

SERIES 1640/1650  
PRINTERS AND TERMINALS  
PARTS CATALOG

90414-02 Rev A

November, 1980

DIABLO SYSTEMS, INC.  
A XEROX Company

## PREFACE

The contents of this catalog represent the unit as manufactured at the time of publication. All parts listed are shown in the correct form for ordering, including those assemblies which are supplied as single parts. Items not listed are NOT FIELD REPLACEABLE. Such items are sometimes included for completeness of illustration only.

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NOTE: On revised pages of text, each area of new revision is marked by a heavy vertical bar in the margin.

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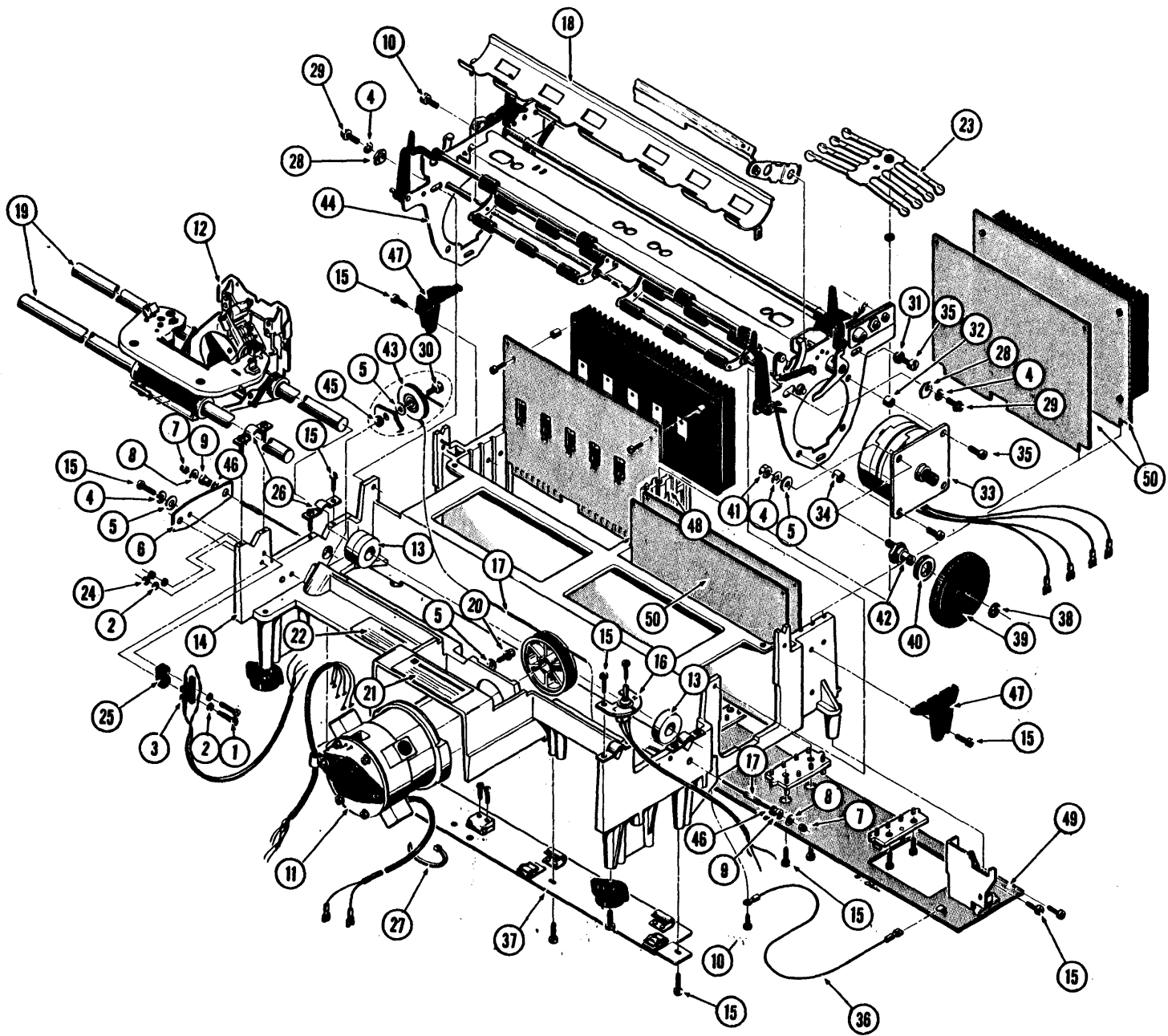


Figure-1-1  
301600-XX/301650-XX FINAL ASSEMBLY

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## SECTION L1

301600-XX/301650-XX FINAL ASSEMBLY  
(see notes)

| ITEM | PART NO.  | DESCRIPTION                                    |                                                                                  |
|------|-----------|------------------------------------------------|----------------------------------------------------------------------------------|
| 1    | 70029-18  | Screw, 4-40 X 1.125 P.H.                       | Notes:                                                                           |
| 2    | 70179-04  | Washer, #4 Flat                                |                                                                                  |
| 3    | 24304-02  | Harness Assembly,<br>Carriage Home             | (1) Final Assemblies:                                                            |
| 4    | 70168-08  | Lockwasher, #8                                 | See Appendix "B"                                                                 |
| 5    | 70169-08  | Washer, #8 Flat                                |                                                                                  |
| 6    | 24322     | Leaf Spring                                    | (2) For 1640/1650 Terminal Configurations only,<br>see Appendix "C" Guide Chart. |
| 7    | 70852-05  | Locknut, 5-40                                  |                                                                                  |
| 8    | 70425-06  | Lockwasher, #6                                 |                                                                                  |
| 9    | 24145-01  | Hub, Cable                                     | (3) Used on Model 1640 only.                                                     |
| 10   | 70829-04  | Screw, 8-32 X .250 T.F. P.H.                   |                                                                                  |
| 11   | 40715-02  | Motor Assembly, Carriage<br>(Note 5)           | (4) Used on Model 1650 only.                                                     |
| 12   | 40750-24  | Carriage Assembly (Note 3)<br>(see Section L3) | (5) The only replaceable parts of the Carriage<br>Motor Assembly are:            |
|      | 40750-32  | Carriage Assembly (Note 4)<br>(see Section L4) | 70802 Brush/Spring Assembly                                                      |
| 13   | 24144     | End Stop                                       | 70801-03 Cap, Motor Brush                                                        |
| 14   | 24225-01  | Main Frame                                     | 305020-01 Damping Disk                                                           |
| 15   | 70829-06  | Screw, 8-32 X .375 T.F. P.H.                   |                                                                                  |
| 16   | 24464-00  | Switch and Harness Assembly                    |                                                                                  |
| 17   | 24143-01  | Cable                                          |                                                                                  |
| 18   | 24056-01  | Paper Cradle                                   |                                                                                  |
| 19   | 24140     | Shaft, Carriage                                |                                                                                  |
| 20   | 70316-04  | Screw, 8-32 X .625 T.F. H. Hex Hd.             |                                                                                  |
| 21   | 301685-01 | Label, Serial Number, UL and CSA               |                                                                                  |
| 22   | 20755     | Label, Warning                                 |                                                                                  |
| 23   | 301085-02 | Clamp, PCB                                     |                                                                                  |
| 24   | 70166-04  | Nut, 4-40                                      |                                                                                  |
| 25   | 301338-01 | Spacer, Sensor                                 |                                                                                  |
| 26   | 24141     | Clamp, Shaft                                   |                                                                                  |
| 27   | 10538-01  | Cable Tie                                      |                                                                                  |
| 28   | 24045     | Eccentric, Platen Position                     |                                                                                  |
| 29   | 70316-03  | Screw, 8-32 X .500 T.F. H. Hex Hd.             |                                                                                  |
| 30   | 24055     | Screw, Shoulder                                |                                                                                  |
| 31   | 301001-01 | Spacer, Shoulder                               |                                                                                  |
| 32   | 24260     | Spacer                                         |                                                                                  |
| 33   | 24283     | Motor, Paper Feed                              |                                                                                  |
| 34   | 24262     | Spacer                                         |                                                                                  |
| 35   | 70829-12  | Screw, 8-32 X .750 T.F. P.H.                   |                                                                                  |
| 36   | 24499-00  | Strap, Ground                                  |                                                                                  |
| 37   | 40630-04  | Plate Assembly, Wire Harness                   |                                                                                  |
| 38   | 70170-10  | Retaining Ring                                 |                                                                                  |
| 39   | 20452     | Gear, 85 Tooth Spur                            |                                                                                  |
| 40   | 20599     | Oil Washer                                     |                                                                                  |
| 41   | 70166-08  | Nut, 8-32 Hex                                  |                                                                                  |
| 42   | 24058-01  | Stud, Eccentric                                |                                                                                  |
| 43   | 40877     | Pulley                                         |                                                                                  |
| 44   | 24050-04  | Carrier Assembly, TPO<br>(see Section L2)      |                                                                                  |
| 45   | 40693-01  | Nut, Pulley                                    |                                                                                  |
| 46   | 70349-03  | "O" Ring                                       |                                                                                  |
| 47   | 40661     | Guide, PCB Side                                |                                                                                  |
| 48   | 40660-01  | Bracket, PCB Center                            |                                                                                  |
| 49   | 301390-01 | Motherboard (Note 4)                           |                                                                                  |
|      | 301390-02 | Motherboard (Note 3)<br>(see Section II)       |                                                                                  |
| 50   | _____     | PCB Assemblies<br>(see Section II)             |                                                                                  |

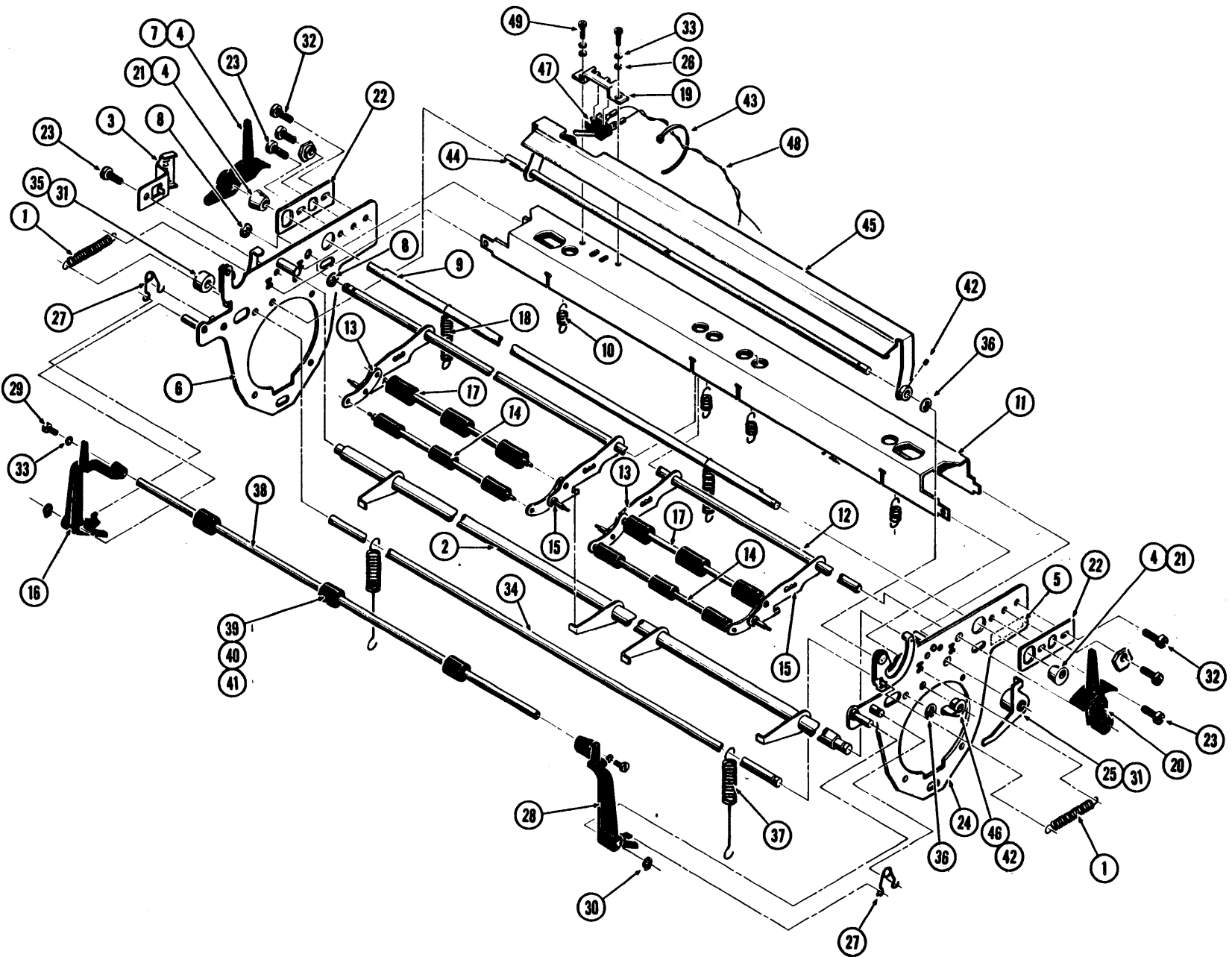


Figure 1-2  
24050-04 CARRIER ASSEMBLY

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SECTION L2  
24050-04 CARRIER ASSEMBLY

| ITEM | PART NO.  | DESCRIPTION                     |
|------|-----------|---------------------------------|
| 1    | 20424     | Spring, Platen Latch            |
| 2    | 24030-01  | Shaft Assembly, Actuator        |
| 3    | 24052-01  | Plate, Detent                   |
| 4    | 100358-02 | Setscrew, 6-32 X .187 Cup Point |
| 5    | 301585-02 | Label, Identification           |
| 6    | 24027-02  | Plate Assembly, Left            |
| 7    | 24053-01  | Lever, Manifold                 |
| 8    | 70172-05  | Retaining Ring                  |
| 9    | 24049     | Shaft, Manifold                 |
| 10   | 24047     | Spring, Comb                    |
| 11   | 301372-02 | Comb, Carrier                   |
| 12   | 24043     | Shaft, Support                  |
| 13   | 24042     | Lever, Pressure Roller, Rear    |
| 14   | 24080-01  | Roller Assembly, Front Pressure |
| 15   | 24038     | Lever, Pressure Roller, Front   |
| 16   | 24076-01  | Bail Arm, Left                  |
| 17   | 24081-01  | Roller Assembly, Rear Pressure  |
| 18   | 301343-01 | Spring                          |
| 19   | 301038-02 | Bracket, Switch                 |
| 20   | 24046-01  | Lever, Pressure Release         |
| 21   | 24051     | Eccentric, Manifold             |
| 22   | 24044-02  | Plate, Horizontal Adjust        |
| 23   | 70829-04  | Screw, 8-32 X .250 P.H.         |
| 24   | 24034-02  | Plate Assembly, Right           |
| 25   | 24099-02  | Lever, Actuator                 |
| 26   | 70179-04  | Washer, #4 Flat                 |
| 27   | 24088-01  | Spring, Bail Arm                |
| 28   | 24074-01  | Bail Arm, Right                 |
| 29   | 70029-05  | Screw, 4-40 X .312 P.H.         |
| 30   | 70170-05  | Retaining Ring                  |
| 31   | 100356-01 | Setscrew, 8-32 X .190 Cup Point |
| 32   | 70829-06  | Screw, 8-32 X .375 T.F. P.H.    |
| 33   | 70168-04  | Lockwasher, #4                  |
| 34   | 24373     | Shaft, Bias                     |
| 35   | 24374     | Collar, Bias Shaft              |
| 36   | 70170-14  | Retaining Ring                  |
| 37   | 24375     | Spring, Bias                    |
| 38   | 24087     | Rod, Bail                       |
| 39   | 24289     | Roller, Bail                    |
| 40   | 20332     | Spring, Bail Roller             |
| 41   | 302918-01 | Bearing, Bail Roller            |
| 42   | 100355-01 | Setscrew, 5-40 X .187           |
| 43   | 10538-01  | Cable Tie                       |
| 44   | 24398     | Shaft, Paper Out                |
| 45   | 301897-01 | Bail Assembly                   |
| 46   | 24404-02  | Lever Assembly                  |
| 47   | 24436-04  | Switch                          |
| 48   | 24429     | Harness Assembly                |
| 49   | 70827-06  | Screw, 4-40 X .375 P.H.         |

