

03-0080-B

**August 17, 1979**

# CUSTOMER ENGINEERING DIVISION

# **WANG CARTRIDGE MODULE DISK DRIVE CDC MODEL 9448 CMD (PHOENIX DRIVE)**

## **ADDENDUM TWO**

**WANG**

2280 "PHOENIX" ADDENDUM (TWO) SUPPLEMENT TO FIELD-LEVEL  
MAINTENANCE MANUAL 03-0800

PURPOSE

The purpose of the ADDENDUM TWO supplement to the WANG FIELD-LEVEL MAINTENANCE MANUAL 03-0800 is to correct additional errors noted by Field and In-house Personnel. The errors are mainly involved with the use of the Field Test Unit (FTU) Model TB216, the illustrated procedure for selecting the proper storage capacity for each system disk drive and the setting of the SERVO-COARSE sector option switches. Additional part numbers and corrections to the initial parts list are also included in this addendum.

CORRECTIONS TO FIELD LEVEL MAINTENANCE MANUAL #03-0080

All corrections listed below should be entered into the respective pages of Field Level Maintenance Manual #03-0080. This method is suggested to maintain all the data in a single volume. However, the exact method of filing can be determined by each individual.

1. FIGURE 4-2

Supplement Figure 4-2 on page 4-6 with enclosed Figure 4-2A.

(Figure 4-2A illustrates the jumper cuts required on U33 for data storage as shown on the enclosed chart rather than the earlier use of installing jumpers).

2. FIGURE 4-5

Supplement Figure 4-5 on page 4-12 with enclosed Figure 4-5A.

(Figure 4-5A illustrates the settings of the S1 sector selection switches on the Coarse Servo Board).

3. DEVICE CODE

The Device Code for the "PHOENIX" CMD disk drive is incorrect on Page 7-29, Step 9.

a) Replace CMD incorrect CODE 8105 with correct CODE 8905.

