21			X	
22			X	
23			X	
24			X	
25			X	
26			X	X
27	X			
28	X			
29	X			
30	X			
31			X	
32			X	
33			X	
34	X			
35	X			
36		X		X
37		X		
38		X		
39		X		

9246A, 9246P
MAG TAPE UNIT
PAGE 1
F

REV	DESCRIPTION	CHG	DATE	APPROVED
A	REL TO MFG			
B	SEE REV E.O.			
C	SEE REV E.O.			
D	SEE SEE E.O.			
E	SEE REV E.O.			
F	SEE REV E.O.			

DRAWING NO.		DESCRIPTION		REFERENCE DESIGNATION		ITEM NO.
NOTE UNLESS SPECIFIED		MATERIAL LIST		SDS		
1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED		CHECKED		DESIGNATION DATA SYSTEMS		
2. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED		APPROVED		TITLE		
3. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED				DIAGRAM, LOGIC		
4. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED				MAG TAPE UNIT		
FORM NO. 9246				D 103258 F		
NEXT APPY				SCALE		
				DO NOT SCALE DRAWING		
				SHEET 33		

ITEM	DESCRIPTION	MODEL	QTY
1	WRITE DRIVER	AK52	2
2	CABLE DRIVER	AX16	3
3	AND/OR BUFFER AMP	BC10	4
4	UNIVERSAL F.F.	FC17	2
5	GATE EXPANDER	GC10	3
6	GATE EXPANDER	GC11	1
7	OPERATIONAL AMP	Hx20-0	1
8	READ AMP	HK60	7
9	AND INVERTER	IC12	3
10	ONE SHOT MULT.	OX13	8
11	RELAY DRIVER	RX10	2
12	RESISTOR	ZK51	1
13	TERM. MODULE	ZK56	1
14	TERM. MODULE	ZK57	1
15	TERM. MODULE	ZK58	1
16	AND INVERTER	1M12	1
17	UNIVERSAL F.F.	FH17	1

ITEM	DESCRIPTION	DESIGNATION	QTY.	SUPPLIER CODE (SEE INDEX)
1	RESISTOR, 3.3 K $\pm$ 2%	(P42) R1, R2, R3	3	16, 17
2	↑ 1 MEG Ω ↑	(P42) R4, R5, R6, R8	4	16, 17
3	↓ 1 K ↓	(P42) R7, R9	2	16, 17
4	RESISTOR, 0.2 K $\pm$ 2%	(P42) R10, R11, R12, R13	4	16, 17
5	CAPACITOR, MYLAR 0.033 μ F $\pm$ 10%	(P42) C1, C2	2	26, 27, 74
6	CAPACITOR, MYLAR 0.050 μ F $\pm$ 10%	(P42) C3, C4	2	26, 27, 74
7	CAPACITOR, TANTALUM 0.1 μ F $\pm$ 20% 50V	(P42) C5	1	23, 77
8	DIODE, SILICON SWITCHING	(P42) CR17-2WJCR7	7	4, 12, 13, 14
9	CONNECTOR, SOLID TAIL 47 CONTACT # 7008-47	J1(Q) THRU J2(S) J1(S) THRU J2(S) J2(4S), J2(5S)	47	82
10	RESISTOR, 1.8 K $\pm$ 2%	(TB2) R1	1	16, 17
11	↑ 15 K ↑	(TB2) R2	1	↑
12	↓ 180 Ω ↓	(TB2) R3	1	↓
13	↓ 390 Ω ↓	(TB2) R4, R5, R6	3	↓
14	RESISTOR, 470 Ω $\pm$ 2%	(TB2) R7, R8, R9 (P42) R14 THRU R22	12	16, 17
15	DIODE, VOLTAGE REGULATOR IN752	(TB2) VR1	1	2, 12, 13, 14
16	DIODE, VOLTAGE REGULATOR IN964A	(TB2) VR2, VR3, VR4	3	2, 6, 14, 65
17	CAPACITOR, TANTALUM 4.7 μ F $\pm$ 20% 50V	(TB2) C1	1	23, 77
18	TRANSISTOR, SILICON 2N1132	(TB2) Q1	1	3, 10, 11
19	RECEPTACLE, 19 PIN # ESK 19-31SL	J1	1	134
20	SWITCH, 19 PIN # SK19-32S	J2	1	134
21	PLUG, ROTARY # 102163	S1, S2	2	SDS
22	LAMP, INCANDESCENT # 47	D51 THRU D55	5	84
23	RESISTOR, WW 10 Ω $\pm$ 5%	R1 THRU R5	5	99, 100
24	RELAY, DPDT # DOSX-7T # 80-6A/115 VAC	K1 THRU K4	4	78 79
25	SWITCH, TOSSEL DPDT 530-6A-2	S1(S)	1	106
26	CAPACITOR, TANTALUM 1.0 μ F $\pm$ 20% 50V	C1(Q)	1	23, 77

REV	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION
MATERIAL LIST			
NOTES UNLESS SPECIFIED		QANTITY	UNIT
1. MATERIALS TO BE USED SHALL BE AS SHOWN ON DRAWING.		1	EA
2. MATERIALS TO BE USED SHALL BE AS SHOWN ON DRAWING.		1	EA
3. ALL DIMENSIONS SHALL BE IN INCHES.		1	EA
MODEL NO.		DATE	REV
9246		10/25/88	1
SHEET 1 OF 1		TOTAL SHEETS 1	

REVISIONS			
REV.	DESCRIPTION	CHK.	DATE
C	SEE REV. E.O.		
D	SEE REV. E.O.		
E	SEE REV. E.O.		
F	SEE REV. E.O.		