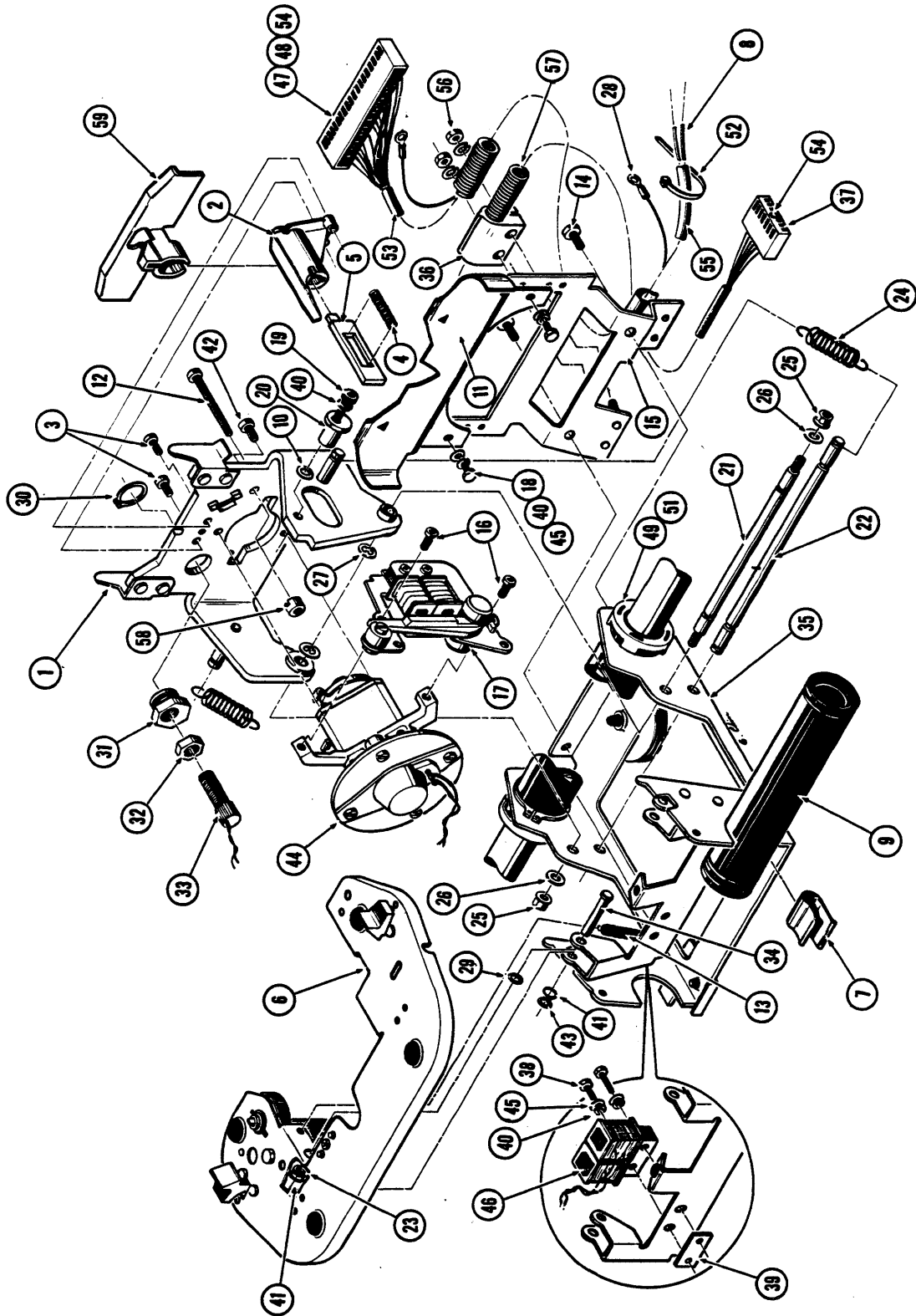


Figure 1-3  
 40750-24 CARRIAGE ASSEMBLY—MODEL 1640 PRINTERS

## SECTION L3

40750-24 CARRIAGE ASSEMBLY—MODEL 1640 PRINTERS  
(see notes)

| ITEM | PART NO.  | DESCRIPTION                                    | ITEM | PART NO.  | DESCRIPTION                     |
|------|-----------|------------------------------------------------|------|-----------|---------------------------------|
| 1    | 24213-01  | Bracket Assembly                               | 60   | 301977-01 | Pivot Frame Subassembly         |
| 2    | 24211-04  | Guide, Hammer                                  |      |           | (Note 2) (Not Shown Separately) |
| 3    | 70805-02  | Screw, 4-20 X .375 T.F. P.H.                   | 61   | 301976-01 | Hammer Guide Subassembly        |
| 4    | 20353     | Spring, Hammer                                 |      |           | (Note 3) (Not Shown Separately) |
| 5    | 22900-02  | Hammer                                         |      |           |                                 |
| 6    | 40695-02  | Ribbon Base Plate Assembly<br>(see Section L5) |      |           |                                 |
| 7    | 40684-01  | Spring                                         |      |           |                                 |
| 8    | 10567-13  | Shrink, Tubing                                 |      |           |                                 |
| 9    | 320241-01 | Case Assembly, Bearing                         |      |           |                                 |
| 10   | 70179-05  | Washer, #5 Flat                                |      |           |                                 |
| 11   | 40550-02  | Card Guide Assembly                            |      |           |                                 |
| 12   | 70806-18  | Screw, 4-40 X 1.125 P.H.                       |      |           |                                 |
| 13   | 40953     | Spring                                         |      |           |                                 |
| 14   | 70828-04  | Screw, 6-32 X .250 T.F. P.H.                   |      |           |                                 |
| 15   | 40694-03  | Bracket Assembly, Card Guide                   |      |           |                                 |
| 16   | 70827-04  | Screw, 4-40 X .250 T.F. P.H.                   |      |           |                                 |
| 17   | 24205-04  | Armature Assembly, Hammer                      |      |           |                                 |
| 18   | 100447-02 | Screw, 4-40 X .187 Hex Hd.                     |      |           |                                 |
| 19   | 70075-10  | Screw, 4-40 X .625 Skt Hd. Cap.                |      |           |                                 |
| 20   | 46054     | Eccentric                                      |      |           |                                 |
| 21   | 24377     | Shaft, Motor Pivot                             |      |           |                                 |
| 22   | 24105     | Shaft, Spring                                  |      |           |                                 |
| 23   | 40773     | Oil Washer                                     |      |           |                                 |
| 24   | 40562     | Spring                                         |      |           |                                 |
| 25   | 70166-06  | Nut, 6-32 Hex                                  |      |           |                                 |
| 26   | 301126-01 | Locknut, #6                                    |      |           |                                 |
| 27   | 70170-04  | Retaining Ring                                 |      |           |                                 |
| 28   | 40529-02  | Strap, Ground                                  |      |           |                                 |
| 29   | 46004     | Washer, Nylon                                  |      |           |                                 |
| 30   | 70816-09  | Retaining Ring, Bowed                          |      |           |                                 |
| 31   | 24092     | Eccentric                                      |      |           |                                 |
| 32   | 20597     | Nut, Hex                                       |      |           |                                 |
| 33   | 24426-02  | Pick-up, Magnetic                              |      |           |                                 |
| 34   | 40724     | Pin, Pivot                                     |      |           |                                 |
| 35   | 24410-03  | Carriage Subassembly<br>(see Section L6)       |      |           |                                 |
| 36   | 20348     | Clamp, Cable                                   |      |           |                                 |
| 37   | 13019-25  | Housing, Connector                             |      |           |                                 |
| 38   | 100447-03 | Screw, 4-40 X .437 Hex Hd.                     |      |           |                                 |
| 39   | 40713     | Nut Plate                                      |      |           |                                 |
| 40   | 70168-04  | Lockwasher, #4                                 |      |           |                                 |
| 41   | 70349-01  | "O" Ring                                       |      |           |                                 |
| 42   | 70827-05  | Screw, 4-40 X .312 P.H.                        |      |           |                                 |
| 43   | 70227-01  | Grip Ring                                      |      |           |                                 |
| 44   | 40700-11  | Motor, Print Wheel (Note 1)                    |      |           |                                 |
| 45   | 70179-04  | Washer, #4 Flat                                |      |           |                                 |
| 46   | 301211-01 | Coil Assembly, Ribbon Lift                     |      |           |                                 |
| 47   | 13019-41  | Connector Contact                              |      |           |                                 |
| 48   | 13019-29  | Connector Housing                              |      |           |                                 |
| 49   | 24128     | Felt Washer                                    |      |           |                                 |
| 50   |           | Not Used                                       |      |           |                                 |
| 51   | 24129     | Shaft Wiper                                    |      |           |                                 |
| 52   | 10538-01  | Cable Tie                                      |      |           |                                 |
| 53   | 301973-02 | Sleeve, Clear Vinyl                            |      |           |                                 |
| 54   | 13019-42  | Key, Polarizing                                |      |           |                                 |
| 55   | 301973-03 | Sleeve, Clear Vinyl                            |      |           |                                 |
| 56   | 70166-66  | Nut, 6-32 Hex                                  |      |           |                                 |
| 57   | 40677     | Spring, Carriage Cable                         |      |           |                                 |
| 58   | 24216     | Nut, Frame                                     |      |           |                                 |
| 59   | 301416-01 | Print Wheel Shield                             |      |           |                                 |

## Notes:

- (1) The only replaceable parts of the Print Wheel Motor Assembly are:
- 40682-01 Brush/Spring Assembly  
40894 Brush Retaining Screw
- (2) This subassembly includes items 1,3,10,19,20, 30,31,32,33,40, and 61.
- (3) This subassembly includes items 2,4, and 5.

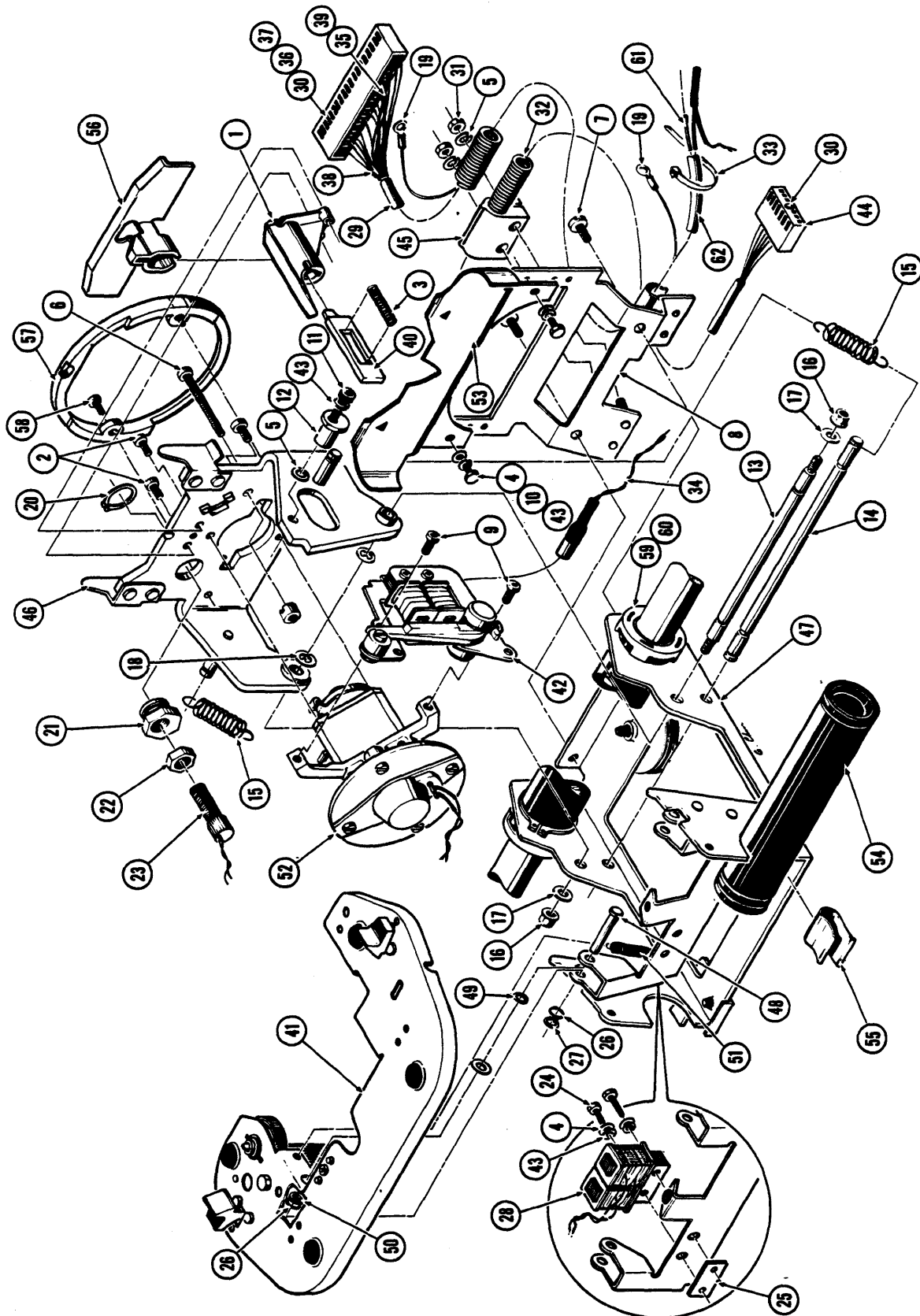


Figure 1-4  
 40750-32 CARRIAGE ASSEMBLY—MODEL 1650 PRINTERS

## SECTION L4

40750-32 CARRIAGE ASSEMBLY--MODEL 1650 PRINTERS  
(see notes)

| ITEM | PART NO.  | DESCRIPTION                                    | ITEM | PART NO.  | DESCRIPTION                                                 |
|------|-----------|------------------------------------------------|------|-----------|-------------------------------------------------------------|
| 1    | 24211-04  | Guide, Hammer                                  | 57   | 302511-02 | Damping Ring                                                |
| 2    | 70805-02  | Screw, 4-20 X .375 T.F. P.H.                   | 58   | 100391-01 | Screw, 4-40 X .250 T.F. F.H.                                |
| 3    | 20353     | Spring, Hammer                                 | 59   | 24128     | Felt Washer                                                 |
| 4    | 70179-04  | Washer, #4 Flat                                | 60   | 24129     | Shaft Wiper                                                 |
| 5    | 70179-05  | Washer, #5 Flat                                | 61   | 10567-13  | Shrink, Tubing                                              |
| 6    | 70806-26  | Screw, 4-40 X .1.625 P.H.                      | 62   | 301973-02 | Sleeve, Clear Vinyl                                         |
| 7    | 70828-04  | Screw, 6-32 X .250 T.F. P.H.                   | 63   | 301977-03 | Pivot Frame Subassembly<br>(Note 2) (Not Shown Separately)  |
| 8    | 40694-03  | Bracket Assembly, Card Guide                   | 64   | 301976-03 | Hammer Guide Subassembly<br>(Note 3) (Not Shown Separately) |
| 9    | 70827-04  | Screw, 4-40 X .250 T.F. P.H.                   |      |           |                                                             |
| 10   | 100447-02 | Screw, 4-40 X .187 Hex Hd.                     |      |           |                                                             |
| 11   | 70075-10  | Screw, 4-40 X .625 Skt Hd. Cap.                |      |           |                                                             |
| 12   | 46054     | Eccentric                                      |      |           |                                                             |
| 13   | 24377     | Shaft, Motor Pivot                             |      |           |                                                             |
| 14   | 24105     | Shaft, Spring                                  |      |           |                                                             |
| 15   | 40562     | Spring                                         |      |           |                                                             |
| 16   | 70166-06  | Nut, 6-32 Hex                                  |      |           |                                                             |
| 17   | 301126-01 | Locknut, #6                                    |      |           |                                                             |
| 18   | 70170-04  | Retaining Ring                                 |      |           |                                                             |
| 19   | 40529-02  | Strap, Ground                                  |      |           |                                                             |
| 20   | 70816-09  | Retaining Ring, Bowed                          |      |           |                                                             |
| 21   | 24092     | Eccentric                                      |      |           |                                                             |
| 22   | 20597     | Nut, Hex                                       |      |           |                                                             |
| 23   | 24426-02  | Pick-up, Magnetic                              |      |           |                                                             |
| 24   | 100447-03 | Screw, 4-40 X .4375 Hex Hd.                    |      |           |                                                             |
| 25   | 40713     | Nut Plate                                      |      |           |                                                             |
| 26   | 70349-01  | "O" Ring                                       |      |           |                                                             |
| 27   | 70227-01  | Grip Ring                                      |      |           |                                                             |
| 28   | 301211-01 | Coil Assembly, Ribbon Lift                     |      |           |                                                             |
| 29   | 301973-03 | Sleeve, Clear Vinyl                            |      |           |                                                             |
| 30   | 13019-42  | Key, Polarizing                                |      |           |                                                             |
| 31   | 70166-66  | Nut, 6-32 Hex                                  |      |           |                                                             |
| 32   | 40677     | Spring, Carriage Cable                         |      |           |                                                             |
| 33   | 10538-01  | Cable Tie                                      |      |           |                                                             |
| 34   | 301275-02 | Harness, Hammer Solenoid                       |      |           |                                                             |
| 35   | 10561-08  | Hookup Wire, #24 Orn                           |      |           |                                                             |
| 36   | 13019-29  | Housing, Connector                             |      |           |                                                             |
| 37   | 13019-41  | Contact, Connector                             |      |           |                                                             |
| 38   | 100386-04 | Splice, Sleeve Solder                          |      |           |                                                             |
| 39   | 10561-07  | Hookup Wire, #24 Brn                           |      |           |                                                             |
| 40   | 40787-02  | Hammer                                         |      |           |                                                             |
| 41   | 40695-04  | Ribbon Base Plate Assembly<br>(see Section L5) |      |           |                                                             |
| 42   | 40770-06  | Hammer Armature Assembly                       |      |           |                                                             |
| 43   | 70168-04  | Lockwasher, #4                                 |      |           |                                                             |
| 44   | 13019-25  | Housing, Connector                             |      |           |                                                             |
| 45   | 20348     | Cable Clamp                                    |      |           |                                                             |
| 46   | 24213-01  | Bracket Assembly                               |      |           |                                                             |
| 47   | 24410-03  | Carriage Subassembly<br>(see Section L6)       |      |           |                                                             |
| 48   | 40724     | Pin, Pivot                                     |      |           |                                                             |
| 49   | 46004     | Washer, Nylon                                  |      |           |                                                             |
| 50   | 40773     | Oil Washer                                     |      |           |                                                             |
| 51   | 40953     | Spring                                         |      |           |                                                             |
| 52   | 40700-16  | Motor, Print Wheel (Note 1)                    |      |           |                                                             |
| 53   | 40550-02  | Card Guide Assembly                            |      |           |                                                             |
| 54   | 320241-01 | Case Assembly, Bearing                         |      |           |                                                             |
| 55   | 40684-01  | Spring                                         |      |           |                                                             |
| 56   | 301416-01 | Print Wheel Shield                             |      |           |                                                             |