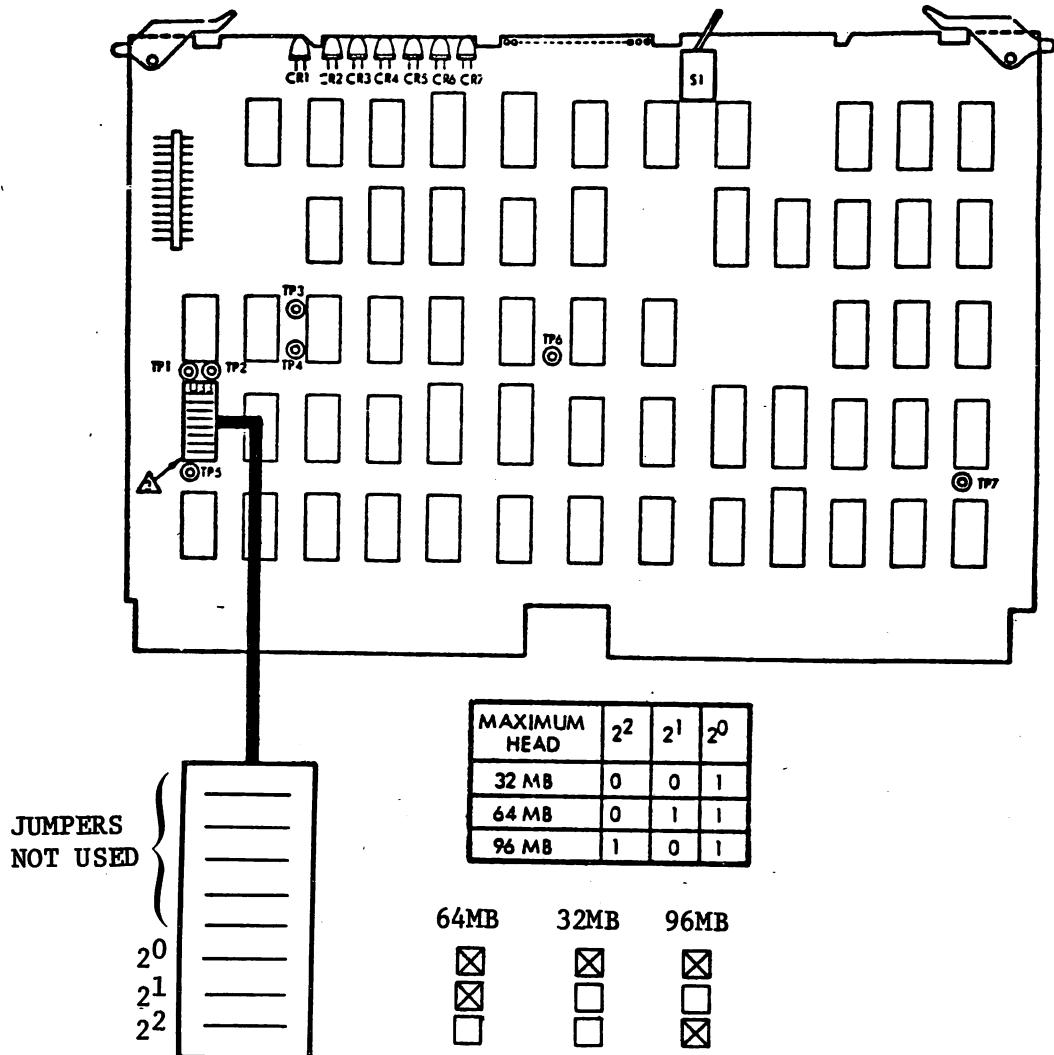
4. ACCESSING PROCEDURES

The procedure for accessing the "PHOENIX" fixed and removable disk with the TB216 Exerciser is in error.

The correct procedure is as follows:

a. Perform the Preliminary Set-up using code 8905 in step 9.

b. At Step 10, place the Write Protect (WRIT PROT) switch in the UP position and initiate the desired step 1,2 or 3.

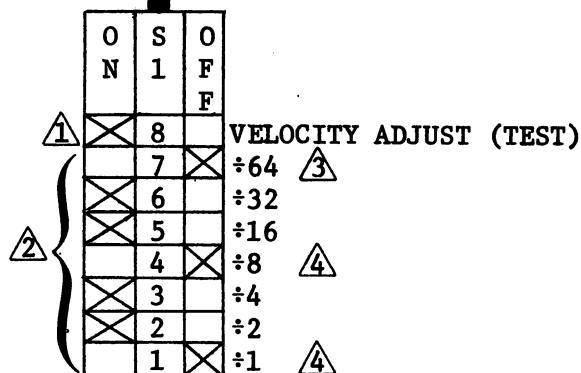
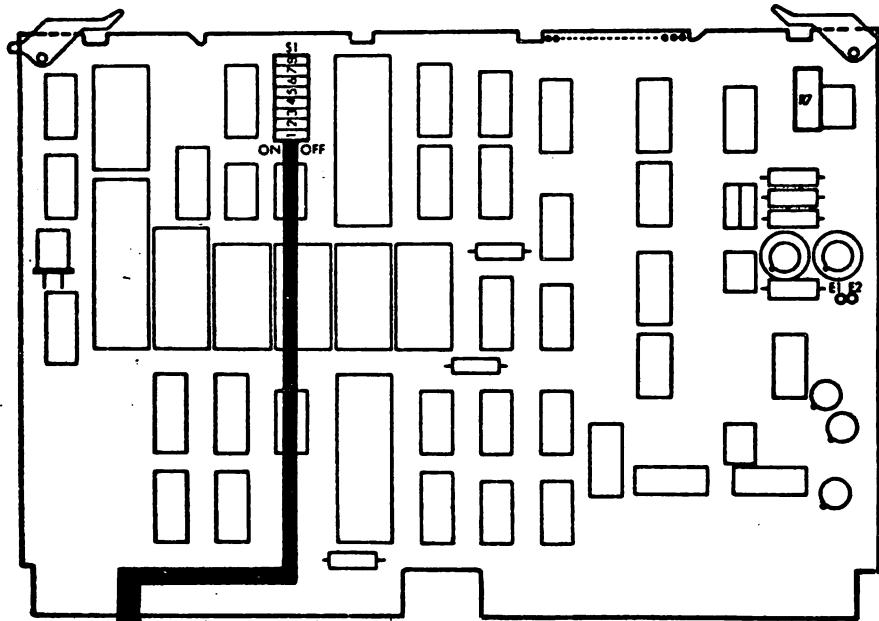


NOTES: 1. ☒ = CUT JUMPER (LOGIC 1 IN TABLE)

FIGURE 4-2A ELECTRONICS MODULE CONTROL/MUX PWA

## COURSE SERVO BOARD

INDICATES SELECTION



NOTES: ① S1 MUST BE ON (DOWN) FOR NORMAL I/O OPERATION.