MODULE LIST

ITEM	DESCRIPTION	MODEL	QTY
1	WRITE DRIVER	AK62	2
2	CABLE DRIVER	AX16	3
3	AND/OR BUFFER AMP	BC10	4
4	UNIVERSAL F.F.	FC17	2
5	GATE EXPANDER	GC10	3
6	GATE EXPANDER	GC11	1
7	READ AMP	HK60	7
8	AND INVERTER	IC12	3
9	ONE SHOT M.U.T.	OY13	8
10	RELAY DRIVER	RX10	1
11	RESISTOR	ZK51	2
12	TERM. MODULE	ZK56	1
13	TERM. MODULE	ZK57	1
14	TERM. MODULE	ZK58	1
15	AUD INVERTER	IH12	1
16	UNIVERSAL F.F.	FH17	1

REPLACEMENT PARTS LIST

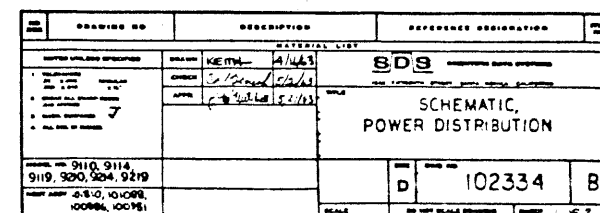
ITEM	DESCRIPTION	DESIGNATION	QTY.	EXT. JES. CODES (SEE PARTS LIST)
1	RESISTOR, 3.3 K $\pm 2\%$	(P70) R1, R2, R3	3	16, 17
2	RESISTOR, 1.0 K $\pm 2\%$	(P70) R6, R7	2	16, 17
3	RESISTOR, 8.2 K $\pm 2\%$	(P70) R4, R5, R9	3	16, 17
4	CAPACITOR, MYLAR 1000 μ F $\pm 10\%$	(P70) C1, C2	2	24, 27, 74
5	CAPACITOR, MYLAR 1000 μ F $\pm 10\%$	(P70) C3, C6	2	24, 27, 74
6	DIODE, SILICON SWITCHING 1N414A	(P70) CR1 THROUGH CR3	3	4, 12, 13, 14
7	INDUCTOR, WOUND 1000 μ H $\pm 5\%$	(P70) L2, L3	2	42, 90, 91
8	RECEPTACLE, 19 PIN #20119-315L	J1	1	134
9	PLUG, 19 PIN #20119-325	J2	1	134
10	SWITCH, ROTARY #102163	S101, S102	2	555
11	RESISTOR, WW 10 Ω $\pm 5\%$	R1 THRU R5	5	99, 100
12	RELAY, DPDT #100K-7T #100K-7T/115VAC	K1, K3	2	70 79
13	SWITCH, TOGGLE 1-10T #03254-SE	S1(S)	1	106
14	CAPACITOR, TANTALUM 4.7 μ F $\pm 20\%$ 50V	C1(C)	1	23, 77
15	CONNECTOR, SO, D-RETAIL 47 CONTACT #7000-47	J(13) THRU J(250) J(5) THRU J(205) J(245), J(255)	47	82
16	LAUD, MINIATURE #223	DS101 THRU DS105	20	83, 84
17	INDUCTOR, WOUND 500 μ H $\pm 5\%$	(P70) L1	1	42, 90, 91
18	RESISTOR, 560 Ω $\pm 2\%$	(P70) R5	1	16, 17
19	CAPACITOR, MYLAR, 1000 μ F $\pm 10\%$	(P70) C3	1	24, 27, 74
20	RESISTOR, 170 Ω $\pm 2\%$	(P70) RD THRU RS	9	16, 17

9246P
MAG TAPE UNIT
PAGE 38
F

* NOT USED ON 92463P

REV.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION	REV.
NOTES UNLESS SPECIFIED				
1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED				
2. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
3. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
4. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
5. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
6. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
7. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
8. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
9. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
10. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
11. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
12. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
13. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
14. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
15. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
16. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
17. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
18. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
19. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
20. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
21. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
22. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
23. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
24. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
25. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
26. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
27. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
28. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
29. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
30. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
31. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
32. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
33. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
34. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
35. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
36. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
37. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
38. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
39. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
40. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
41. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
42. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
43. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
44. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
45. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
46. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
47. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
48. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
49. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
50. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
51. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
52. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
53. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
54. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
55. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
56. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
57. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
58. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
59. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
60. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
61. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
62. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
63. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
64. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
65. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
66. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
67. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
68. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
69. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
70. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
71. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
72. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
73. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
74. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
75. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
76. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
77. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
78. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
79. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
80. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
81. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
82. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
83. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
84. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
85. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
86. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
87. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
88. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
89. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
90. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
91. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
92. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
93. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
94. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
95. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
96. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
97. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
98. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
99. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				
100. DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED				

REVISIONS					102334
REV	DESCRIPTION	DATE	BY	APPROVED	
B	SEE KEY P.O		Chapman	1-2-80	

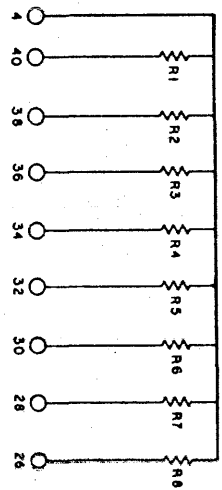


REVISIONS		102334	B
REV	DESCRIPTION	DATE	APPROVED
	SEE SH1 ONE		

REPLACEMENT PARTS LIST

ITEM	DESCRIPTION	DESIGNATION	QTY	SUPPLIER CODE (SEE INDEX)
1	CORD, A.C. #16/3 SPT-3 CORD WITH #PA-3 PLUG	PI, P4	2	101
2	CONNECTOR, 5 WIRE FEMALE #3523	P2	1	102
3	CONNECTOR, 3 WIRE MALE #3331	P3	1	102
4	RECEPTACLE, 3 WIRE FEMALE #5256	J1	1	102
5	CONNECTOR, 5 WIRE MALE #3525	J2	1	102
6	WIREMOLD, A.C. #G-20GB306	J4 THRU J9	1	103
7	LAMP, NEON #249-784H-1437	DS1, DS2	2	104
8	RELAY, SPST #NAS-13A/115 VAC	K1, K2	2	79
9	CIRCUIT BREAKER, DOUBLE POLE #2XAM1516-35-250 VAC 60 CYCLE CURVE 2	CB1	1	105
10	SWITCH, TOGGLE DPDT	S1	1	106

DRAWING NO.		DESCRIPTION		REFERENCE DESIGNATION	
102334		SCHEMATIC POWER DISTRIBUTION		B	
DESIGNED BY: J. V. [Signature] CHECKED BY: [Signature] APPROVED BY: [Signature]		MATERIAL LIST 1. [Blank] 2. [Blank] 3. [Blank] 4. [Blank]			
WORK NO. 910.9114, 9119.9210, 9214, 9219 PART NAME 41610, 101C88, 100E44, 100E51		SD3 SCHEMATIC POWER DISTRIBUTION D 102334 B			
SCALE		SHEET 2 OF 2			