## Notes:

- (1) The only replaceable parts of the Print Wheel Motor Assembly are:

40682-01 Brush/Spring Assembly  
40894 Brush Retaining Screw

- (2) This subassembly includes items 2,5,11,12,20, 21,22,23,43,46,57,58, and 64.

- (3) This subassembly includes items 1,3, and 40.

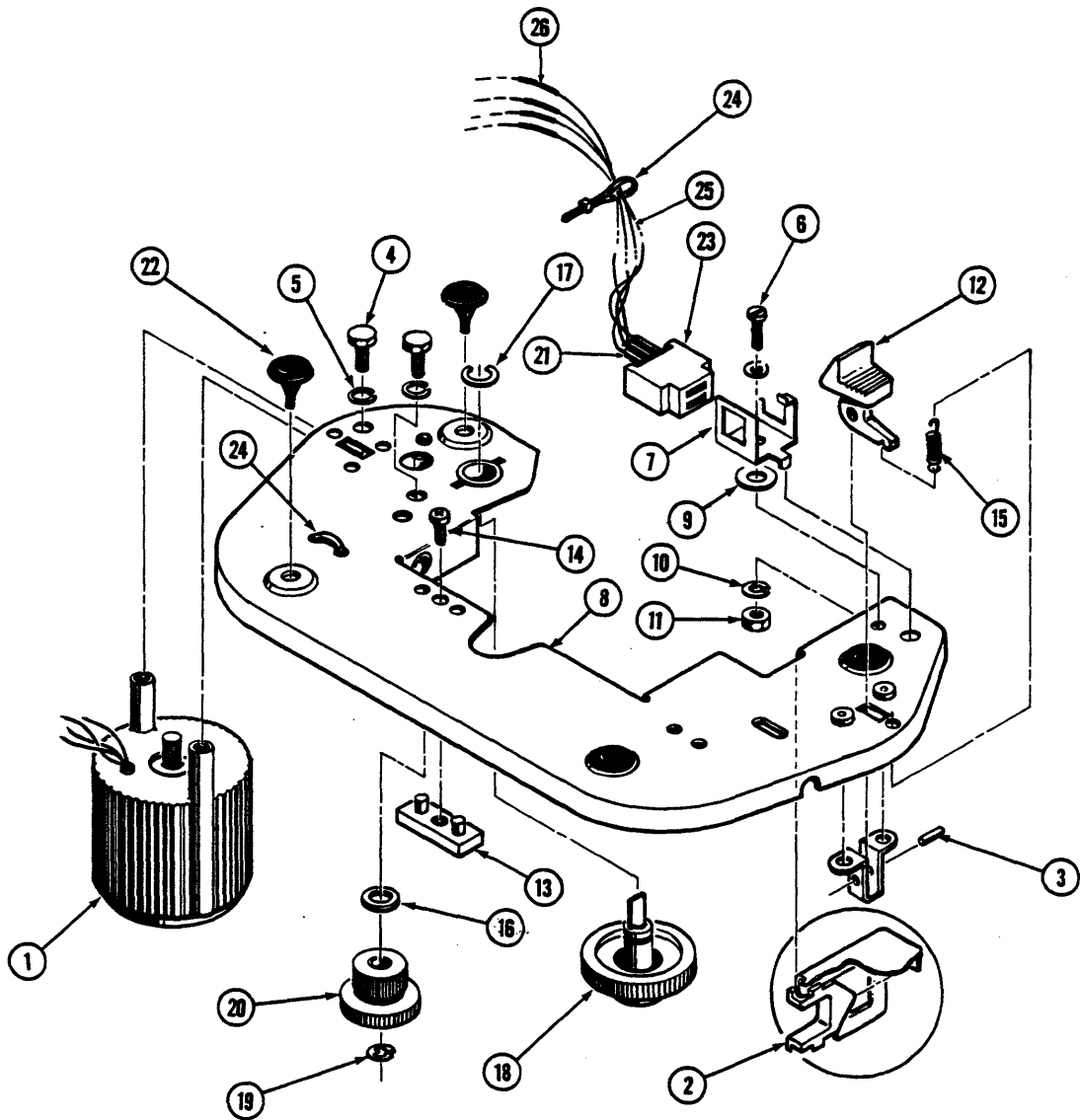


Figure 1-5  
40695-XX RIBBON BASE PLATE ASSEMBLY



## SECTION L5

40695-XX RIBBON BASE PLATE ASSEMBLY  
(see notes)

| ITEM | PART NO.  | DESCRIPTION                    |
|------|-----------|--------------------------------|
| 1    | 24427-01  | Motor, Ribbon Advance (Note 2) |
|      | 40687-01  | Motor, Ribbon Advance (Note 3) |
| 2    | 40722     | Grommet                        |
| 3    | 24147     | Pin, Latch                     |
| 4    | 100447-01 | Screw, 4-40 X .250 Hex Hd.     |
| 5    | 70168-04  | Lockwasher, #4                 |
| 6    | 70027-03  | Screw, 2-56 X .250 P.H.        |
| 7    | 24335     | Clip, Limit Switch             |
| 8    | 24111-03  | Base Plate Assembly            |
| 9    | 70169-04  | Washer, #4 Flat                |
| 10   | 70168-02  | Lockwasher, #2                 |
| 11   | 70166-02  | Nut, 2-56 Hex                  |
| 12   | 24120     | Latch, Ribbon                  |
| 13   | 20368     | Pole, Armature                 |
| 14   | 70027-02  | Screw, 2-56 X .125 P.H.        |
| 15   | 24146     | Spring                         |
| 16   | 40773     | Washer, Felt                   |
| 17   | 70172-04  | Retaining Ring                 |
| 18   | 46184-02  | Drive Gear Assembly            |
| 19   | 70170-03  | Retaining Ring                 |
| 20   | 24118-01  | Gear, Dual Idler               |
| 21   | 301973-01 | Sleeve, Clear Vinyl            |
| 22   | 24115     | Pad, Rubber                    |
| 23   | 13018-02  | Sensor, End of Ribbon          |
| 24   | 10538-01  | Cable Tie                      |
| 25   | 301974-01 | Wire, #28 Vio/Orn              |
| 26   | 100386-03 | Splice, Sleeve Solder          |

## Notes:

- (1) Ribbon Base Plate Assemblies:
- |          |                    |
|----------|--------------------|
| 40695-02 | Used on Model 1640 |
| 40695-04 | Used on Model 1650 |
- (2) Used on 40695-02 only.
- (3) Used on 40695-04 only.

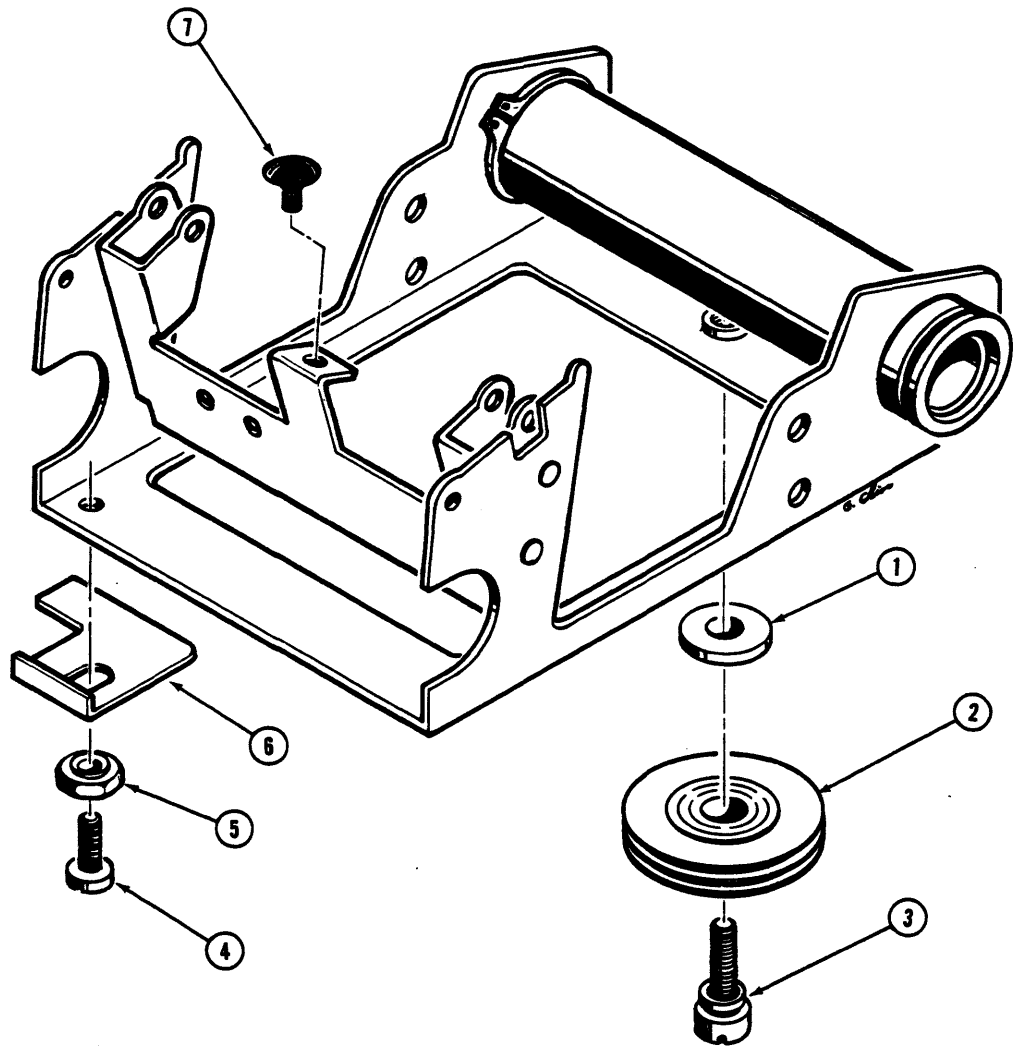


Figure 1-6  
24410-03 CARRIAGE SUBASSEMBLY

SECTION L6

24410-03 CARRIAGE SUBASSEMBLY  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>      |
|-------------|-----------------|-------------------------|
| 1           | 24264           | Spacer                  |
| 2           | 40876           | Pulley                  |
| 3           | 24055           | Shoulder Screw          |
| 4           | 70828-06        | Screw, 6-32 X .375 P.H. |
| 5           | 24411           | Eccentric               |
| 6           | 24319           | Plate, Home Position    |
| 7           | 24115           | Pad, Rubber             |

Notes:

- (1) Parts not numbered are NOT available separately; order complete 24410-03 assembly.

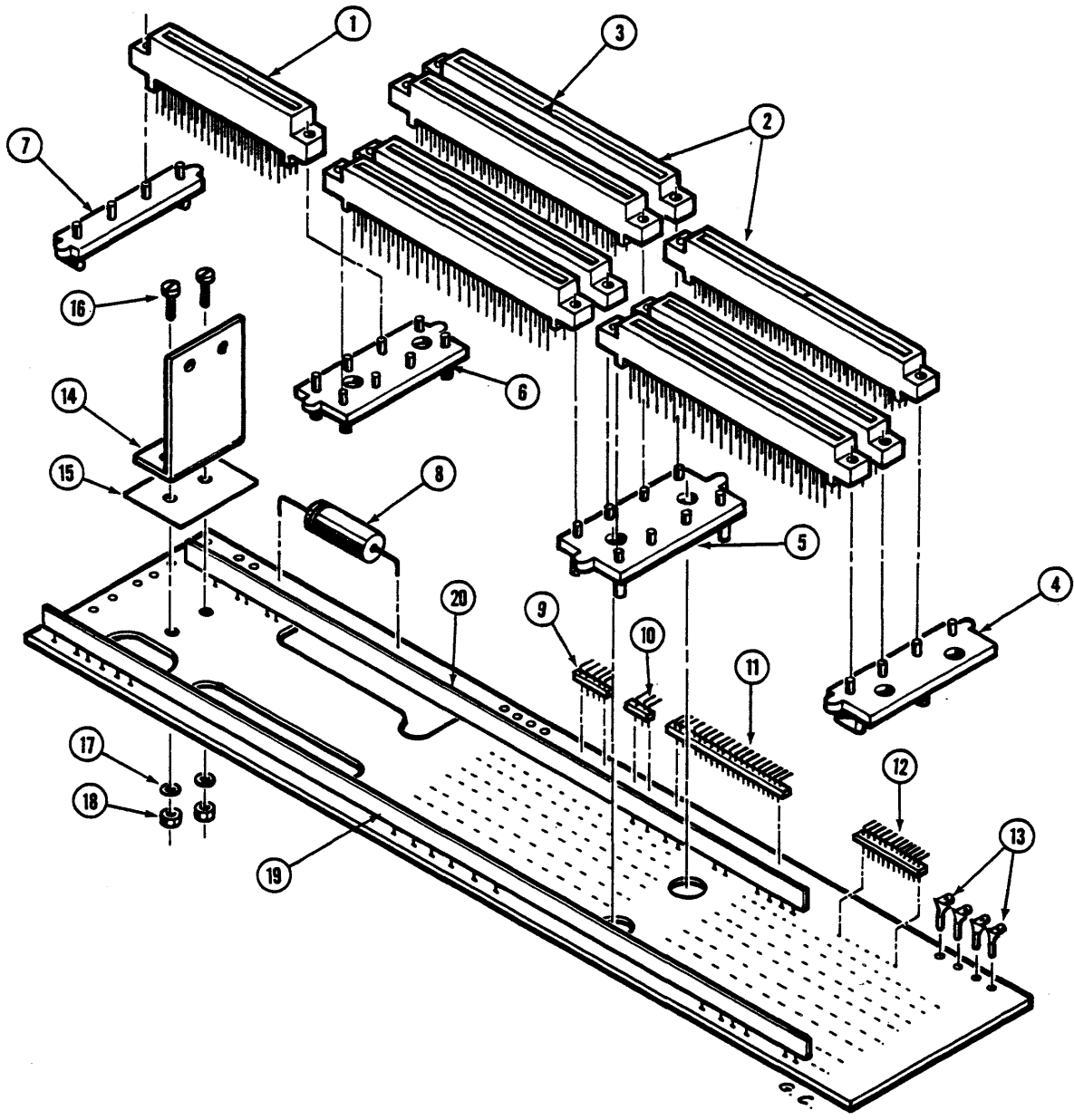


Figure 2-1  
301390-XX MOTHERBOARD ASSEMBLY

SECTION IL1

301390-XX MOTHERBOARD ASSEMBLY  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>      |
|-------------|-----------------|-------------------------|
| 1           | 301032-02       | Connector, 36-pin PCB   |
| 2           | 13015-03        | Connector, PCB, Female  |
| 3           | 13015-02        | Key, Polarizing         |
| 4           | 40708           | Support, Connector      |
| 5           | 40707           | Support, Connector      |
| 6           | 46139-01        | Support, Connector      |
| 7           | 46138-01        | Support, Connector      |
| 8           | 100077-01       | Capacitor, 470uF 10V    |
| 9           | 13019-04        | Wafer, 6 Circuit        |
| 10          | 13019-02        | Wafer, 4 Circuit        |
| 11          | 13019-09        | Wafer, 20 Circuit       |
| 12          | 10910-05        | Header, 20 Circuit      |
| 13          | 22819           | Tab, 187 Series         |
| 14          | 46082-01        | Bracket                 |
| 15          | 46166-01        | Insulator               |
| 16          | 70030-06        | Screw, 6-32 X .375 P.H. |
| 17          | 70168-06        | Lockwasher, #6          |
| 18          | 70166-06        | Nut, #6-32 Hex          |
| 19          | 13056           | Bus Strip               |
| 20          | 13055           | Bus Strip               |