② NO. OF SECTORS ARE SET BY SELECTING COMPLEMENT  
I.E., FOR 64 SECTORS SET S1-7 OFF AND S1-1 THRU S1-6 ON.

③ FOR 2200 64 SECTOR

④ FOR 2200VS 9 SECTORS

FIGURE 4-5A MICROPROCESSOR PCB - (SERVO-COURSE)

STEP

- 1: To access the removable cartridge only, press SEL DRV with the ACCESS SELECT switch NOT in the fixed volume position.
- 2: To access the fixed volume only, place the ACCESS SELECT switch in FIXED VOLUME position, press SEL DRV.
- 3: To access both fixed and removable, place the ACCESS SELECT switch in the FIXED VOLUME position and press GO.

All other operations remain the same.

5. CHANGES and ADDITIONS

- a. Change: FIXED VOLUME item on page 7-14.  
(Reverse the switch terms GO and SEL DRV).
- b. Change: Item 4a. of Paragraph 7.6.2 on Page 7-30 to read as follows:  
(Press SEL DRV key to select fixed volume only)
- c. Change: Item 4b. of Para.7.6.2 on Page 7-30 to read as follows  
(Press GO key to select both removable pack and fixed module)
- d. Add: Item 4c. of Para. 7.6.2 on Page 7-30 to read as follows:  
(Press SEL DRV with ACCESS SELECT switch not in fixed volume position to select removable disk pack only).
- e. Change: Repeat the above changes for Items 4a, 4b, and 4c in paragraph 7.6.3 on page 7-31.
- f. Change: Item 7 of Para. 7.6.8 on Page 7-36 to read as follows:  
(Press GO key and note whether.....)
- g. Change: Second paragraph of Section 7.1 on Page 7-1 in parentheses, should be changed to read  
(See Figure 7-1 for FTU illustration).
- h. Change: First paragraph of Section 7.4 on Page 7-8  
(Change Figure 7-3 to read Figure 7-4).
- i. Change: First paragraph of Section 7.7.3 on Page 7-39  
(Change Table 7-1 to read Table 7-2).
- j. Change: In Discrete Components Section Appendix A(Page A-4)  
(Correct WLI #726-5898 to read #726-5798)  
(Correct WLI #726-5899 to read #726-5799)

k. ADD: To Discrete Components Section (Appendix A) in numerical sequence.

<u>WLI#</u>	<u>CDC#</u>	<u>Description</u>
726-5889	77612224	Dip Shunt
726-5933	75888776	Resistor, Wire Wound
726-6511	75778719	6' Power Cord
726-9673	-----	Torque Extender Adapter

1. Add: The following list of "PHOENIX" components with Wang Part numbers (and some CDC numbers) will be added to Appendix A temporarily as page A-4a, A-4b, A-4c etc.

PHOENIX COMPONENTS LIST

<u>I.C.</u>	<u>WL #</u>	<u>CDC #</u>
74S00	376-0228	
74LS00	376-0207	
74LS02	376-0208	
74LS03	376-0224	
7404	376-0002	
74S04	726-6537	88883700-2
74LS04	376-0180	
74LS05	726-6538	15145300-8
74LS08	376-0153	
74S10	376-0238	
74LS10	376-0209	
74LS11	376-0225	
74LS14	376-0322	
74S20	376-0230	
74LS20	376-0210	
74LS27	376-0245	
74LS32	376-0211	
74LS42	376-0212	
74S51	376-0184	
74LS51	376-0213	
74S64	376-0201	
74S74	376-0202	
74LS74	376-0155	
74S86	376-0271	
74LS86	376-0231	
74LS109	726-6539	15148000-1
74S112	726-5122	15158600-5
74LS138	376-0294	
74LS139	376-0226	
74S140	726-6540	15158700-3
74148	376-0171	
74LS157	376-0216	
74LS161	376-0233	
74LS164	376-0236	
74LS175	376-0160	
74S195	726-6541	15164418-4
74LS257	376-0204	
74LS279	726-5120	15148300-5