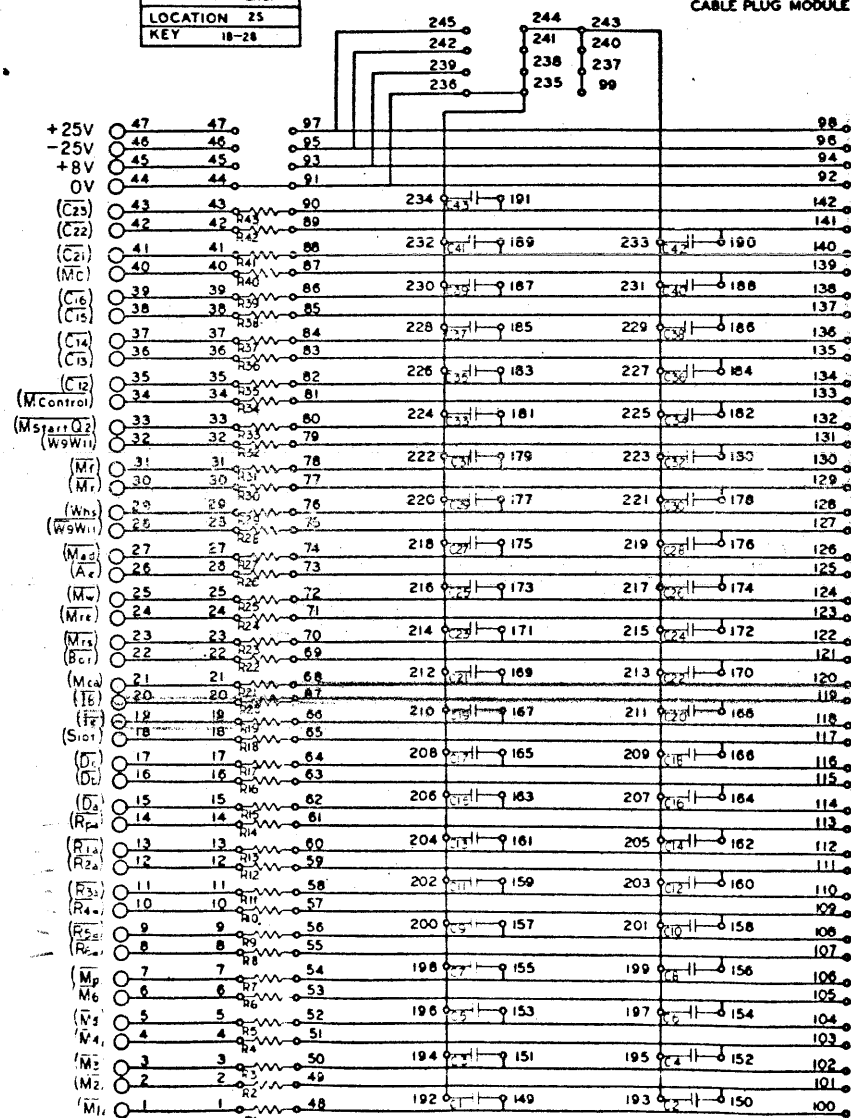


[illegible]

REVISIONS			5-1470 1A
REV.	DESCRIPTION	DATE	BY
A	RELEASED TO MFG	7/1/62	W. J. [signature]