Notes:

(1) Motherboard Assemblies:

|           |                    |
|-----------|--------------------|
| 301390-01 | Used on Model 1650 |
| 301390-02 | Used on Model 1640 |

## SECTION IL2a

301410-XX HPRO4 PCB ASSEMBLY, RO  
(see notes)

| <u>PART NO.</u> | <u>DESCRIPTION</u>                     | <u>LOCATION(S)</u>                                                                        | <u>PART NO.</u> | <u>DESCRIPTION</u>                       | <u>LOCATION(S)</u> |
|-----------------|----------------------------------------|-------------------------------------------------------------------------------------------|-----------------|------------------------------------------|--------------------|
|                 | <u>RESISTORS</u>                       |                                                                                           |                 | <u>LC's</u>                              |                    |
| 10429-25        | 100 Ohm 1/4W 2%                        | B9,D3                                                                                     | 100237-03       | ROM, Print Wheel Program (Note 4)        | B19                |
| 10429-41        | 470 Ohm 1/4W 2%                        | D5,D6                                                                                     | 100311-02       | MASK ROM, Print Wheel Program (Note 3,4) | B19                |
| 10429-49        | 1K 1/4W 2%                             | A18,A24,B17<br>E3,E10,F15<br>F16                                                          | 100234-02       | EROM-1 Basic Program (Note 4)            | E52                |
| 10429-63        | 3.9K 1/4W 2%                           | A2,A11                                                                                    | 100319-02       | MOS ROM 32K Basic Program (Note 3,4)     | E52                |
| 10429-69        | 6.8K 1/4W 2%                           | A7,A13                                                                                    | 100235-02       | EROM-2 Basic Program (Note 4)            | E67                |
| 10429-65        | 4.7K 1/4W 2%                           | A34,A65,B1<br>B44,B59,B66<br>B67,D7,E11<br>E50                                            | 100178-02       | 8155                                     | B28,B45            |
| 10429-68        | 6.2K 1/4W 2%                           | A40,B61,B62<br>D9,D69,D70<br>E65,E74,F74                                                  | 100180-02       | 8243                                     | E4,E25             |
| 10429-81        | 22K 1/4W 2%                            | E47                                                                                       | 10136           | 7404                                     | A8                 |
|                 | <u>CAPACITORS</u>                      |                                                                                           | 42351-01        | 74LS05                                   | D4                 |
|                 |                                        |                                                                                           | 13082           | 74LS32                                   | A14                |
| 10062-20        | 200pF 500V                             | A12                                                                                       | 100228-01       | 74LS139                                  | E40                |
| 10094-10        | .01uF 25V                              | B2,D1                                                                                     | 100230-01       | 74LS257                                  | E13,E19,E46        |
| 42077-01        | .1uF 12V                               | B30                                                                                       | 100229-01       | 74LS373                                  | E62                |
| 10086-10        | .1uF 50V (Note 6)                      | B75,D68                                                                                   | 10198           | 8837                                     | B4                 |
| 10038-01        | .1uF 50V                               | A6,A20,A45<br>B3,B12,B21<br>B41,B63,B69<br>D2,D45,D71<br>E7,E18,E28<br>E45,E54,E61<br>E68 | 13235-03        | SWAP-0015                                | A19                |
|                 |                                        |                                                                                           | 100227-01       | 7417                                     | A41,A47            |
| 10076-10        | 1uF 35V (Note 6)                       | F33,F42                                                                                   | 10239           | Resistor Pack,<br>1K 2%                  | A30                |
| 10076-68        | 6.8uF 35V (Note 6)                     | E33,E36                                                                                   | 10761           | Resistor Pack,<br>1K 2%                  | A36                |
| 10410-22        | 22uF 15V                               | F1,F68                                                                                    | 100189-02       | 8251A (Note 6)                           | D55                |
|                 | <u>LC's</u>                            |                                                                                           | 10353           | 75150P (Note 6)                          | B70,B71            |
|                 |                                        |                                                                                           | 10354           | 75154 (Note 6)                           | B64,D64            |
| 100176-02       | 8085A                                  | B37                                                                                       | 42391-12        | 78M12C (Note 6)                          | F48                |
| 100236-02       | ROM, Carriage Program (Note 4)         | B10                                                                                       | 10213-12        | 79M05AHC (Note 6)                        | F41                |
| 100310-01       | MASK ROM, Carriage Program (Notes 3,4) | B10                                                                                       |                 |                                          |                    |

| <u>PART NO.</u>      | <u>DESCRIPTION</u>         | <u>LOCATION(S)</u>     |
|----------------------|----------------------------|------------------------|
| <u>MISCELLANEOUS</u> |                            |                        |
| 10592                | Jack, Closed Entry         | B46,B48                |
| 10255-06             | Crystal, 5MHz              | A3                     |
| 10792-02             | Switch, 8 pos SPST         | A25                    |
| 10899-24             | Socket, 24-pin             | E4,E25,E52<br>E67      |
| 10899-28             | Socket, 28-pin             | D55                    |
| 10899-40             | Socket, 40-pin             | B10,B19,B28<br>B37,B45 |
| 10910-01             | Header, 34-pin             | J1                     |
| 10910-06             | Header, 12-pin<br>(Note 6) | J2                     |
| 10634-02             | Plug, Shorting<br>(Note 5) | B47                    |

Notes:

- (1) HPRO4 PCB Assemblies:
  - 301410-03 Used on Model 1640 Serial/Parallel
  - 301410-04 Used on Model 1640 Parallel
  - 301410-05 Used on Model 1650 Serial/Parallel
  - 301410-06 Used on Model 1650 Parallel
  - 301410-97 Mask ROM's (see Section II.2b)
- (2) 301410-97 replaces 301410-03 and -05.  
Remove Shorting Plug (B47) for 301410-03.
- (3) Used on 301410-97 only.
- (4) 100310-01 replaces 100236-02; 100311-02 replaces  
100237-03; 100319-02 replaces 100234-02 and  
100235-02.
- (5) Used on 301410-05, -06 and -97 only; remove for  
plastic Print Wheels.
- (6) Used on 301410-03, -05 and -97 only.

## SECTION II.2b 99A81084

302510-XX HPRO4 PCB ASSEMBLY, KSR  
(see notes)

| <u>PART NO.</u> | <u>DESCRIPTION</u>                                                  | <u>LOCATION(S)</u> |
|-----------------|---------------------------------------------------------------------|--------------------|
| 301410-97       | HPRO4 PCB Assembly<br>(see Section II.2a)                           |                    |
| 100318-02       | Mask ROM,<br>Typewriter Paired<br>(Note 2)                          | E67                |
| 100464-01       | MASK ROM, English,<br>Scandinavian,<br>Norsk, APL (Note 3)          | E67                |
| 320003-01       | EROM-3 (Alternate)<br>English, Scandinavian,<br>Norsk, APL (Note 3) |                    |
| 100463-01       | MASK ROM, English<br>French, German,<br>APL (Note 4)                | E67                |
| 320006-01       | EROM-3 (Alternate)<br>English, French<br>German, APL (Note 4)       |                    |

## Notes:

- (1) HPRO4 PCB Assemblies with Keyboard ROM:
  - 302510-01 Typewriter Paired
  - 302510-07 English, Scandinavian, Norsk APL
  - 302510-08 English, French, German, APL
- (2) Used on 302510-01 only. Interchangeable with 400598-01 EROM used on earlier versions.
- (3) Used on 302510-07 only.
- (4) Used on 302510-08 only.



## SECTION IL3a

400664-98 XMEM2 PCB ASSEMBLY WITHOUT FIRMWARE OPTIONS  
(see notes)

| <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>LOCATION(S)</u>                                                             | <u>PART NO.</u> | <u>DESCRIPTION</u>       | <u>LOCATION(S)</u>                               |
|-----------------|--------------------|--------------------------------------------------------------------------------|-----------------|--------------------------|--------------------------------------------------|
|                 | <u>RESISTORS</u>   |                                                                                |                 | <u>INDUCTORS</u>         |                                                  |
| 10021-82        | 82 Ohm 1/4W 5%     | B3,B4                                                                          | 10097-05        | 8200uH                   | F24                                              |
| 10429-33        | 220 Ohm 1/4W 2%    | F17                                                                            |                 | <u>DIODES</u>            |                                                  |
| 10022-39        | 390 Ohm 1/4W 5%    | E23                                                                            | 10160           | 1N4454                   | F29,F31                                          |
| 10429-43        | 560 Ohm 1/4W 2%    | F6                                                                             | 10102-13        | 30V Zener 1N5256         | F34                                              |
| 10022-82        | 820 Ohm 1/4W 5%    | F18                                                                            |                 | <u>TRANSISTORS</u>       |                                                  |
| 10023-10        | 1K 1/4W 5%         | B14,E17                                                                        | 42220-01        | 2N2219A                  | D4,F23                                           |
| 10429-49        | 1K 1/4W 2%         | F16                                                                            | 10105           | 2N3644                   | F11                                              |
| 42001-06        | 2K 1/4W 1%         | F33                                                                            |                 | <u>LC's</u>              |                                                  |
| 42005-08        | 7.5K 1/4W 1%       | F5                                                                             | 13145           | 7405                     | B33,E26                                          |
| 10024-10        | 10K 1/4W 5%        | B38,B45,B46<br>E24                                                             | 42358-01        | 74LS14                   | E13                                              |
| 42005-12        | 10K 1/4W 1%        | F15                                                                            | 100196-01       | 74LS138                  | F49,F63                                          |
| 10025-10        | 100K 1/4W 5%       | B6                                                                             | 100228-01       | 74LS139                  | E33                                              |
| 10026-10        | 1M 1/4W 5%         | D3,D18                                                                         | 10353           | 75150P                   | E18                                              |
|                 | <u>CAPACITORS</u>  |                                                                                | 10354           | 75154                    | E5                                               |
| 42081-01        | .0022uF 50V        | F8                                                                             | 10213-12        | 79M05AHC                 | F38                                              |
| 10094-10        | .01uF 12V          | F22                                                                            | 42391-12        | 78M12C                   | F39                                              |
| 10086-10        | .1uF 50V           | D24,E20,E21                                                                    | 10348-01        | Timer (555)              | F10                                              |
| 10038-01        | .1uF 50V           | A30,A39,A48<br>A57,A66,A75<br>B31,B55,B68<br>D48,E12,E31<br>E55,E68,F55<br>F68 | 42168-01        | Optocoupler<br>(TIL 117) | B5,D5,D12                                        |
| 10086-22        | .22uF 50V          | F28                                                                            | 42407-03        | 8255A                    | B40                                              |
| 10087-39        | .39uF 50V          | F27                                                                            | 10239           | Resistor Network 1K      | B18                                              |
| 10086-47        | .47uF 50V          | D23                                                                            |                 | <u>MISCELLANEOUS</u>     |                                                  |
| 10079-10        | 1uF 35V            | F36,F37                                                                        | 10792           | Switch 4 pos SPST        | B12                                              |
| 10076-68        | 6.8uF 35V          | F3,F20                                                                         | 10898-18        | Socket, IC, 18-pin       | XB49,XB56<br>XB63,XB70<br>XE49,XE56<br>XE63,XE70 |
| 10410-22        | 22uF 15V           | F1,F69                                                                         |                 |                          |                                                  |
| 10077-22        | 22uF 35V           | F43,F47                                                                        |                 |                          |                                                  |

| <u>PART NO.</u>      | <u>DESCRIPTION</u>        | <u>LOCATION(S)</u>                  |
|----------------------|---------------------------|-------------------------------------|
| <u>MISCELLANEOUS</u> |                           |                                     |
| 42577-06             | Socket, IC, 22-pin        | XB25                                |
| 10899-24             | Socket, IC, 24-pin        | XA22,XA31<br>XA40,XA49<br>XA58,XA67 |
| 10592                | Jack                      | A5,A7                               |
| 10910-02             | Connector,<br>14 Position | J1                                  |
| 10910-05             | Connector,<br>20 Position | J2                                  |

**Notes:**

- (1) See Section II.3b for XMEM2 PCB Assembly with firmware options.

SECTION IL3b

301730-XX XMEM2 PCB ASSEMBLY WITH FIRMWARE OPTIONS  
(see notes)

PART NO.      DESCRIPTION                      LOCATION(S)

400664-98      XMEM2 PCB Assembly  
(see Section IL3a)

2741 OPTION

100429-01      Mask ROM 4                      A31  
301660-03      EROM 4 (Alternate)

100430-01      Mask ROM 5                      A40  
301661-03      EROM 5 (Alternate)

400196-80      Keytop,                              (Position #92  
"Attention" Legend              on keyboard)

WORD PROCESSING ENHANCEMENTS

100431-01      Mask ROM 6                      A49  
301664-01      EROM 6 (Alternate)

100432-01      Mask ROM 7                      A58  
301665-01      EROM 7 (Alternate)

100249-01      RAM, 1K X 4 Pos              E63

HYPLOT, FEEDER CONTROL, DIAGNOSTIC

100410-01      Mask ROM 8                      A67  
400710-01      EROM 8 (Alternate)

HERE IS MESSAGE

100248-01      EAROM                              B25

10634-02      Plug, Shorting                      A6

EXPANDED BUFFER

100249-01      RAM, 1K X 4 Pos              B49,B56,E49  
(Note 2)                              E56

Notes:

(1) XMEM2 PCB Assemblies:

(See Table)

(2) Also used at locations B63  
and E63 on 301730-22, -23, -26  
-27, -30, -31.

|           | 2741 OPTION | WORD PROCESSING | HYPLOT FEEDER DIAGNOSTICS | HERE IS MESSAGE | EXPANDED BUFFER |
|-----------|-------------|-----------------|---------------------------|-----------------|-----------------|
| 301730-01 | X           |                 |                           |                 |                 |
| 301730-02 |             | X               |                           |                 |                 |
| 301730-03 | X           | X               |                           |                 |                 |
| 301730-04 |             |                 | X                         |                 |                 |
| 301730-05 | X           |                 | X                         |                 |                 |
| 301730-06 |             | X               | X                         |                 |                 |
| 301730-07 | X           | X               | X                         |                 |                 |
| 301730-08 |             |                 |                           | X               |                 |
| 301730-09 | X           |                 |                           | X               |                 |
| 301730-10 |             | X               |                           | X               |                 |
| 301730-11 | X           | X               |                           | X               |                 |
| 301730-12 |             |                 | X                         | X               |                 |
| 301730-13 | X           |                 | X                         | X               |                 |
| 301730-14 |             | X               | X                         | X               |                 |
| 301730-15 | X           | X               | X                         | X               |                 |
| 301730-16 |             |                 |                           |                 | X               |
| 301730-17 | X           |                 |                           |                 | X               |
| 301730-18 |             | X               |                           |                 | X               |
| 301730-19 | X           | X               |                           |                 | X               |
| 301730-20 |             |                 | X                         |                 | X               |
| 301730-21 | X           |                 | X                         |                 | X               |
| 301730-22 |             | X               | X                         |                 | X               |
| 301730-23 | X           | X               | X                         |                 | X               |
| 301730-24 |             |                 |                           | X               | X               |
| 301730-25 | X           |                 |                           | X               | X               |
| 301730-26 |             | X               |                           | X               | X               |
| 301730-27 | X           | X               |                           | X               | X               |
| 301730-28 |             |                 | X                         | X               | X               |
| 301730-29 | X           |                 | X                         | X               | X               |
| 301730-30 |             | X               | X                         | X               | X               |
| 301730-31 | X           | X               | X                         | X               | X               |