<u>I.C.</u>	<u>WL #</u>	<u>CDC #</u>
75107	376-0146	
75110	376-0255	
75452	726-6542	15113000-2
75461	726-6543	15161600-0
75472	726-6519	15164423-4
8080A	377-0269	
8111	726-6536	
8212	726-8039	
8224	377-0337	
8228	377-0338	
8253	726-8040	
8255A	726-8041	
AM685DL	726-6520	15164430-9
CA3346	726-5352	94675200-3
ECL1648	726-5806	15164422-6
ECL10102	726-5711	15118000-7
ECL10104	726-5712	15120900-4
ECL10105	726-5713	15118100-5
ECL10116	726-5716	15121100-0
ECL10117	726-5805	15118600-4
ECL10124	726-5717	15119400-8
ECL10125	726-5718	15119500-5
ECL10131	726-5719	15118500-6
ECL12040	726-6527	15126400-9
LF13201D	726-6528	15164403-6
LM339	376-0240	
MC1408L8	726-6521	15132702-0
MC1733CL	726-6523	15163100-9
MC1776CP1	726-6524	15164425-9
MC4741CL	726-6522	15164404-4
MPQ1000	726-6529	77832297-4
MPQ1500	726-6530	77832298-2
MPQ6600-1	726-6531	75889250-9
NE521FH	726-6532	15123100-2
201A	726-5840	15156600-7
3437	376-0291	
9324DC	376-0325	
9602	376-0104	

<u>Volt. Reg.</u>	<u>WL #</u>	<u>CDC #</u>
78M06	726-5807	15161101-9
78M12	726-5808	15161100-1
78M15	726-5809	15161102-7
79M06	726-5810	15137901-3
79M12	726-5811	15137903-9
79M15	726-5812	15137902-1
HYBRID	726-5890	15162000-2

<u>Trans.</u>	<u>WL #</u>	<u>CDC #</u>
2N1893	726-6526	51751900-5
2N2222A	726-0179	51795600
2N2905A	726-5860	51585100-4
2N2907A	726-0905	72035901
2N3771	726-6535	94791000-6
2N4860A	726-5625	75888005-8
2N5583	726-6533	77612002-4
BFR91	726-6534	77612004-0
MJ11016	726-5769	75887208-9
PMD16K100	726-5630	50223703-5
PMD17K100	726-5629	50223603-7
7 AMP	726-5891	95689901-7

<u>Rectifier</u>	<u>WL#</u>	<u>CDC #</u>
3 AMP 100V	726-5764	95588200-6
MR 751	726-5747	95575000-5
Silicon	726-5869	94825000-7

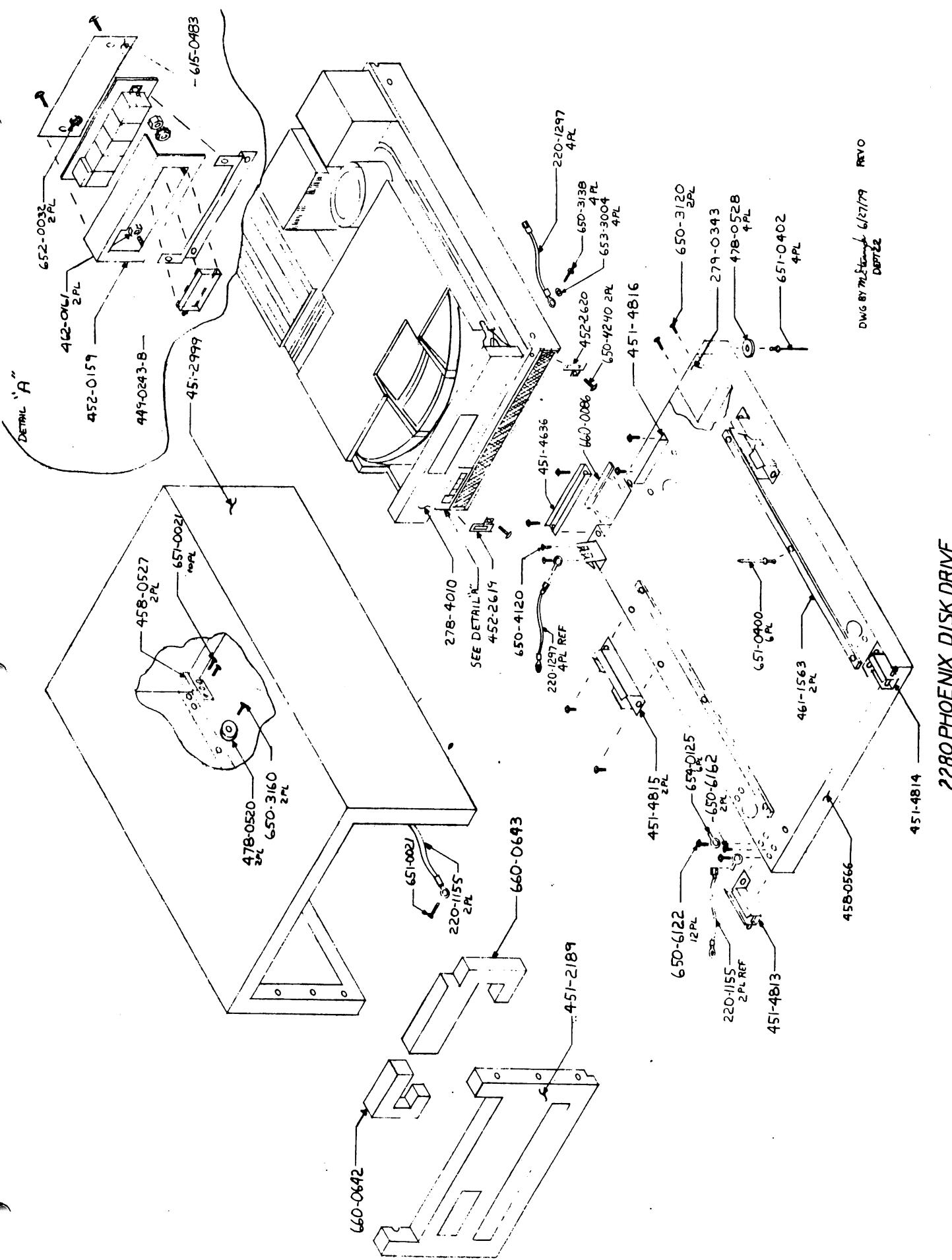
The Exploded view of the "PHOENIX" Disk Drive is added to Appendix A for an additional source of Part Numbers to assist in replacing defective or broken parts. Insert this illustration into Appendix A as Figure A-10. See list of parts below:

2280 PHOENIX DISK DRIVE PARTS

220-1155	Wire & Lug Assy	B6482-12
220-1297	Wire & Lug Assy	2280
278-4010	96 Meg Phoenix Drv. 60HZ tested	
279-0343	2260C/928C2 Switch Box Assy	
449-0243-B	Cover Keypad (Bronze)	
451-2189	Cover, Front Silkscreen	2280 D6684-1020
451-2999	Cover Top Weld	2280 B6884-1021
451-4636	Brkt, CBP Clamp FS6	C6853-575
451-4815	Brkt, Rear Hold Down	2280 C6884-1014
451-4816	Brkt, Rear Stop	2280 B6884-1016
452-0159	Plate, Dress Kbd	2280 C6884-1010
452-2619	Clamp Inner Cover (LH)	C6884-1026
452-2620	Clamp Inner Cover (RH)	C6884-1026
458-0526	Ground Wipe Frame FS6	B6863-609
458-0527	Ground Wipe Frame FS6	B6863-61
458-0566	Frame, Top Wldmnt FS6	DT E6863-811
461-1563	Block Spacer	2280 C6884-1017
462-0161	Sper 6-32 UXIC .250 OD .187L	
478-0520	Stop Cover	2280 B6884-1015
478-0528	Foot, Top Frame	2280 B6884-1019
615-0483	Insulator, PC Board	2280 B6884-1012
650-3120	6-32 x 3/8 Pan Hd Phil ms ss sems	
650-3138	Scr 6-32 3/8 Pan Hd Phl ss	
650-3160	6-32 x 1/2 Pan Hd Phl ss	
650-4120	8-32 x 3/8 Pan Hd Phl ms ss sems	
650-4240	8-32 x 3/4 Pan Hd Phl ms ss sems	
650-6122	10-32 x 3/8 Flange Whiz-Lock ms Zinc	
651-0021	Scr #8 x 1/2 Self Tap Truss Hd T-B	
651-0400	Rivet Avdel 11250412 1/8 x 3/8 LG.	
651-0402	Rivet Avdel 11210615 3/16 x 7/16 LG.	
652-0032	6-32 Lock-Nut Keps 511-061800-00	
653-3004	#6 Ext. Tooth Lk Washer	
654-0125	Terminal Lug .200 Hole 1/4 spade	
660-0642	Fm Frnt Pnl Battle Right	B6884-1028
660-0643	Fm Frnt Pnl Battle Left	C6884-1027

\*Items not illustrated

220-1336	Short Power Cord (Pigtail)
220-1220	10 Ft. Power Cord Assy.



**2280 PHOENIX DISK DRIVE**

FIGURE A-10