DESIGNATION	ZK57
LOCATION	25
KEY	18-28

CABLE PLUG MODULE

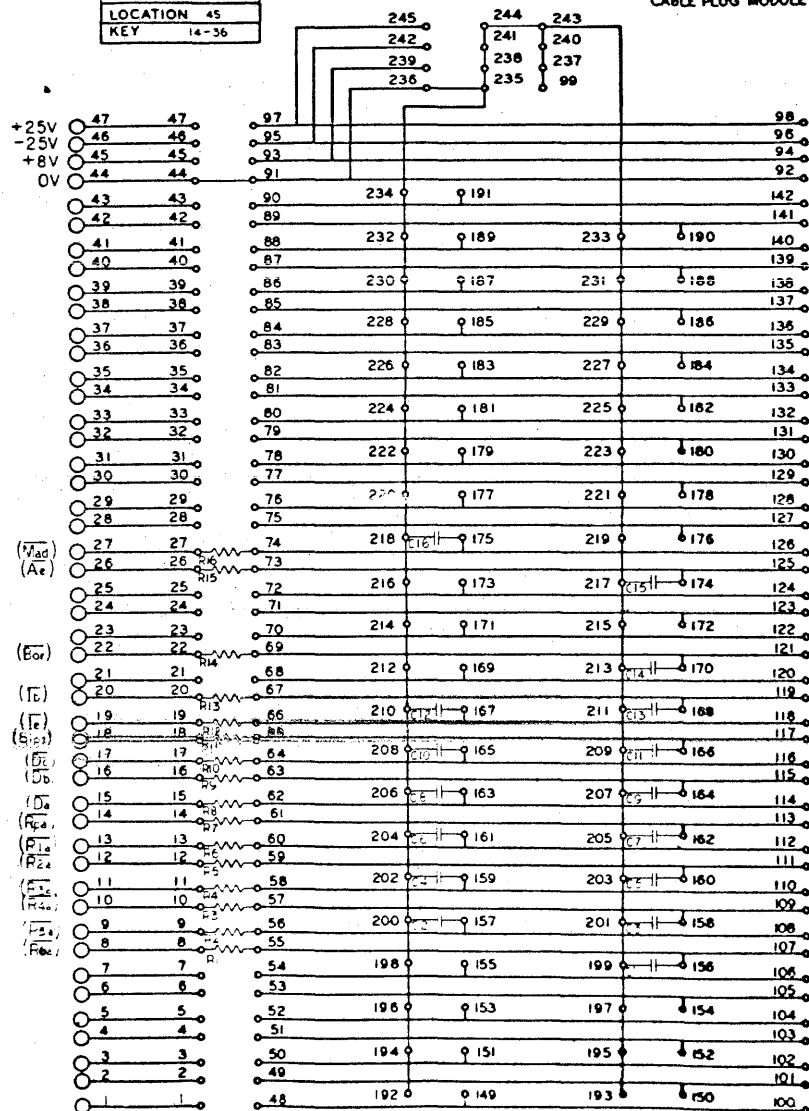


DRAWING NO.		DESCRIPTION		REFERENCE DESIGNATION	
ZK57		SCHEMATIC TERMINATION MODULE (25)		103470 A	
REVISIONS		MATERIAL LIST		DO NOT SCALE DRAWING	
1. [blank]		2. [blank]		3. [blank]	
4. [blank]		5. [blank]		6. [blank]	
7. [blank]		8. [blank]		9. [blank]	
10. [blank]		11. [blank]		12. [blank]	
13. [blank]		14. [blank]		15. [blank]	
16. [blank]		17. [blank]		18. [blank]	
19. [blank]		20. [blank]		21. [blank]	
22. [blank]		23. [blank]		24. [blank]	
25. [blank]		26. [blank]		27. [blank]	
28. [blank]		29. [blank]		30. [blank]	
31. [blank]		32. [blank]		33. [blank]	
34. [blank]		35. [blank]		36. [blank]	
37. [blank]		38. [blank]		39. [blank]	
40. [blank]		41. [blank]		42. [blank]	
43. [blank]		44. [blank]		45. [blank]	
46. [blank]		47. [blank]		48. [blank]	
49. [blank]		50. [blank]		51. [blank]	
52. [blank]		53. [blank]		54. [blank]	
55. [blank]		56. [blank]		57. [blank]	
58. [blank]		59. [blank]		60. [blank]	
61. [blank]		62. [blank]		63. [blank]	
64. [blank]		65. [blank]		66. [blank]	
67. [blank]		68. [blank]		69. [blank]	
70. [blank]		71. [blank]		72. [blank]	
73. [blank]		74. [blank]		75. [blank]	
76. [blank]		77. [blank]		78. [blank]	
79. [blank]		80. [blank]		81. [blank]	
82. [blank]		83. [blank]		84. [blank]	
85. [blank]		86. [blank]		87. [blank]	
88. [blank]		89. [blank]		90. [blank]	
91. [blank]		92. [blank]		93. [blank]	
94. [blank]		95. [blank]		96. [blank]	
97. [blank]		98. [blank]		99. [blank]	
100. [blank]		101. [blank]		102. [blank]	
103. [blank]		104. [blank]		105. [blank]	
106. [blank]		107. [blank]		108. [blank]	
109. [blank]		110. [blank]		111. [blank]	
112. [blank]		113. [blank]		114. [blank]	
115. [blank]		116. [blank]		117. [blank]	
118. [blank]		119. [blank]		120. [blank]	
121. [blank]		122. [blank]		123. [blank]	
124. [blank]		125. [blank]		126. [blank]	
127. [blank]		128. [blank]		129. [blank]	
130. [blank]		131. [blank]		132. [blank]	
133. [blank]		134. [blank]		135. [blank]	
136. [blank]		137. [blank]		138. [blank]	
139. [blank]		140. [blank]		141. [blank]	
142. [blank]		143. [blank]		144. [blank]	
145. [blank]		146. [blank]		147. [blank]	
148. [blank]		149. [blank]		150. [blank]	
151. [blank]		152. [blank]		153. [blank]	
154. [blank]		155. [blank]		156. [blank]	
157. [blank]		158. [blank]		159. [blank]	
160. [blank]		161. [blank]		162. [blank]	
163. [blank]		164. [blank]		165. [blank]	
166. [blank]		167. [blank]		168. [blank]	
169. [blank]		170. [blank]		171. [blank]	
172. [blank]		173. [blank]		174. [blank]	
175. [blank]		176. [blank]		177. [blank]	
178. [blank]		179. [blank]		180. [blank]	
181. [blank]		182. [blank]		183. [blank]	
184. [blank]		185. [blank]		186. [blank]	
187. [blank]		188. [blank]		189. [blank]	
190. [blank]		191. [blank]		192. [blank]	
193. [blank]		194. [blank]		195. [blank]	
196. [blank]		197. [blank]		198. [blank]	
199. [blank]		200. [blank]		201. [blank]	
202. [blank]		203. [blank]		204. [blank]	
205. [blank]		206. [blank]		207. [blank]	
208. [blank]		209. [blank]		210. [blank]	
211. [blank]		212. [blank]		213. [blank]	
214. [blank]		215. [blank]		216. [blank]	
217. [blank]		218. [blank]		219. [blank]	
220. [blank]		221. [blank]		222. [blank]	
223. [blank]		224. [blank]		225. [blank]	
226. [blank]		227. [blank]		228. [blank]	
229. [blank]		230. [blank]		231. [blank]	
232. [blank]		233. [blank]		234. [blank]	
235. [blank]		236. [blank]		237. [blank]	
238. [blank]		239. [blank]		240. [blank]	
241. [blank]		242. [blank]		243. [blank]	
244. [blank]		245. [blank]		246. [blank]	
247. [blank]		248. [blank]		249. [blank]	
250. [blank]		251. [blank]		252. [blank]	
253. [blank]		254. [blank]		255. [blank]	
256. [blank]		257. [blank]		258. [blank]	
259. [blank]		260. [blank]		261. [blank]	
262. [blank]		263. [blank]		264. [blank]	
265. [blank]		266. [blank]		267. [blank]	
268. [blank]		269. [blank]		270. [blank]	
271. [blank]		272. [blank]		273. [blank]	
274. [blank]		275. [blank]		276. [blank]	
277. [blank]		278. [blank]		279. [blank]	
280. [blank]		281. [blank]		282. [blank]	
283. [blank]		284. [blank]		285. [blank]	
286. [blank]		287. [blank]		288. [blank]	
289. [blank]		290. [blank]		291. [blank]	
292. [blank]		293. [blank]		294. [blank]	
295. [blank]		296. [blank]		297. [blank]	
298. [blank]		299. [blank]		300. [blank]	

REVISIONS				103473 A
REV	DESCRIPTION	DATE	BY	APPROVED
A	RELEASED TO MFG	1/7		

DESIGNATION ZK 58
LOCATION 45
KEY 14-36

CABLE PLUG MODULE



DWG NO.	DRAWING NO.	DESCRIPTION	REFERENCE DESIGNATION								
<table border="1"> <tr> <th>APPROVED UNLESS SPECIFIED</th> <th>DESIGNED</th> <th>CHECKED</th> <th>APPROVED</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>				APPROVED UNLESS SPECIFIED	DESIGNED	CHECKED	APPROVED				
APPROVED UNLESS SPECIFIED	DESIGNED	CHECKED	APPROVED								
<table border="1"> <tr> <th colspan="2">MATERIAL LIST</th> <th colspan="2">SCHEMATIC DATA SHEET</th> </tr> <tr> <td colspan="2"></td> <td colspan="2">SCHEMATIC, TERMINATION MODULE (45)</td> </tr> </table>				MATERIAL LIST		SCHEMATIC DATA SHEET				SCHEMATIC, TERMINATION MODULE (45)	
MATERIAL LIST		SCHEMATIC DATA SHEET									
		SCHEMATIC, TERMINATION MODULE (45)									
DRAWN BY ZK 58		REV. NO. 103473 A									
NEXT APPR.		SCALE									

SDS-E-106 71.77.