## SECTION II.4

## 40520-04 SERVO PCB ASSEMBLY, STANDARD

| <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>LOCATION(S)</u>                                                                                                                                            | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>LOCATION(S)</u>                                                                    |
|-----------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|---------------------------------------------------------------------------------------|
|                 | <u>RESISTORS</u>   |                                                                                                                                                               |                 | <u>RESISTORS</u>   |                                                                                       |
| 10002-69        | 511 Ohm 1/8W 1%    | A24,B10,D9<br>F23                                                                                                                                             | 10429-73        | 10K 1/4W 2%        | A16,B35,D8<br>D19,D31,D32<br>D42,D44,D45<br>D57,D58,D67<br>D68,F35,F36<br>F67,F70,F72 |
| 10003-01        | 1K 1/8W 1%         | A64,B47,D14<br>D64,F60,F73                                                                                                                                    |                 |                    |                                                                                       |
| 10003-69        | 5.11K 1/8W 1%      | F10                                                                                                                                                           | 10429-78        | 16K 1/4W 2%        | D34,D55,D70<br>F34                                                                    |
| 10005-39        | 249K 1/8W 1%       | B4                                                                                                                                                            |                 |                    |                                                                                       |
| 10004-01        | 10K 1/8W 1%        | A20,A26,A34<br>B15,B23,B40<br>F11                                                                                                                             | 10429-79        | 18K 1/4W 2%        | D46,F68                                                                               |
|                 |                    |                                                                                                                                                               | 10429-80        | 20K 1/4W 2%        | B11,B31,B57<br>B59,D6,F19<br>F20                                                      |
| 10005-15        | 140K 1/8W 1%       | A45                                                                                                                                                           |                 |                    |                                                                                       |
| 10004-30        | 20K 1/8W 1%        | A48,A49,A51<br>A63,B13,B14<br>B29,B30,B43<br>B45,B68,B70<br>B72,B74,D48<br>D49                                                                                | 10429-82        | 24K 1/4W 2%        | D43,F71                                                                               |
|                 |                    |                                                                                                                                                               | 10429-90        | 51K 1/4W 2%        | D21,D23,F21                                                                           |
|                 |                    |                                                                                                                                                               | 10430-01        | 100K 1/4W 2%       | B8,B24,F18                                                                            |
| 10005-12        | 130K 1/8W 1%       | B64                                                                                                                                                           | 10005-74        | 576K 1/8W 1%       | B19                                                                                   |
| 10005-21        | 162K 1/8W 1%       | B36                                                                                                                                                           | 10003-30        | 2K 1/8W 1%         | B48,D40,D41<br>F43                                                                    |
| 10005-03        | 105K 1/8W 1%       | B56                                                                                                                                                           |                 |                    |                                                                                       |
|                 |                    |                                                                                                                                                               |                 | <u>CAPACITORS</u>  |                                                                                       |
| 10429-25        | 100 Ohm 1/4W 2%    | A15,A22,D5<br>F9                                                                                                                                              | 10087-39        | .39uF 50V          | D24                                                                                   |
| 10429-41        | 470 Ohm 1/4W 2%    | H27                                                                                                                                                           | 10062-12        | 120pF 500V         | B20                                                                                   |
| 10429-56        | 2K 1/4W 2%         | A47,B65,D13<br>D17,D20,D22<br>D33,D54,D59<br>D69,F16,F22<br>F24,F28,F31<br>F32,F44,F47<br>F50,F55,F69<br>H23,H32,H38<br>H41,H42,H44<br>H63,H67,H70<br>H71,H74 | 10062-91        | 910pF 500V         | B60                                                                                   |
|                 |                    |                                                                                                                                                               | 10061-75        | 75pF 500V          | G16                                                                                   |
|                 |                    |                                                                                                                                                               | 10070-15        | .0015uF 200V       | B54                                                                                   |
|                 |                    |                                                                                                                                                               | 13061           | .01uF 80V 2%       | B50,B62,D38<br>D62,F38,F41<br>F62,F63                                                 |
| 10429-66        | 5.1K 1/4W 2%       | H11                                                                                                                                                           | 10086-10        | .1uF 50V           | C16,C28,C40<br>C50,E14,E28<br>E39,E50,F6<br>G15,G26,G38<br>G50,G63,H16<br>H28         |
| 10429-68        | 6.2K 1/4W 2%       | A14,A25,A66<br>A72,B34,B42<br>D11,D15,D27<br>D71,F15,F46<br>F49,F54,F57<br>H40,H69,H73                                                                        | 10076-68        | 6.8uF 35V          | F7,H5,H22<br>H29                                                                      |

| <u>PART NO.</u>    | <u>DESCRIPTION</u>  | <u>LOCATION(S)</u>                                                                                                        |
|--------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------|
| <u>CAPACITORS</u>  |                     |                                                                                                                           |
| 10071-10           | .01uF 80V           | B5,B27                                                                                                                    |
| 10061-39           | 39pF 500V           | F12                                                                                                                       |
| <u>DIODES</u>      |                     |                                                                                                                           |
| 10160              | 1N4454              | A21,A40,A41<br>A67,A71,B6<br>B9,B26,B33<br>B41,D10,D12<br>D16,D25,D72<br>F14,F27,F45<br>F48,F51,F56<br>H20,H39,H68<br>H72 |
| 13009-34           | 6.2V Zener, 1N5234B | B21,B22,B37<br>B38                                                                                                        |
| <u>TRANSISTORS</u> |                     |                                                                                                                           |
| 13013              | 2N4401              | E6                                                                                                                        |
| 13070              | PN3644              | A18,A28                                                                                                                   |
| <u>LC.'s</u>       |                     |                                                                                                                           |
| 10136              | 7404                | E60,G60                                                                                                                   |
| 10460              | 7406                | G24,G36                                                                                                                   |
| 10120              | 7426                | G48,G72                                                                                                                   |
| 10167              | 1741                | E12                                                                                                                       |
| 13072              | 747C                | C60                                                                                                                       |
| 10190              | 8041                | A12,A32,A60<br>C72                                                                                                        |
| 13060              | 1408                | G12                                                                                                                       |
| 10168              | 319                 | E24,E36,E48<br>E72                                                                                                        |
| 10165              | 747C                | C12,C24,C36<br>C48                                                                                                        |

## SECTION IL5

40525-10 CARRIAGE POWER AMP. PCB ASSEMBLY, STANDARD  
(see notes)

| <u>PART NO.</u> | <u>DESCRIPTION</u>       | <u>LOCATION(S)</u>                                                                                           | <u>PART NO.</u> | <u>DESCRIPTION</u>           | <u>LOCATION(S)</u> |
|-----------------|--------------------------|--------------------------------------------------------------------------------------------------------------|-----------------|------------------------------|--------------------|
|                 | <u>RESISTORS</u>         |                                                                                                              |                 | <u>RESISTORS</u>             |                    |
| 10042-20        | 200 Ohm 1W 5%            | G54,G67                                                                                                      | 10429-89        | 47K 1/4W 2%                  | A18,A29,B30        |
| 13033           | .1 Ohm 2W 5%,<br>Fusible | G37,G39                                                                                                      | 10429-92        | 62K 1/4W 2%                  | F32,G16            |
| 10059-01        | .1 Ohm 3W 1%             | C53                                                                                                          | 10430-01        | 100K 1/4W 2%                 | B10                |
| 10059-10        | 1 Ohm 1W 1%              | G24,G26                                                                                                      | 10429-90        | 51K 1/4W 2%                  | A55                |
| 10042-30        | 300 Ohm 1W 5%            | F59,G44                                                                                                      | 10002-01        | 100 Ohm 1/8W 1%              | B74                |
| 10432-33        | 220 Ohm 1/2W 2%          | D4,D33                                                                                                       | 10004-01        | 10K 1/8W 1%                  | B51,F27,G20        |
| 10432-49        | 1K 1/2W 2%               | A9,A11                                                                                                       | 10005-58        | 392K 1/8W 1%                 | G18,G19            |
| 10432-29        | 150 Ohm 1/2W 2%          | D12,D27                                                                                                      | 10005-69        | 511K 1/8W 1%                 | B54                |
| 10432-58        | 2.4K 1/2W 2%             | A35,B32                                                                                                      | 10002-93        | 909 Ohm 1/8W 1%              | B73                |
| 10429-25        | 100 Ohm 1/4W 2%          | A56,B53,D10<br>D11,E47,E62<br>F52,F68                                                                        | 10026-10        | 1M 1/4W 5%                   | F26,G15            |
| 10429-41        | 470 Ohm 1/4W 2%          | B6                                                                                                           | 10429-84        | 30K 1/4W 2%                  | B33                |
| 10429-42        | 510 Ohm 1/4W 2%          | C14,C18,E14<br>E19                                                                                           |                 | <u>CAPACITORS</u>            |                    |
| 10429-49        | 1K 1/4W 2%               | A62,B27,B28<br>B34,B44,C59<br>D46,G10,G35                                                                    | 10062-12        | 120pF 500V                   | D43,G55            |
| 10429-53        | 1.5K 1/4W 2%             | E72                                                                                                          | 10062-82        | 820pF 300V                   | A44                |
| 10429-56        | 2K 1/4W 2%               | A26,A27,A34<br>A45,C41,C58<br>D9,D44,D72<br>D76,E54,E73<br>E74,F4,F6<br>F7,F56,F70<br>G56,G57,G69<br>G70,G71 | 10070-15        | .0015uF 200V                 | G75                |
| 10429-60        | 3K 1/4W 2%               | B14                                                                                                          | 10070-47        | .0047uF 80V                  | A63                |
| 10429-65        | 4.7K 1/4W 2%             | A28,B18,B29                                                                                                  | 13059-01        | .1uF 50V                     | A15,B2,B71         |
| 10429-66        | 5.1K 1/4W 2%             | B47,D75,F75<br>F76                                                                                           | 13059-03        | .22uF 50V                    | F35,G12            |
| 10429-67        | 5.6K 1/4W 2%             | A14,A17,B35<br>B50                                                                                           | 13036           | 3uF 100V                     | E37                |
| 10429-73        | 10K 1/4W 2%              | A24,A58,B31                                                                                                  | 10076-68        | 6.8uF 35V                    | A22,G6             |
| 10429-79        | 18K 1/4W 2%              | F28,G17                                                                                                      | 10205-22        | 22uF 35V                     | G22,G32            |
| 10429-80        | 20K 1/4W 2%              | A13                                                                                                          | 10071-10        | .01uF 80V                    | C15                |
| 10429-85        | 33K 1/4W 2%              | B17                                                                                                          | 10061-10        | 10pF 500V                    | A51,B59            |
|                 |                          |                                                                                                              |                 | <u>DIODES</u>                |                    |
|                 |                          |                                                                                                              | 10103-05        | 5V Zener, 1N4733             | B5                 |
|                 |                          |                                                                                                              | 100138-01       | 11V Zener,<br>(Diablo Spec.) | A7,B7              |
|                 |                          |                                                                                                              | 13009-31        | 5.1V Zener, 1N5231B          | G52,G68            |

| <u>PART NO.</u> | <u>DESCRIPTION</u>       | <u>LOCATION(S)</u>                                                                                                               | <u>PART NO.</u> | <u>DESCRIPTION</u>                                                                       | <u>LOCATION(S)</u>                       |
|-----------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------|------------------------------------------|
|                 | <u>DIODES</u>            |                                                                                                                                  |                 | <u>MISCELLANEOUS</u>                                                                     |                                          |
| 10160           | 1N4454                   | A8,A12,A19<br>A20,A25,A32<br>A33,A37,A38<br>A59,A60,B8,B9<br>B19,B20,B25<br>B26,B36,B37<br>B46,C67,E75<br>E76,F72,F73<br>F74,G72 | 70111-07        | Screw, 4-40 X .4375                                                                      | (To mount<br>Heat Sink)                  |
|                 |                          |                                                                                                                                  | 70812           | Insulator                                                                                | (Between<br>transistor<br>and Heat Sink) |
|                 |                          |                                                                                                                                  | 70813           | Insulator                                                                                | (Transistor<br>mount screws)             |
| 10369           | 1N4002                   | C13,C19,E13<br>E20                                                                                                               | 70111-04        | Screw, 4-40 X .250                                                                       | (Transistor<br>mounting)                 |
| 10424-01        | 1N5807                   | E48,E63                                                                                                                          | 22753           | Jumper, Lead Module                                                                      | D73                                      |
| 13054           | 1N5415                   | E53,E67                                                                                                                          |                 |                                                                                          |                                          |
|                 | <u>TRANSISTORS</u>       |                                                                                                                                  |                 | Notes:                                                                                   |                                          |
| 13070           | PN3644                   | C34,D15,D22<br>D45,D59,E77<br>G58,G73                                                                                            | (1)             | Thermal compound #10549 required between<br>power transistors, insulators and Heat Sink. |                                          |
|                 |                          |                                                                                                                                  | (2)             | Etch -08.                                                                                |                                          |
| 13013           | 2N4401                   | A30,A47,B12<br>B13,B16,B22<br>B23,C36,D18<br>D24,D42,E56<br>E70r                                                                 |                 |                                                                                          |                                          |
| 10443-01        | 2N5320                   | E51,E65                                                                                                                          |                 |                                                                                          |                                          |
| 10444-01        | 2N5322                   | E44,E60                                                                                                                          |                 |                                                                                          |                                          |
| 10445-01        | 2N6103                   | D48,D63,F47<br>F63                                                                                                               |                 |                                                                                          |                                          |
| 13063           | TIP41A                   | C20,E21                                                                                                                          |                 |                                                                                          |                                          |
| 13064           | TIP42A                   | C12,E12                                                                                                                          |                 |                                                                                          |                                          |
|                 | <u>LC.'s</u>             |                                                                                                                                  |                 |                                                                                          |                                          |
| 10165           | 72747                    | B62,F18                                                                                                                          |                 |                                                                                          |                                          |
| 10166           | 748                      | A50,B55                                                                                                                          |                 |                                                                                          |                                          |
| 100300-01       | Resistor Network,<br>10K | A74,A75                                                                                                                          |                 |                                                                                          |                                          |
|                 | <u>MISCELLANEOUS</u>     |                                                                                                                                  |                 |                                                                                          |                                          |
| 10626-00        | Switch, Toggle           | A42                                                                                                                              |                 |                                                                                          |                                          |
| 22819           | Tab, 187 Series          | B75,C75                                                                                                                          |                 |                                                                                          |                                          |
| 24376-01        | Heat Sink                | (Mounted to<br>PCB)                                                                                                              |                 |                                                                                          |                                          |
| 70373-10        | Standoff                 | (Between<br>Heat Sink<br>and PCB)                                                                                                |                 |                                                                                          |                                          |

## SECTION IL6

## 40515-04 TRANSDUCER PCB ASSEMBLY, STANDARD

| <u>PART NO.</u> | <u>DESCRIPTION</u>      | <u>LOCATION(S)</u>                                                                                                                                                                                           | <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>LOCATION(S)</u>                                                     |
|-----------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|------------------------------------------------------------------------|
|                 | <u>RESISTORS</u>        |                                                                                                                                                                                                              |                 | <u>RESISTORS</u>   |                                                                        |
| 10059-01        | .1 Ohm 3W 1%            | G45,G50                                                                                                                                                                                                      | 10004-79        | 64.9K 1/8W 1%      | B43,C32,C43<br>D32,D43                                                 |
| 10031-82        | 82 Ohm 1/2W 5%          | G12,G20                                                                                                                                                                                                      | 10005-01        | 100K 1/8W 1%       | B42,C30,C42<br>D30,D42                                                 |
| 10020-27        | 2.7 Ohm 1/4W 5%         | E30,E40,G47                                                                                                                                                                                                  | 10003-69        | 5.11K 1/8W 1%      | A31,A32,A42<br>A43                                                     |
| 100399-01       | 10 Ohm 1W 5%<br>Fusible | F50,F51,G1                                                                                                                                                                                                   | 10003-01        | 1K 1/8W 1%         | J4,J18,J30<br>J39                                                      |
| 10429-23        | 82 Ohm 1/4W 2%          | G15,G18                                                                                                                                                                                                      | 10003-04        | 1.07K 1/8W 1%      | J16,J24,J26<br>J29,J32,J41<br>J45,J47                                  |
| 10429-25        | 100 Ohm 1/4W 2%         | A51,B29,D26<br>D51                                                                                                                                                                                           | 10003-14        | 1.37K 1/8W 1%      | J6,J12,J14<br>J20,J21,J34<br>J35,J43                                   |
| 10429-32        | 200 Ohm 1/4W 2%         | A50,B31,D27<br>D50                                                                                                                                                                                           |                 |                    |                                                                        |
| 10429-39        | 390 Ohm 1/4W 2%         | G14,G19                                                                                                                                                                                                      |                 |                    |                                                                        |
| 10429-41        | 470 Ohm 1/4W 2%         | H44                                                                                                                                                                                                          |                 |                    |                                                                        |
| 10429-61        | 3.3K 1/4W 2%            | G31,G34,G35<br>H31,J5,J7<br>J9,J11,J13<br>J15,J17,J19<br>J23,J27,J31<br>J33,J37,J40<br>J44,J46                                                                                                               |                 | <u>CAPACITORS</u>  |                                                                        |
| 10429-90        | 51K 1/4W 2%             | E32,E34,E42<br>E44,E46                                                                                                                                                                                       | 10061-27        | 27pF 500V          | E31,E33,E41<br>E43,E45                                                 |
| 10429-37        | 330 Ohm 1/4W 2%         | A29,A40                                                                                                                                                                                                      | 10061-75        | 75pF 500V          | A30,A41                                                                |
| 10429-49        | 1K 1/4W 2%              | A9,A10,A11<br>A12,A18,A19<br>A20,A21,A52<br>B30,C12,C23<br>C27,D6,D7,D11<br>D12,D17,D18<br>D22,D23,D52<br>E6,E12,E13<br>E17,E23,E24<br>E29,F5,F6<br>F12,F13,F15<br>F17,F23,F24<br>F30,F32,F40<br>F42,F44,G36 | 10062-10        | 100pF 500V         | E35,E36,E37<br>E38,E39                                                 |
|                 |                         |                                                                                                                                                                                                              | 10062-15        | 150pF 500V         | A8,A22,D9<br>D20,F9,F20                                                |
|                 |                         |                                                                                                                                                                                                              | 10062-91        | 910pF 100V         | A7,A13,A16<br>A23,B24,C5<br>C10,C16,E5<br>E10,E16,E21                  |
|                 |                         |                                                                                                                                                                                                              | 10070-22        | .0022uF 80V        | G3,G5,G7,G9                                                            |
|                 |                         |                                                                                                                                                                                                              | 10076-68        | 6.8uF 35V          | B40,G11,G51<br>J50                                                     |
|                 |                         |                                                                                                                                                                                                              | 10410-22        | 22uF 15V           | F38,H25                                                                |
|                 |                         |                                                                                                                                                                                                              | 10071-10        | .01uF 80V          | A27,A39                                                                |
| 10430-01        | 100K 1/4W 2%            | G30,G32,G40<br>G42,G44                                                                                                                                                                                       | 10038-01        | .1uF 50V           | B27,C35,C39<br>C45,C46,D5<br>D13,D16,D24<br>E27,F28,G29<br>G39,H13,J49 |
| 10004-58        | 39.2K 1/8W 1%           | B41,C29,C40<br>D29,D40                                                                                                                                                                                       |                 |                    |                                                                        |
| 10003-33        | 2.15K 1/8W 1%           | J8,J10,J22<br>J25,J28,J36<br>J42,J48                                                                                                                                                                         |                 |                    |                                                                        |



| <u>PART NO.</u>      | <u>DESCRIPTION</u> | <u>LOCATION(S)</u> |
|----------------------|--------------------|--------------------|
| <u>DIODES</u>        |                    |                    |
| 10329                | 6.8V Zener, 1N4736 | G16,G17            |
| <u>TRANSISTORS</u>   |                    |                    |
| 10443-01             | 2N5320             | F14                |
| 10444-01             | 2N5322             | F25                |
| 13013                | 2N4401             | B33,B45,D34<br>D45 |
| 13070                | PN3644             | B36,B48,D36<br>D48 |
| <u>LC.'s</u>         |                    |                    |
| 10136                | 7404               | H12                |
| 10125                | 7420               | H30                |
| 10460                | 7406               | H6,H18,H36<br>H42  |
| 10191                | 74195              | H24,H48            |
| 10303-01             | 7486               | F36,F48            |
| 10165                | 72747              | A36,A48,C36<br>C48 |
| 10124                | 733                | B10,B21,D10<br>D21 |
| 10168                | 319                | F10,F21            |
| <u>MISCELLANEOUS</u> |                    |                    |
| 13019-13             | Connector, 14-pin  | J8                 |

## SECTION IL7

40730-10 PRINT WHEEL POWER AMP. PCB ASSEMBLY, 1650  
(see notes)

| <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>LOCATION(S)</u>                                                                                          | <u>PART NO.</u> | <u>DESCRIPTION</u>       | <u>LOCATION(S)</u> |
|-----------------|--------------------|-------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|--------------------|
|                 | <u>RESISTORS</u>   |                                                                                                             |                 | <u>RESISTORS</u>         |                    |
| 10059-01        | .1 Ohm 3W 1%       | G23,H23                                                                                                     | 10004-01        | 10K 1/8W 1%              | A25,F67,F75        |
| 10429-01        | 10 Ohm 1/4W 2%     | A55,G73,G74                                                                                                 | 10004-30        | 20K 1/8W 1%              | D68,D75            |
| 10429-25        | 100 Ohm 1/4W 2%    | A7,A34,B45<br>C31,D8,D24<br>F14,F30                                                                         | 10004-43        | 27.4K 1/8W 1%            | D67,D74            |
| 10429-37        | 330 Ohm 1/4W 2%    | D46,D62,E46<br>E62                                                                                          | 10003-90        | 8.45K 1/8W 1%            | B40                |
| 10429-41        | 470 Ohm 1/4W 2%    | C36,C63,C64<br>G57,G63,G64<br>G70,H49,H71                                                                   | 13107           | .5 Ohm 5W 1%             | C57                |
| 10429-49        | 1K 1/4W 2%         | B29,B43,B58<br>C7,C23,C60<br>F36,G71,G72<br>H46,H48,H63<br>H64,H65,H70                                      | 10430-18        | 510K 1/8W 2%             | C30                |
| 10429-56        | 2K 1/4W 2%         | B57,B60,B63<br>C6,C14,C17<br>C18,C22,C34<br>C52,D14,D31<br>F19,F37,F38<br>F39,G17,G18<br>G34,G35,G53<br>H51 | 10429-42        | 510 Ohm 1/4W 2%          | F34                |
| 10004-58        | 39.2K 1/8W 1%      | B39,C41                                                                                                     | 10032-68        | 680 Ohm 1/2W 5%          | G59                |
| 10429-57        | 2.2K 1/4W 2%       | D70,F71                                                                                                     | 10033-12        | 1.2K 1/2W 5%             | E47,E48,E63<br>E64 |
| 10429-66        | 5.1K 1/4W 2%       | B59,C16,D34<br>G40,G41                                                                                      | 10042-30        | 300 Ohm 1W 5%            | G3,G21             |
| 10429-73        | 10K 1/4W 2%        | A21,A24,B61<br>D69,D73,G51                                                                                  | 10042-20        | 200 Ohm 1W 5%            | G14,G30            |
| 10003-51        | 3.32K 1/8W 1%      | B51                                                                                                         | 10031-82        | 82 Ohm 1/2W 5%           | G75                |
| 10430-08        | 200K 1/4W 2%       | F68,F74                                                                                                     | 13033           | .1 Ohm 2W 5%,<br>Fusible | H44,H55            |
| 10429-90        | 51K 1/4W 2%        | A13                                                                                                         |                 | <u>CAPACITORS</u>        |                    |
| 10429-84        | 30K 1/4W 2%        | B62                                                                                                         | 10062-12        | 120pF 500V               | C5,G16             |
| 10430-01        | 100K 1/4W 2%       | C62                                                                                                         | 10062-56        | 560pF 300V               | B44,E75,F66        |
| 10003-60        | 4.12K 1/8W 1%      | B41                                                                                                         | 10070-15        | .0015uF 200V             | G32                |
| 10001-01        | 10 Ohm 1/8W 1%     | C48,C49                                                                                                     | 10070-22        | .0022uF 80V              | A22,E50,E66        |
| 10002-01        | 100 Ohm 1/8W 1%    | B47                                                                                                         | 10071-22        | .022uF 80V               | A71                |
| 10002-83        | 715 Ohm 1/8W 1%    | A33                                                                                                         | 10086-10        | .1uF 50V                 | B31,C38            |
|                 |                    |                                                                                                             | 13069           | 1uF 50V                  | C68,D72            |
|                 |                    |                                                                                                             | 10086-47        | .47uF 50V                | A56                |
|                 |                    |                                                                                                             | 10205-22        | 22uF 35V                 | J50,J61            |
|                 |                    |                                                                                                             | 13036           | 3uF 100V                 | E18                |
|                 |                    |                                                                                                             | 10076-68        | 6.8uF 35V                | J73                |
|                 |                    |                                                                                                             | 10062-82        | 820pF 300V               | C21                |
|                 |                    |                                                                                                             | 10070-33        | .0033uF 80V              | B30                |
|                 |                    |                                                                                                             | 10061-10        | 10pF 500V                | A30                |

| <u>PART NO.</u> | <u>DESCRIPTION</u>              | <u>LOCATION(S)</u>                                                                                | <u>PART NO.</u> | <u>DESCRIPTION</u>                                                                    | <u>LOCATION(S)</u>                 |
|-----------------|---------------------------------|---------------------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------|------------------------------------|
|                 | <u>DIODES</u>                   |                                                                                                   |                 | <u>MISCELLANEOUS</u>                                                                  |                                    |
| 10160           | 1N4454                          | B17,B42,B50<br>B52,B55,C15<br>C39,C40,C50<br>C51,F40,F41<br>G36,G37,G38<br>G39,G65,G66<br>H47,H53 | 24376-02        | Heat Sink                                                                             | (Mounted to PCB)                   |
|                 |                                 |                                                                                                   | 70373-10        | Standoff                                                                              | (Between Heat Sink and PCB)        |
| 10369           | 1N4002                          | C55,D45,D61<br>E45,E55,E61<br>G61,G62                                                             | 70111-07        | Screw, 4-40 X .4375                                                                   | (To mount Heat Sink)               |
| 13009-31        | 5.1V Zener 1N5231B              | F69,F70,F72<br>F73,H16,H31                                                                        | 70111-04        | Screw, 4-40 X .250                                                                    | (Transistor mounting)              |
| 13054           | 1N5415                          | E10,E11,E26<br>E27                                                                                | 70813           | Insulator                                                                             | (Transistor mount screws)          |
| 13009-34        | 6.2V Zener, 1N5234B<br>(Note 2) | C37                                                                                               | 70812           | Insulator                                                                             | (Between transistor and Heat Sink) |
| 13108           | 5.1V Zener, 1N5338A             | F55                                                                                               |                 | Notes:                                                                                |                                    |
|                 | <u>TRANSISTORS</u>              |                                                                                                   | (1)             | Thermal compound #10549 required between power transistors, insulators and Heat Sink. |                                    |
| 13070           | PN3644                          | C44,D5,D21<br>D43,D50,D64<br>E35,E58,G67<br>H18,H35,H50<br>H67                                    | (2)             | Part number 10103-02 may be substituted if 13009-34 is not available.                 |                                    |
| 13013           | 2N4401                          | C4,C19,C65<br>F16,F32,F45<br>F48,F58,F64<br>G47,H61                                               |                 |                                                                                       |                                    |
| 10444-01        | 2N5322                          | E6,E22                                                                                            |                 |                                                                                       |                                    |
| 10443-01        | 2N5320                          | E14,E30,H59                                                                                       |                 |                                                                                       |                                    |
| 10445-01        | 2N6103                          | C10,C26,G10<br>G26                                                                                |                 |                                                                                       |                                    |
| 13007           | TIP125                          | C73                                                                                               |                 |                                                                                       |                                    |
|                 | <u>LC.'s</u>                    |                                                                                                   |                 |                                                                                       |                                    |
| 10165           | 72747                           | A45,E74                                                                                           |                 |                                                                                       |                                    |
| 10166           | 748                             | A19,A31                                                                                           |                 |                                                                                       |                                    |
| 10168           | 319                             | A64                                                                                               |                 |                                                                                       |                                    |
| 100300-01       | Resistor Network,<br>10K        | A50,A51                                                                                           |                 |                                                                                       |                                    |
|                 | <u>MISCELLANEOUS</u>            |                                                                                                   |                 |                                                                                       |                                    |
| 10626-00        | Switch, Toggle                  | A36,A67                                                                                           |                 |                                                                                       |                                    |
| 22753           | Jumper Module                   | D33                                                                                               |                 |                                                                                       |                                    |

## SECTION IL8

40530-10 PRINT WHEEL POWER AMP. PCB ASSEMBLY, 1640  
(see notes)

| <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>LOCATION(S)</u>                                                                                              | <u>PART NO.</u> | <u>DESCRIPTION</u>       | <u>LOCATION(S)</u> |
|-----------------|--------------------|-----------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|--------------------|
|                 | <u>RESISTORS</u>   |                                                                                                                 |                 | <u>RESISTORS</u>         |                    |
| 10429-01        | 10 Ohm 1/4W 2%     | G73,G74                                                                                                         | 10004-43        | 27.4K 1/8W 1%            | D67,D74,F67<br>F75 |
| 10429-25        | 100 Ohm 1/4W 2%    | A7,A34,A55<br>B45,C31,D8<br>D24,F14,F30                                                                         | 10003-90        | 8.45K 1/8W 1%            | B40                |
| 10429-37        | 330 Ohm 1/4W 2%    | D46,D62,E46<br>E62                                                                                              | 13038           | 1 Ohm 3W 1%              | C57,H23            |
| 10429-41        | 470 Ohm 1/4W 2%    | C36,C63,C64<br>G57,G63,G64<br>G70,H49,H71                                                                       | 10032-68        | 680 Ohm 1/2W 5%          | G59                |
| 10429-49        | 1K 1/4W 2%         | B43,B58,C7<br>C23,F36,G71<br>G72,H46,H48<br>H63,H64,H65<br>H70                                                  | 10033-12        | 1.2K 1/2W 5%             | E47,E48,E63<br>E64 |
| 10429-56        | 2K 1/4W 2%         | B57,B60,B63<br>C6,C14,C17<br>C18,C22,C34<br>C52,D14,D31<br>F19,F34,F37<br>F38,F39,G17<br>G18,G34,G35<br>G53,H51 | 10042-30        | 300 Ohm 1W 5%            | G3,G21             |
|                 |                    |                                                                                                                 | 10042-20        | 200 Ohm 1W 5%            | G14,G30            |
|                 |                    |                                                                                                                 | 10031-82        | 82 Ohm 1/2W 5%           | G75                |
|                 |                    |                                                                                                                 | 13012           | 1 Ohm 2W 5%,<br>Fusible  | C55                |
|                 |                    |                                                                                                                 | 13033           | .1 Ohm 2W 5%,<br>Fusible | H44,H55            |
|                 |                    |                                                                                                                 | 10429-84        | 30K 1/4W 2%              | B62                |
|                 |                    |                                                                                                                 |                 | <u>CAPACITORS</u>        |                    |
| 10004-41        | 26.1K 1/8W 1%      | C41                                                                                                             | 10062-12        | 120pF 500V               | C5,G16             |
| 10429-57        | 2.2K 1/4W 2%       | D70,F71                                                                                                         | 10062-56        | 560pF 300V               | B44                |
| 10429-66        | 5.1K 1/4W 2%       | B59,C16,G40<br>G41,D34                                                                                          | 10070-15        | .0015uF 200V             | G32                |
| 10429-73        | 10K 1/4W 2%        | A21,A24,B61<br>D69,D73,G51                                                                                      | 10070-22        | .0022uF 80V              | A22,E50,E66        |
| 10004-47        | 30.1K 1/8W 1%      | B39                                                                                                             | 10071-22        | .022uF 80V               | A71                |
| 10003-69        | 5.11K 1/8W 1%      | B51                                                                                                             | 10086-10        | .1uF 50V                 | B31,C38            |
| 10430-08        | 200K 1/4W 2%       | F68,F74                                                                                                         | 10086-47        | .47uF 50V                | A56                |
| 10429-90        | 51K 1/4W 2%        | A13,C30                                                                                                         | 10205-22        | 22uF 35V                 | J50,J61            |
| 10026-51        | 5.1M 1/4W 5%       | C62                                                                                                             | 13036           | 3uF 100V                 | E18                |
| 10003-60        | 4.12K 1/8W 1%      | B41                                                                                                             | 10076-68        | 6.8uF 35V                | J73                |
| 10001-01        | 10 Ohm 1/8W 1%     | C48,C49                                                                                                         | 10062-82        | 820pF 300V               | C21                |
| 10002-01        | 100 Ohm 1/8W 1%    | B47                                                                                                             | 10061-10        | 10pF 500V                | A30                |
| 10003-18        | 1.5K 1/8W 1%       | A33                                                                                                             |                 |                          |                    |
| 10004-01        | 10K 1/8W 1%        | A25,C60                                                                                                         |                 |                          |                    |