Code No.	Name	Address
1	Motorola Semiconductor	5005 E. McDowell Rd. Phoenix, Arizona
2	Same as 1	
3	Fairchild Semiconductor	545 Whisman Road Mountain View, Calif.
4	Same as 3	
5	General Electric Co. Semiconductor Products Div.	Electronics Park Syracuse 1, N. Y.
6	Same as 5	
7	RCA Semiconductor Div.	Somerville, N. Y.
8	Silicon Transistor Corp.	East Gate Blvd. Garden City, N. Y.
9	Same as 8	
10	Hughes Semiconductor Div.	500 Superior Ave. Newport Beach, Calif.
11	Texas Instruments, Inc.	P.O. Box 5012 Dallas, Texas
12	Same as 11	
13	Pacific Semiconductors, Inc.	1420 Aviation Blvd. Lawndale, Calif.
14	Continental Device Corp.	12515 Chadron Ave. Hawthorn, Calif.
15	Sperry Semiconductor Div.	380 Main Ave. Norwalk, Conn.
16	Corning Glass Works	550 High St. Bradford, Penn.
17	Welwyn International, Inc.	3535 Edgecliff Terr. Cleveland 11, Ohio
18	Same as 11	
19	Arco Electronics, Inc.	Community Drive Great Neck, N. Y.
20	Sangamo Electric Co.	1207 N. 11th. St. Springfield, Ill.
21	Micamold Electric Mfg. Co.	65 Gouverneur St. Newark, N. J.
22	Kemet Company	11901 Madison Ave. Cleveland 1, Ohio
23	Sprague Electric Co.	481 Marshall St. North Adams, Mass.
24	U.S. Semiconductor Products	3540 W. Osborn R. Phoenix, Ariz.
25	General Electric Co. Capacitor Dept.	Hudson Falls, N. Y.
26	Same as 23	
27	Same as 23	
28	Raytheon Semiconductor Co.	350 Ellis St. Mountain View, Calif.
29	National Semiconductor Corp.	P.O. Box 443 Danbury, Conn.
30	General Instrument Corp.	65 Gouverneur St. Newark, N. J.

Code No.	Name	Address
31	Sylvania Electric Products Semiconductor Div.	100 Sylvan Road Woburn, Mass.
32	Western Semiconductors	2200 S. Fairview St. Santa Ana, Calif.
33	Computer Diode Corp.	250 Garibaldi Ave. Lodi, New Jersey
34	Tungsol Electric Inc.	1 Summer Ave. Newark, N. J.
35	Bourns, Inc.	1200 Columbia Ave. Riverside, Calif.
36	International Resistance Co.	401 N. Broad St. Philadelphia, Penn.
37	General Resistance, Inc.	430 Southern Blvd. New York 55, N. Y.
38	Same as 23	
39	Technitrol Engineering Co.	1952 E. Allegheny Ave. Philadelphia, Penn.
40	Same as 39	
41	Delevan Electronics Corp.	77 Olean Road East Aurora, N. Y.
42	Same as 41	
43	Delco Radio Division	700 E. Firmin St. Kokomo, Indiana
44	Atohm Electronics	7648 San Fernando Rd. Sun Valley, Calif.
45	Dale Electronics, Inc.	P.O. Box 609 Columbus, Nebraska
46	Tepro Electric Co.	5 St. Paul Street Rochester 4, N. Y.
47	Sage Electronics Corp.	Country Club Road East Rochester, N. Y.
48	Littelfuse Inc.	1865 Miner St. Des Plaines, Illinois
49	Bussman Mfg. Co.	University at Jefferson St. Louis, Missouri
50	Sola Electric Company	1717 Busse Road Elk Grove Village, Ill.
51	Cinch Jones Division	1026 S. Homan Ave. Chicago, Ill.
52	Same as 51	
53	Ohmite Mfg. Co.	3635 Howard St. Skokie, Illinois
54	Cutler-Hammer, Inc.	321 N. 12th. Street Milwaukee, Wisc.
55	Centralab	900A E. Keefe Ave. Milwaukee, Wisc.
56	Eldema Corporation	1805 Belcroft Ave. El Monte, Calif.
57	Same as 23	
58	Same as 25	
59	Same as 20	
60	Same as 51	

No.	Name	Address
61	Same as 54	
62	Amelco, Inc.	341 Moffet Blvd. Mountain View, Calif.
63	Transitron Electronic Corp.	168-182 Albion St. Wakefield, Mass.
64	Same as 10	
65	Same as 30	
66	American Semiconductor Corp.	3940 N. Kilpatrick Chicago, Illinois
67	Hoffman Electronics Corp. Semiconductor Division	Box 471 1001 N. Arden El Monte, Calif.
68	Delta Semiconductors, Inc.	835 Production Place Newport Beach, Calif.
69	Pulse Engineering, Inc.	560 Robert Ave. Santa Clara, Calif.
70	Nytronics, Inc.	550 Springfield Ave. Berkeley Heights, N. J.
71	Alladin Electronics, Inc.	Nashville 10, Tenn.
72	Ferroxcube Corp. of America	E. Bridge Street Saugerties, New York
73	Electra Mfg. Co.	4051 Broadway Kansas City, Mo.
74	Same as 25	
	Same as 24	
76	Same as 24	
77	Same as 24	
78	Same as 53	
79	Allied Control Co, Inc.	2 East 2nd Ave. New York, 21, N.Y.
80	Same as 23	
81	Same as 20	
82	Elco Corporation	Willow Grove, Penn.
83	Chicago Miniature Lamp Works	4433 Ravenswood Ave. Chicago 40, Illinois
84	General Electric Co. Miniature Lamp Dept.	Nela Park Cleveland 12, Ohio
85	Same as 34	
86	Automatic Electric Sales Corp.	North Lake, Illinois
87	Same as 24	
88	Same as 47	
89	Same as 45	
90	J.W. Miller Co.	5917 S. Main St. Los Angeles 3, Calif.
91	Stanwyck Winding Co.	137 Walsh Ave. Newburgh, N. Y.
92	Same as 36	
93	Same as 73	
94	Same as 23	
95	Philco Corp.	Lansdale Division Lansdale, Penn.
96	Amperex Electronic Corp.	230 Duffy Avenue Hicksville, N. Y.