| <u>PART NO.</u> | <u>DESCRIPTION</u>       | <u>LOCATION(S)</u>                                                                                | <u>PART NO.</u> | <u>DESCRIPTION</u>   | <u>LOCATION(S)</u>                 |
|-----------------|--------------------------|---------------------------------------------------------------------------------------------------|-----------------|----------------------|------------------------------------|
|                 | <u>DIODES</u>            |                                                                                                   |                 | <u>MISCELLANEOUS</u> |                                    |
| 10160           | 1N4454                   | B17,B42,B50<br>B52,B56,C15<br>C39,C40,C50<br>C51,F40,F41<br>G36,G37,G38<br>G39,G65,G66<br>H47,H53 | 22753           | Jumper Module        | G23,D33                            |
|                 |                          |                                                                                                   | 10626-00        | Switch, Toggle       | A36,A67                            |
|                 |                          |                                                                                                   | 24376-02        | Heat Sink            | (Mounted to PCB)                   |
| 10369           | 1N4002                   | D45,D61,E45<br>E55,E61,G61<br>G62                                                                 | 70373-10        | Standoff             | (Between Heat Sink and PCB)        |
| 13009-31        | 5.1V Zener, 1N5231B      | F69,F70,F72<br>F73,H16,H31                                                                        | 70111-07        | Screw, 4-40 X .4375  | (To mount Heat Sink)               |
| 13054           | 1N5415                   | E10,E11,E26<br>E27                                                                                | 70111-04        | Screw, 4-40 X .250   | (Transistor mounting)              |
| 10103-02        | 6.2V Zener               | C37                                                                                               | 70813           | Insulator            | (Transistor mount screws)          |
|                 | <u>TRANSISTORS</u>       |                                                                                                   | 70812           | Insulator            | (Between transistor and Heat Sink) |
| 13070           | PN3644                   | C44,D5,D21<br>D43,D50,D58<br>D64,E35,G67<br>H18,H35,H50<br>H67                                    |                 |                      |                                    |
| 13013           | 2N4401                   | C4,C19,C65<br>E58,F16,F32<br>F45,F48,F64<br>G47,H61                                               |                 |                      |                                    |
| 10444-01        | 2N5322                   | E6,E22                                                                                            |                 |                      |                                    |
| 10443-01        | 2N5320                   | E14,E30,H59                                                                                       |                 |                      |                                    |
| 10445-01        | 2N6103                   | C10,C26,G10<br>G26                                                                                |                 |                      |                                    |
| 13007           | TIP125                   | C73                                                                                               |                 |                      |                                    |
|                 | <u>LC's</u>              |                                                                                                   |                 |                      |                                    |
| 10165           | 72747                    | A45,E74                                                                                           |                 |                      |                                    |
| 10166           | 748                      | A19,A31                                                                                           |                 |                      |                                    |
| 10168           | 319                      | A64                                                                                               |                 |                      |                                    |
| 100300-01       | Resistor Network,<br>10K | A50,A51                                                                                           |                 |                      |                                    |

Notes:

- (1) Thermal compound #10549 required between power transistors, insulators and Heat Sink.

HPR & 4 ROM

100318-02

XPN 547N321

SECTION IL9

00568-01 H4CPN PCB ASSEMBLY

|           |                         | <u>LOCATION(S)</u>                                     | <u>PART NO.</u> | <u>DESCRIPTION</u>         | <u>LOCATION(S)</u>                                             |
|-----------|-------------------------|--------------------------------------------------------|-----------------|----------------------------|----------------------------------------------------------------|
|           |                         |                                                        |                 | <u>MISCELLANEOUS</u>       |                                                                |
|           |                         | R2,R3,R4<br>R6,R7,R8<br>R10,R11                        | 42503-01        | Buzzer                     | DS1                                                            |
|           |                         | 3                                                      | 70027-05        | Screw, 2-56 X .312<br>P.H. | DS1                                                            |
|           |                         | 2                                                      | 70168-02        | Lockwasher, #2             | DS1                                                            |
|           |                         |                                                        | 100065-03       | Switch, 4 X SPDT           | S1,S2,S3                                                       |
|           | <u>CAPACITORS</u>       |                                                        | 42501-10        | Switch, SPDT               | S8,S9,S10<br>S11                                               |
| 10038-01  | .1uF 50V                | C2,C3,C4,C5<br>C6,C7,C8                                | 42502-10        | Switch SPDT,<br>Momentary  | S4,S5,S6,S7                                                    |
| 10410-22  | 22uF 15V                | C1                                                     | 14022-03        | Spacer                     | CR1,CR2,CR3<br>CR4,CR5,CR6<br>CR7,CR8,CR9<br>CR10,CR11<br>CR13 |
| 10077-22  | 22uF 35V                | C9                                                     | 70166-02        | Nut, 2-56                  | DS1                                                            |
|           | <u>DIODES</u>           |                                                        |                 |                            |                                                                |
| 10160     | 1N4454                  | CR12                                                   |                 |                            |                                                                |
| 14005-01  | L.E.D. Red              | CR1,CR2,CR3<br>CR4,CR5,CR6<br>CR7,CR8,CR9<br>CR10,CR13 |                 |                            |                                                                |
| 42222-01  | L.E.D. Green            | CR11                                                   |                 |                            |                                                                |
|           | <u>LC's</u>             |                                                        |                 |                            |                                                                |
| 10209-01  | 74LS04                  | U3                                                     |                 |                            |                                                                |
| 10390     | 7416                    | U1,U4                                                  |                 |                            |                                                                |
| 100228-01 | 74LS139                 | U2                                                     |                 |                            |                                                                |
| 42412-01  | 74LS244                 | U6                                                     |                 |                            |                                                                |
| 42407-03  | 8255A                   | U5                                                     |                 |                            |                                                                |
| 10761     | Resistor Network,<br>1K | U7,U8                                                  |                 |                            |                                                                |

## SECTION II10

301153-05/-06 UNIVERSAL POWER SUPPLY PCB ASSEMBLY  
(see notes)

| <u>PART NO.</u> | <u>DESCRIPTION</u> | <u>LOCATION(S)</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>       | <u>LOCATION(S)</u>                               |
|-----------------|--------------------|--------------------|-----------------|--------------------------|--------------------------------------------------|
|                 | <u>RESISTORS</u>   |                    |                 | <u>RESISTORS</u>         |                                                  |
| 10429-01        | 10 Ohm 1/4W 2%     | C32,C133,B25       | 10054-15        | 15K 2W 5%                | B63                                              |
| 10429-18        | 51 Ohm 1/4W 2%     | C132               | 10054-22        | 22K 2W 5%                | C3                                               |
| 10429-23        | 82 Ohm 1/4W 2%     | C33                | 10054-33        | 33K 2W 5%                | C10,C11                                          |
| 10429-25        | 100 Ohm 1/4W 2%    | A76,C6,C7          | 10055-10        | 100K 2W 5%               | C4                                               |
| 10429-34        | 240 Ohm 1/4W 2%    | C19,C20            | 10041-10        | 10 Ohm 1W 5%             | B56,B64                                          |
| 10429-32        | 200 Ohm 1/4W 2%    | A64,A65,B15        | 10003-01        | 1K 1/8W 1%               | B22,B26                                          |
| 10429-49        | 1K 1/4W 2%         | B24,B28            | 10004-91        | 86.6K 1/8W 1%            | B23                                              |
| 10429-56        | 2K 1/4W 2%         | A77                | 10229-07        | 2K Trimmer               | A71                                              |
| 10429-31        | 180 Ohm 1/4W 2%    | B20                |                 |                          |                                                  |
| 10429-59        | 2.7K 1/4W 2%       | A70                |                 | <u>CAPACITORS</u>        |                                                  |
| 10429-68        | 6.2K 1/4W 2%       | B19                | 100079-01       | .005uF 1.4KV<br>(Note 2) | A1,A2,A38<br>A59                                 |
| 10429-71        | 8.2K 1/4W 2%       | A79                | 100080-01       | .1uF 500V<br>(Note 3)    | A3                                               |
| 10429-73        | 10K 1/4W 2%        | A73,B18,B27<br>B32 | 100088-01       | 480uF 200V               | A5,A25                                           |
| 10429-62        | 3.6K 1/4W 2%       | B33                | 100081-01       | .47uF 400V               | C16                                              |
| 10429-84        | 30K 1/4W 2%        | B16                | 100089-01       | .1uF 50V                 | A61,A118<br>B37,B68<br>B118,B130<br>C1,C130,C134 |
| 10429-95        | 82K 1/4W 2%        | B17                |                 |                          |                                                  |
| 10430-05        | 150K 1/4W 2%       | B31                |                 |                          |                                                  |
| 10430-08        | 200K 1/4W 2%       | A22,A23            | 10062-22        | 220pF 500V               | A62                                              |
| 10026-10        | 1MEG 1/4W 5%       | C23,C18            | 10062-30        | 300pF 500V               | B35                                              |
| 10429-08        | 20 Ohm 1/4W 2%     | A88,B85,C77        | 10029-07        | .0033uF 200V             | A78                                              |
| 10432-05        | 15 Ohm 1/2W 2%     | A66                | 10062-47        | 470pF 500V               | B42                                              |
| 10432-29        | 150 Ohm 1/2W 2%    | C112               | 100090-01       | 100uF 200V               | B50                                              |
| 10432-66        | 5.1K 1/2W 2%       | A120,B120          | 10077-12        | 12uF 20V                 | B61                                              |
| 10432-96        | 91K 1/2W 2%        | B34                | 100082-01       | .01uF 50V                | A92,A93<br>B93,B94<br>C90,C91                    |
| 10059-01        | .1 Ohm 3W 1%       | B40                |                 |                          |                                                  |
| 13012           | 1 Ohm 2W 5%        | A56                | 100084-01       | .05uF 50V                | A87,B88<br>B109,B110<br>C82,C106                 |
| 10029-96        | 91K 1/4W 2%        | B37                |                 |                          |                                                  |
|                 |                    |                    | 10029-05        | .0022uF 200V             | B38                                              |

| <u>PART NO.</u>      | <u>DESCRIPTION</u>         | <u>LOCATION(S)</u>                                       | <u>PART NO.</u>      | <u>DESCRIPTION</u>            | <u>LOCATION(S)</u>                      |
|----------------------|----------------------------|----------------------------------------------------------|----------------------|-------------------------------|-----------------------------------------|
| <u>CAPACITORS</u>    |                            |                                                          | <u>MISCELLANEOUS</u> |                               |                                         |
| 13241-01             | 2200uF 35V                 | A122,B123<br>B126,C115<br>C126                           | 301075-01            | RF Common Mode Transformer    | C122                                    |
| 10029-32             | .01uF 80V                  | B29                                                      | 301071-02            | High Freq Power Transformer   | B70                                     |
| 10086-22             | .22uF 50V                  | A63                                                      | 301072-01            | Saturable Current Transformer | B57                                     |
| <u>DIODES</u>        |                            |                                                          | 301073-01            | High Freq Current Transformer | A86,B83,<br>C80                         |
| 100094-01            | MR 854                     | A55,B39                                                  | 100092-01            | Heat Sink, Transistor         | (Mounted to base)                       |
| 10160                | 1N4454                     | A80,A82,A83<br>A84,B21,B54<br>B55,B59,B60<br>B62,B86,B87 | 70166-66             | Nut, 6-32                     | (To mount transistor to PCB)            |
| 100096-01            | MR 506                     | B1,B2,B3,B4                                              | 70425-06             | Lockwasher, #6                | (Between nut and transistor base)       |
| 100098-01            | 20V Zener, 1N4747A         | A72,C2                                                   | 22819                | Tab, 187 Series               | A6, A9                                  |
| 100099-01            | 5.6V Zener, 1N5232D        | C131                                                     | 100492-04            | Stud, 6-32 X .500 Threaded    | A95,B92,B95                             |
| 100100-01            | R711-XA                    | A95                                                      | 10883-09             | Terminal Block                | A135                                    |
| 100101-01            | R711-X                     | B95                                                      | 70014-04             | Screw, 10-32 X .250           | (To mount capacitor to PCB)             |
| 100102-01            | VSK3020T                   | B92                                                      | 70425-10             | Lockwasher, #10               | (Betw. screw and PCB)                   |
| 10329                | 6.8V Zener, 1N4736A        | A60                                                      | 100105-01            | Opto-Coupler                  | B36                                     |
| 100095-01            | 1N4936                     | C17                                                      | 10589-02             | Fibre Washer                  | (Betw. Heat Sink and PCB)               |
| <u>TRANSISTORS</u>   |                            |                                                          | 22753                | Jumper Module                 | A4,A81,B89                              |
| 100103-01            | MPS-A93                    | C21,C22                                                  | *10377               | SCR 2N6401                    | C135                                    |
| 100106-01            | Transistor Array           | B12                                                      | *70840-10            | Stud, 4-40 X .625 Self-Clinch | (To mount to Heat Sink Plate Assembly.) |
| 100116-01            | 2N6308                     | C35,C52,C64                                              | *70813               | Insulator, Shoulder           | (Between transistor insul/screw)        |
| 100117-01            | TIP49                      | C5,C9,C30                                                | *301157-02           | Heat Sink Plate               | (Mounted to base)                       |
| <u>LC's</u>          |                            |                                                          | *100369-01           | Washer, Shoulder              | (Betw screw and Heat Sink Plate Assy.)  |
| 10321-02             | 723A SEL                   | A67,B30                                                  |                      |                               |                                         |
| <u>MISCELLANEOUS</u> |                            |                                                          |                      |                               |                                         |
| 301269-01            | Ferrite Bead/Wire Assembly | B121,B122                                                |                      |                               |                                         |
| 301070-01            | High Freq Choke 2.8uH      | A40                                                      |                      |                               |                                         |
| 301074-01            | High Freq Choke 10uH       | A112,B112                                                |                      |                               |                                         |
| 301166-01            | High Freq Choke 50uH       | A52                                                      |                      |                               |                                         |



| <u>PART NO.</u>      | <u>DESCRIPTION</u>    | <u>LOCATION(S)</u>                              |
|----------------------|-----------------------|-------------------------------------------------|
| <u>MISCELLANEOUS</u> |                       |                                                 |
| *70166-04            | Nut, 4-40 X .250      | (To mount transistor to Heat Sink Plate)        |
| *70425-04            | Lockwasher, #4        | (Betw. nut and transistor base)                 |
| *10516-04            | Screw, 4-40 X .250    | (To mount transistor to Heat Sink Plate)        |
| *100115-01           | Insulator, Transistor | (Betw. transistor and Heat Sink Plate Assy.)    |
| *301048-12           | Jumper, 115/230VAC    | B1,B2                                           |
| *100114-01           | Insulator, .062 Thk   | (Betw. Heat Sink Plate Assy. and Lockwasher #4) |

**\*NOTE:**

Universal Power Supply PCB Assemblies without the above parts may be obtained by ordering the following part numbers:

301100-05    Universal Power Supply PCB Subassembly,  
115/230VAC Standard  
301100-06    Universal Power Supply PCB Subassembly,  
115/230VAC VDE

**Notes:**

- (1) Thermal compound #10549 required between power transistors, insulators and Heat Sink.
- (2) Not used at A1 and A2 on 301153-06.
- (3) Used on 301153-05 only.