No.	Name	Address
97	Siliconix, Inc.	1140 W. Evelyn Ave. Sunnyvale, Calif.
98	Continental Connector Corp.	34-63 56th Street Woodside 77, N. Y.
99	Same as 23	
100	Same as 53	
101	Royal Electric Corp.	95 Grand Ave. Pawtucket, R. I.
102	Harvey Hubbell, Inc.	Bridgeport, Conn.
103	The Wiremold Co.	Hartford 10, Conn.
104	Dialight Corp.	60 Stewart Ave. Brooklyn 37, N. Y.
105	Heinemann Electric Co.	2636 Brunswick Pike Trenton 2, N. J.
106	Arrow-Hart and Hegeman Electric	103 Hawthorne St. Hartford, Conn.
107	Allen Bradley Co.	136 W. Greenfield Ave. Milwaukee 4, Wisc.
108	General Electric Co. Meter Division	1 River Road Schenectady 5, N.Y.
109	Same as 70	
110	Winchester Electronics, Inc.	Willard Road Norwalk, Conn.
111	AMP, Inc.	Harrisburg, Penn.
112	Grayhill, Inc.	569 Hillgrove Ave. LaGrange, Illinois
113	Controls Co. of America	9555 Soreng Ave. Schiller Park, Illinois
114	Amphenol-Borg Amphenol Connector Division	1830 S. 54th Ave. Schiller Park, Illinois
115	Same as 36	
116	Same as 36	
117	Same as 73	
118	Same as 73	
119	Same as 11	
120	Thermalloy Co.	4417 N. Central Expressway Dallas 5, Texas
121	Astro Dynamics, Inc.	Second Avenue Northwest Industrial Park Burlington, Mass.
122	Tor Mfg. Co.	1533 E. Walnut St. Pasadena, Calif.
123	Wakefield Engineering, Inc.	9 Broadway Wakefield, Mass.
124	Same as 35	
125	Same as 36	
126	Same as 37	
127	Erie Resistor Corp.	644 W. 12th Street Erie, Penn.
128	Same as 55	

Code No.	Name	Address
129	Same as 37	
130	C.P. Clare and Co.	3101 Pratt Blvd. Chicago 45, Illinois
131	The Adams and Westlake Co.	N. Michigan Street Elkhart, Indiana
132	Not Assigned	
133	Not Assigned	
134	Cannon Electric Co.	3208 Humboldt St. Los Angeles 31, Calif.
135	Indiana General Corp.	Crows Mill Road Keasbey, New Jersey
136	Same as 23	
137	Electro-Cube, Inc.	805 Fairview Ave. South Pasadena, Calif.
138	Monitor Products, Inc.	815 Fremont Ave. South Pasadena, Calif.
139	Rotron Mfg. Co.	Woodstock, N. Y.
140	The Digitran Co.	660 S. Arroyo Parkway Pasadena, Calif.
141	Minneapolis-Honeywell Semiconductor Products Div.	2747 4th Ave. South Minneapolis, Minn.
142	Babcock Relays Div.	1645 Babcock Ave. Costa Mesa, Calif.
143	Simco Company	19th and Walnut St. Lansdale, Penn.
144	IMC Magnetics Corp.	570 Main Street Westbury, N. Y.
145	Malco Mfg. Co.	4025 W. Lake St. Chicago 24, Ill.
146	Drake Mfg. Co.	4626 N. Olcott Ave. Chicago 31, Ill.
147	Same as 25	
148	Same as 23	
149	Same as 20	
150	Westinghouse Electric Co.	Semiconductor Dept. Youngwood, Penn.
151	Stancor Electronics, Inc.	3501 W. Addison St. Chicago 18, Ill.
152	Ammon Instruments, Inc.	345 Kelley St. Manchester, N.H.
153	Raytheon Company Industrial Components Div.	465 Center Street Quincy, Mass.
154	Same as 108	
155	Same as 55	
156	Capitol Machine and Switch Co.	36 Balmforth Street Danbury, Conn.
157	Same as 82	
158	Same as 51	
159	Quam-Nichols Co.	Marquette Rd. at Prairie Chicago 37, Illinois

Code No.	Name	Address
160	Magtrol, Inc.	241 Seneca Street Buffalo 4, New York
161	West Coast Electrical Mfg. Co.	233 W. 116th Place Los Angeles 61, Calif.
162	Minneapolis-Honeywell Micro Switch Division	Chicago and Spring Sts. Freeport, Illinois
163	Eldema Corp.	1805 Belcroft Ave. El Monte, Calif.
164	Potter and Brumfield Div. of Amer. Machine and Foundry	1200 E. Broadway Princeton, Indiana
165	Electric Indicator Company	Camp Avenue Stamford, Conn.
166	General Instrument Co. Magne Head Division	3216 W. El Segundo Hawthorne, Calif.
167	Contract Tool Corp.	3820 Hoke Ave. Culver City, Calif.
168	Milton Ross Metals Co.	250 Jacksonville Rd. Hatboro, Penn.
169	Robinson Company	3636-5 W. 139th St. Hawthorne, Calif.
170	ADC Products, Inc.	6411 Cambridge St. Minneapolis 26, Minn.
171	Same as 170	
172	Same as 170	
173	Same as 53	
174	Bendix Corporation Scintilla Division	Sidney, New York
175	Ward Leonard Electric Co.	75 South Street Mount Vernon, N.Y.
176	Clarostat Mfg. Co. Inc.	Washington Street Dover, New Hampshire
177	J.B.T. Instruments, Inc.	133 Hamilton Street New Haven 8, Conn.
178	Herman H. Smith, Inc.	2336 Nostrand Ave. Brooklyn 10, N.Y.
179	International Instruments	88 Marsh Road Orange, Conn.
180	U.S. Engineering Co. Div. of Litton Ind.	13536 Saticoy St. Van Nuys, Calif.
181	Campbell Industries	Dover, New Hampshire
182	California Resistor Corp.	1631 Colorado Ave. Santa Monica, Calif.
183	Kelvin Electric Co.	5907 Noble Ave. Van Nuys, Calif.
184	Angstrohm Precision Co.	7341 Greenbush Ave. N. Hollywood, Calif.
185	Mepco Inc.	35 Abbet Ave. Morristown, N. J.
186	Wood Electric Corp.	244 Broad Street Lynn, Mass.
187	Pendar, Inc.	509 Sherman Ave. Coeur D'Alene, Idaho

Code No.	Name	Address
188	Aerovox Corp.	740 Belleville Ave. New Bedford, Mass.
189	Cornell-Dubilier	50 Paris Street Newark 1, N. J.
190	Augat Inc.	33 Perry Ave. Attleboro, Mass.
191	Dearborn Labs	Box 3431 Orlando, Florida
192	TRW Capacitor, Div.	112 W. 1st Street Ogallala, Nebraska
193	Electron Products	1962 Walker Ave. Monrovia, Calif.
194	Mallory & Co. Inc.	3029 E. Washington St. Indianapolis, Ind.
195	Ampex Corp.	401 Broadway Redwood City, Calif.
196	Astron Division	255 Grant Avenue E. Newark, N. J.
197	Elgin Controls Division	2435 N. Naomi St. Burbank, Calif.
198	Superior Switch Co.	1001 W. Broad St. Richmond, Va.
199	Rheem Electronics	5250 W. El Segundo Hawthorne, Calif.
200	Union Carbide Cons. Prod. (Eveready)	270 Park Ave. N. Y., New York
201	Mossman, Inc. Donald P.	Box 265 Brewster, N. Y.
202	Dickson Elect. Corp.	310 S. Wells Fargo Scottsdale, Arizona
203	Master Specialties	15020 Figureoa Gardena, Calif.
204	Alco Elect. Prod. Inc.	3 Wolcott Ave. Lawrence, Mass.
205	Southern Electronics	150 W. Cypress Ave. Burbank, Calif.
206	San Fernando Elec. Mfg. Co.	1509 First Street San Fernando, Calif.
207	Leecraft Mfg. Co. Inc.	21-16 44th Rd. Long Island City, N. Y.
208	Oak Mfg. Co.	Crystal Lake, Illinois
209	National Cash Register Co.	S. Main at K St. Dayton, Ohio
210	Sylvania, Lighting Prod. Division	60 Boston St. Salem, Mass.
211	Westinghouse Lamp Div.	MacArthur Blvd. Bloomfield, N. J.
212	National Radio Inc.	37 Washington St. Melrose, Mass.
213	James Electronics Inc.	4050 N. Rockwell, Chicago, Ill.

Code No.	Name	Address
214	Vemaline Products Co.	Box 1, Franklin Lakes, New Jersey
215	United Shoe Mach. Corp.	Federal at High St. Boston 7, Mass.
216	Atlas Tack Corp.	South Pleasant St. Fairhaven, Mass.
217	Cambridge Thermionic Corp.	445 Concord Ave. Cambridge 38, Mass.
218	Hartwell Corp.	9035 Venice Blvd. Los Angeles 34, Calif.
219	Kulka Electric	633 S. Fulton Ave. Mt. Vernon, N. Y.
220	Atlee Corp.	2 Lowell Ave. Winchester, Mass.
221	Birnbach Radio	145 Hudson St. New York 13, N. Y.
222	Southco Fastener Co.	233 Industrial Hwy. Lester, Penn.
223	Standard Pressed Steel Co. (SPS)	Box 1084, Jenkintown, Penn.
224	Penn Engineering & Mfg. Corp.	Box 311 Doylestown, Penn.
225	National Transistor, Div. ITT	500 Broadway Lawrence, Mass.
226	Lerco Div., Microdot	220 Pasadena Ave. South Pasadena, Calif.
227	Burndy	Norwalk, Connecticut
228	Electro-Mec Inst. Co.	47-51 33rd St. Long Island City, N. Y.
229	Ohio Nut & Bolt	36 First Ave. Berea, Ohio
230	Riedon Div. On Mark Eng.	11728 Vost St. No. Hollywood, Calif.
231	Rubbercraft Corp. of Calif.	1800 W. 220th St. Torrance, Calif.
232	Masterite Industries	835 W. Olive St. Inglewood, Calif.
233	Weckesser Co. Inc.	5701 Northwest Hwy. Chicago 46, Illinois
234	Key Resistor Corp.	321 W. Redondo Beach Blvd. Gardena, Calif.
235	Alpha Wire Corp.	180 Varick St. New York 14, N. Y.
236	Nylon Molding Corp.	141 South Ave. Garwood, New Jersey
237	Dakota Engineering Co.	4315 Sepulveda Culver City, Calif.
238	PCA Electronics	16799 Schoenborn St. Sepulveda, Calif.
239	ILS Div., Merriam	10978 Madison Ave. Cleveland, Ohio

Code No.	Name	Address
240	Philadelphia Insulated Wire Co.	333 New Albany Rd. Moorestown, N. J.
241	Amerock Corp.	4000 Auburn St. Rockford, Illinois
242	Superior Electric Co.	383 Middle St. Bristol, Conn.
243	Reon	155 Sawmill River Rd. Yonkers, N.Y.
244	Hardwick Hindle	Huntington, Indiana
245	Driver, W.B.	1875 MacCarter Hwy. Newark 4, N. J.
246	Driver-Harris	202 Middlesex St. Harrison, N. J.
247	Pacific Electricord	747 W. Redondo Beach Blvd., Gardena, Calif.
248	Standard Wire & Cable	3434 Overland Ave. Los Angeles 34, Calif.
249	Illumitronic Eng.	680 E. Taylor Ave. Sunnyvale, Calif.
250	Belden Mfg. Co.	415 S. Kilpatrick Ave. Chicago 44, Ill.
251	Arnold Eng.	Box G, Marengo, Ill.
252	Carstedt Research	2501 E. 68th St. Long Beach 5, Calif.
253	Maloney Elect. Co.	5390 Bircher Ave. St. Louis, Mo.
254	Gerrard, A. J.	400 E. Touhy Ave. Des Plaines, Ill.
255	Ducommun	4890 S. Alameda Los Angeles, Calif.
256	Stevens Paper Mills Inc.	Box 347 Windsor, Conn.
257	Schweitzer, P. J.	Lee, Massachusetts
258	Cottrell Paper	10 Purchase St. Fall River, Mass.
259	American Pamcor	181 Hillcrest Havertown, Pa.
260	Johns - Manville	220 E. 40th St. New York 16, N. Y.
261	Minnesota Mining & Mfg. Co. (3M)	2501 Hudson Ave. St. Paul, Minn.
262	Permacel Mfg. Co.	U. S. Highway 1 New Brunswick, N. J.
263	Technical Tape Co.	240 North Ave. New Rochelle, N. Y.
264	Anaconda	605 Third Ave. New York, N. Y.
265	Essex Wire	1601 Wall St. Fort Wayne, Indiana
266	Kennecott Wire	Phillipsdale 16, R. I.
267	Phelps - Dodge Copper	4400 New Haven Ave. Fort Wayne, Ind.

Code No.	Name	Address
268	Westinghouse, Specialty Transf. Div.	Greenville, Pa.
269	International Rectifier	233 Kansas St. El Segundo, Calif.
270	Chicago Printed String	2322 Logan Blvd. Chicago 47, Ill.
271	Varflex	514 W. Court St. Rome, N.Y.
272	Natvar Corp.	211 Randolph Ave. Woodbridge, N. J.
273	General Electric Wire & Cable Div.	1285 Boston Ave. Bridgeport, Conn.
274	Standard Record Mfg.	17 N. San Gabriel Blvd. Pasadena, Calif.
275	Sun Chemical Corp. Electro-Tech Prod. Div.	Nutley, N. J.
276	Camlock Fastener Corp.	22 Spring Valley Rd. Paramus, N. J.
277	Thomas & Betts	36 Butler St. Elizabeth, N. J.
278	Unistrut	933 W. Washington Blvd. Chicago, Ill.
279	Victor Wire & Cable	618 Main St. Warwick, R.I.
280	Thermatics Corp.	P.O. Drawer 505 Elm City, N. Carolina
281	Reeves-Hoffman	145 Cherry St. Carlisle, Penn.
282	Bulova Electronics	61-20 Woodside Ave. Woodside 77, N.Y.
283	Palmer Inst. Co.	1017 Mission St. Pasadena, Calif.
284	Filtair, Inc.	706 Forrest St. Charlottesville, Va.
285	Signetics	680 W. Maude Ave. Sunnyvale, Calif.
286	American Super-Temp. Wires, Inc.	W. Canal St. Winooski, Vermont
287	Jan Hardware Mfg. Co.	38-03 Queens Blvd. Long Island City 1, N.Y.
288	International Business Mach. Co.	112 E. Post St. White Plains, N.Y.
289	Hoskins Mfg.	4445 Lawton Ave. Detroit 8, Michigan
290	Zippertubing Corp.	13000 S. Broadway Los Angeles 61, Calif.
291	CPR International	555 N. Alaska, Torrance, Calif.
292	Western Insulated Wire	2425 E. 30th Los Angeles 58, Calif.
293	Minneapolis Honeywell, Meter Div.	Grenier Field Manchester, N.H.

Code No.	Name	Address
294	Ives, H. B.	New Haven, Conn.
295	Plastiglide Mfg. Co.	1757 Stanford St. Santa Monica, Calif.
296	Croven Ltd.	500 Beech St. Box 1420, Whitby, Ontario, Canada
297	Darnell Corp.	12000 S. Woodruff Ave. Downey, Calif.
298	Tracor	Austin, Texas
299	Barden Corp.	200 Park Avenue Danbury, Conn.
300	Kooltronic Fan Co.	Box 504 Princeton, N. J.
301	Waldes-Kohinoor	47-16 Austel Place Long Island City, New York
302	PIC Design Corp.	477 Atlantic Ave. E. Rockaway, N. Y.
303	Shakeproof Division Illinois Tool	St. Charles Road Elgin, Illinois
304	Elastic Stop Nut Co. (ESNA)	2330 Vauxhall Road Union, N. J.
305	National Lock Co.	42 Hermon Street Newark 5, N. J.
306	Groov-Pin Corp.	1125 Hendricks Cswy. Ridgefield, N. J.
307	Harrison Labs. Div.	45 Industrial Road Berkeley Heights, New Jersey
308	Boston Gear Works	14 Hayward Street Quincy 71, Mass.
309	Emerson & Cumming	869 Washington Street Canton, Mass.
310	ARBCO Electronics	7820 Gloria Van Nuys, Calif.
311	Sealectro	139 Hoyt St. Mamaroneck, New York
312	General Sensor, Inc.	Box 231 Athens, Texas

Code No.	Name	Address
313	Thermal-Systems, Inc.	15100 S. Broadway Gardena, Calif.
314	Tinnerman Products, Inc.	Box 6688 Cleveland 1, Ohio
315	Brush Beryllium Co.	17876 St. Clair Ave. Cleveland, Ohio
316	National Beryllia Corp.	1st & Haskell Avenues Haskell, N. J.
317	Frenchtown Porcelain	Frenchtown, N. J.
318	Lenz Electric Mfg. Co.	1751 N. Western Ave. Chicago 47, Ill.
319	Space Products Co.	2235 E. Artesia St. Long Beach, Calif.
320	Sterling Inst. Div.	76 E. 2nd Street Mineola, N. Y.
321	Atlantic India Rubber Co.	571 W. Polk St. Chicago 7, Illinois
322	Waldom Electric	4627 W. 53rd Street Chicago, Illinois
323	Mystik Tape Inc. Div.	1700 Winnetka Ave. Northfield, Ill.
324	Amphenol-Borg, Controls Div.	120 S. Main Janesville, Wisc.
325	General Electric, Transformer Div.	1 River Road Schenectady, N. Y.
326	GC Electronics Div.	400 S. Wyman St. Rockford, Ill.
327	United Carr Fastener Div.	459 Watertown St. Newtonville, Mass.
328	North American Elect. Div. IRC	71 Linden St. West Lynn, Mass.
329	Carol Cable Div., Crescent Wire	249 Roosevelt Ave. Pawtucket, R. I.
330	Plastoid Corp.	42-61 24th Street Long Island City, N.Y.
331	G-V Controls Inc.	101 Okner Parkway Livingston, N. J.
332	Teletype Corp.	5555 Touhy Avenue Skokie, Illinois
333	Parker Seal	10567 Jefferson Blvd. Culver City, Calif.