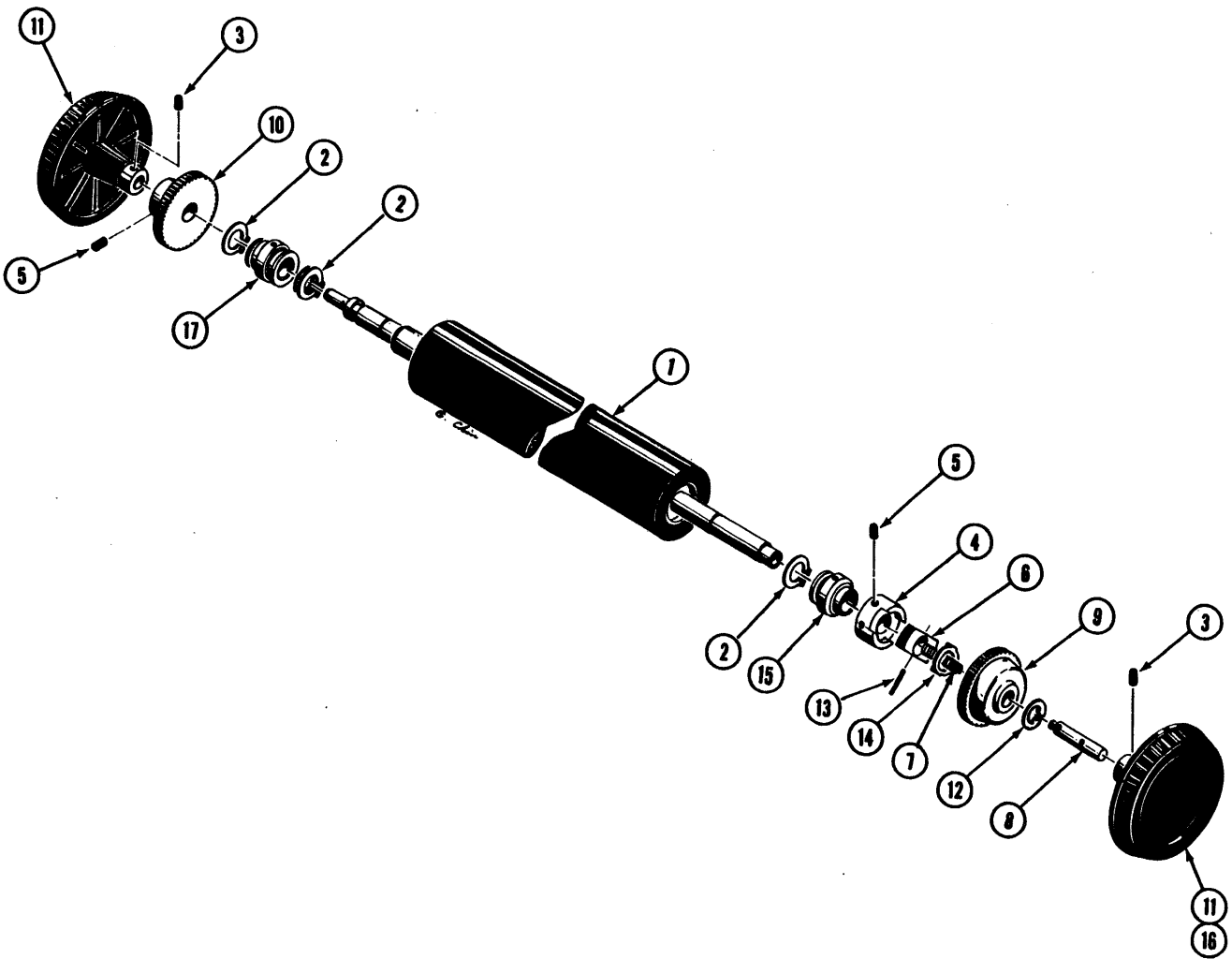


Figure 3-1  
24075-05 FRICTION PLATEN ASSEMBLY

3-0

Rev A (11/80)

## SECTION III.1

24075-05 FRICTION PLATEN ASSEMBLY, STANDARD  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>                  |
|-------------|-----------------|-------------------------------------|
| 1           | 301290-02       | Core Assembly.                      |
| 2           | 70227-06        | Retaining Ring                      |
| 3           | 100357-01       | Setscrew, 8-32 X .187<br>Cone Point |
| 4           | 24413           | Guide Driver (Note 1)               |
| 5           | 100356-01       | Setscrew, 8-32 X .187<br>Cup Point  |
| 6           | 20559           | Driver, Platen (Note 1)             |
| 7           | 20592           | Spring, Compression                 |
| 8           | 24072           | Shaft, Platen Push                  |
| 9           | 20560           | Gear, Drive (Note 1)                |
| 10          | 24288           | Gear, 45T Spur                      |
| 11          | 20498           | Knob                                |
| 12          | 70172-07        | Retaining Ring                      |
| 13          | 40859           | Pin, Driver                         |
| 14          | 40858           | Retainer, Driver Pin                |
| 15          | 320262-01       | Hub, Right, Platen                  |
| 16          | 46103-05        | Label, ID                           |
| 17          | 320273-01       | Hub, Left, Platen                   |

## Notes:

- (1) Items 4, 6, and 9 available as a clutch kit:  
301870-01.

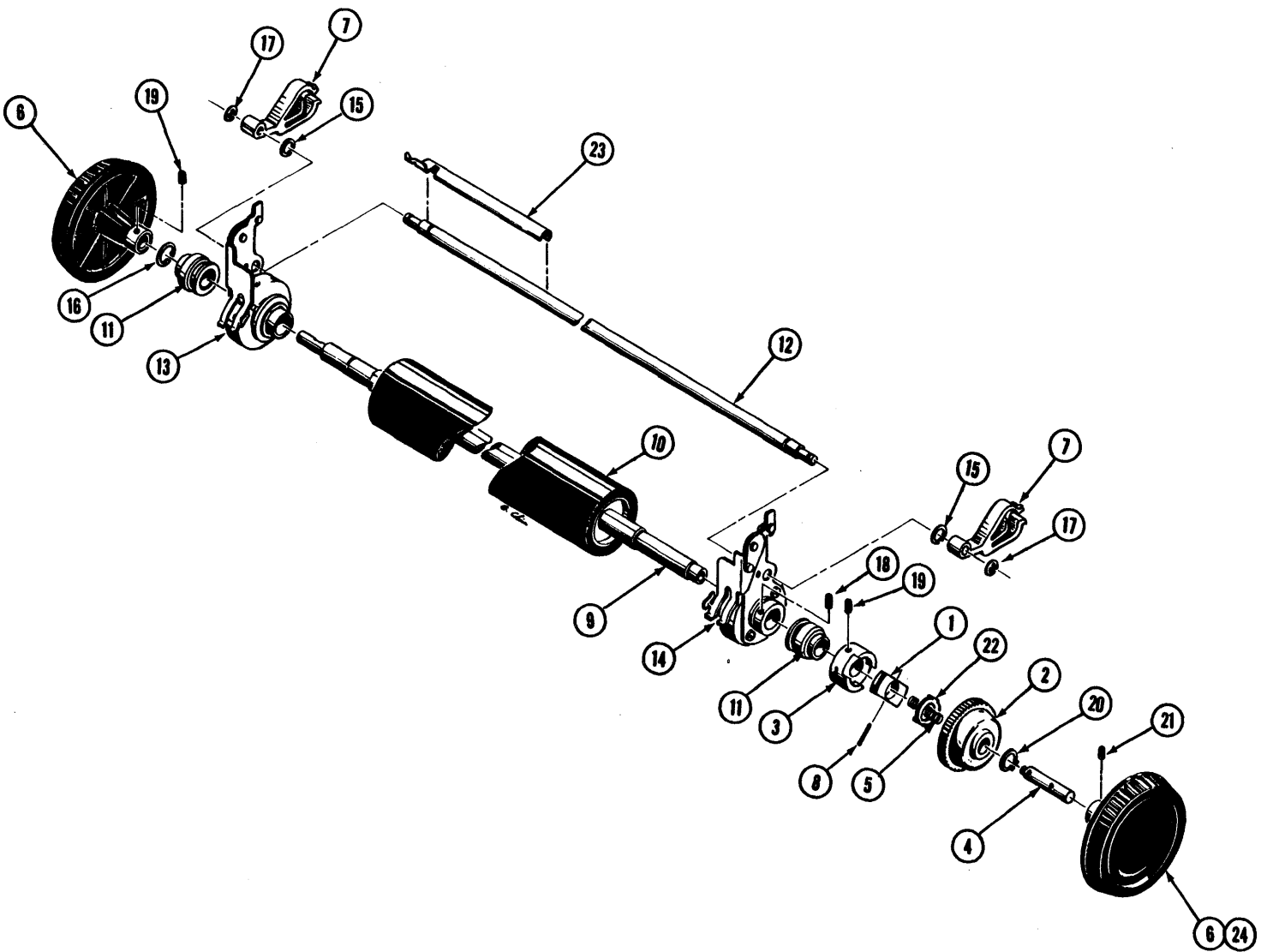


Figure 3-2  
320160-XX PIN FEED PLATEN ASSEMBLY

3-2

Rev A (11/80)

## SECTION III.2

320160-XX PIN FEED PLATEN ASSEMBLY  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>                  |
|-------------|-----------------|-------------------------------------|
| 1           | 20559           | Driver, Platen (Note 2)             |
| 2           | 20560           | Gear, Drive (Note 2)                |
| 3           | 24413           | Guide, Driver (Note 2)              |
| 4           | 24072           | Shaft, Platen Push                  |
| 5           | 20592           | Spring, Compression                 |
| 6           | 20498           | Knob                                |
| 7           | 20704-01        | Clip                                |
| 8           | 40859           | Pin, Driver                         |
| 9           | 22489           | Shaft                               |
| 10          | 22487-XX        | Core Assembly (Note 1)              |
| 11          | 320262-01       | Hub, Platen                         |
| 12          | 24268           | Shaft                               |
| 13          | 320162-01       | Pin Housing Assembly, Left          |
| 14          | 320163-01       | Pin Housing Assembly, Right         |
| 15          | 70172-05        | Retaining Ring                      |
| 16          | 70172-08        | Retaining Ring                      |
| 17          | 70170-05        | "E" Ring                            |
| 18          | 100358-01       | Setscrew, 6-32 X .125<br>Cup Point  |
| 19          | 100356-01       | Setscrew, 8-32 X .187<br>Cup Point  |
| 20          | 70172-07        | Retaining Ring                      |
| 21          | 100357-01       | Setscrew, 8-32 X .187<br>Cone Point |
| 22          | 40858           | Retainer                            |
| 23          | 46007-01        | Guide, Paper                        |
| 24          | 46103-07        | Label, ID                           |

## Notes:

- (1) Pin Feed Platen Assemblies:  
See Appendix "D"
- (2) Items 1, 2, and 3 available as a clutch kit:  
301870-01.

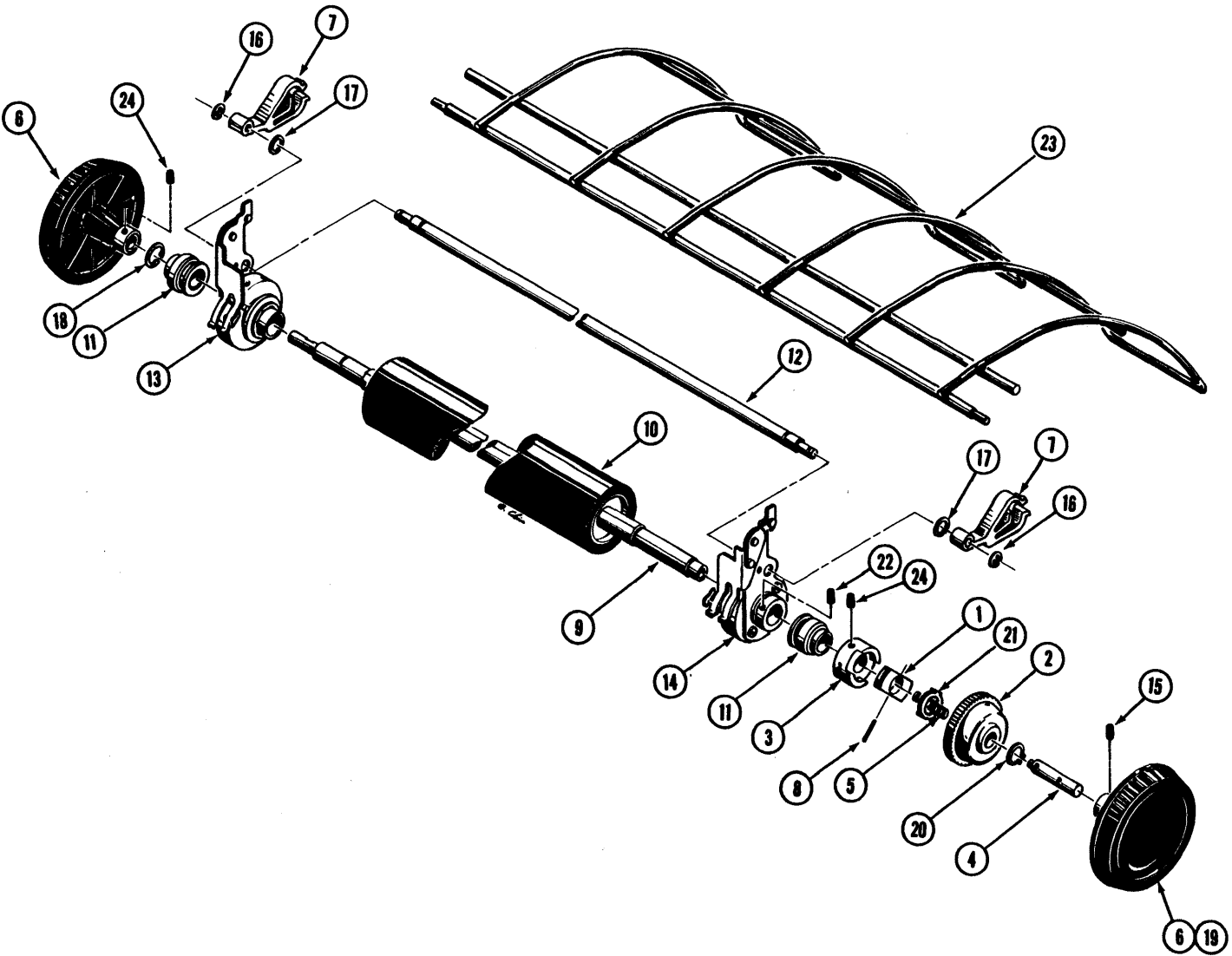


Figure 3-3  
24313-XX PIN FEED PLATEN ASSEMBLY, REVERSIBLE

SECTION III.3

24313-XX PIN FEED PLATEN ASSEMBLY, REVERSIBLE  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>                  |
|-------------|-----------------|-------------------------------------|
| 1           | 20559           | Driver, Platen (Note 2)             |
| 2           | 20560           | Gear, Platen Drive (Note 2)         |
| 3           | 24413           | Guide, Drive (Note 2)               |
| 4           | 24072           | Shaft, Platen Push                  |
| 5           | 20592           | Spring, Compression                 |
| 6           | 20498           | Knob                                |
| 7           | 20704-01        | Clip                                |
| 8           | 40859           | Pin, Driver                         |
| 9           | 22489           | Shaft                               |
| 10          | 22487-XX        | Core Assembly (Note 1)              |
| 11          | 320262-01       | Hub, Platen                         |
| 12          | 24268           | Shaft                               |
| 13          | 24316           | Pin Housing Assembly, Left          |
| 14          | 24315           | Pin Housing Assembly, Right         |
| 15          | 100357-01       | Setscrew, 8-32 X .187<br>Cone Point |
| 16          | 70170-05        | "E" Ring                            |
| 17          | 70172-05        | Retaining Ring                      |
| 18          | 70172-08        | Retaining Ring                      |
| 19          | 46103-09        | Label, ID                           |
| 20          | 70172-07        | Retaining Ring                      |
| 21          | 40858           | Retainer                            |
| 22          | 100358-01       | Setscrew, 6-32 X .125<br>Cup Point  |
| 23          | 40717           | Rack                                |
| 24          | 100356-01       | Setscrew, 8-32 X .187<br>Cup Point  |

Notes:

- (1) Pin Feed Platen Assemblies, Reversible:

| <u>Assembly No.</u> | <u>Paper Width<br/>(inches)</u> | <u>Core No.</u> |
|---------------------|---------------------------------|-----------------|
| 24313-09            | 14.875                          | 22487-09        |
| 24313-10            | 15.000                          | 22487-10        |

- (2) Items 1, 2 and 3 available as a clutch kit:  
301870-01.

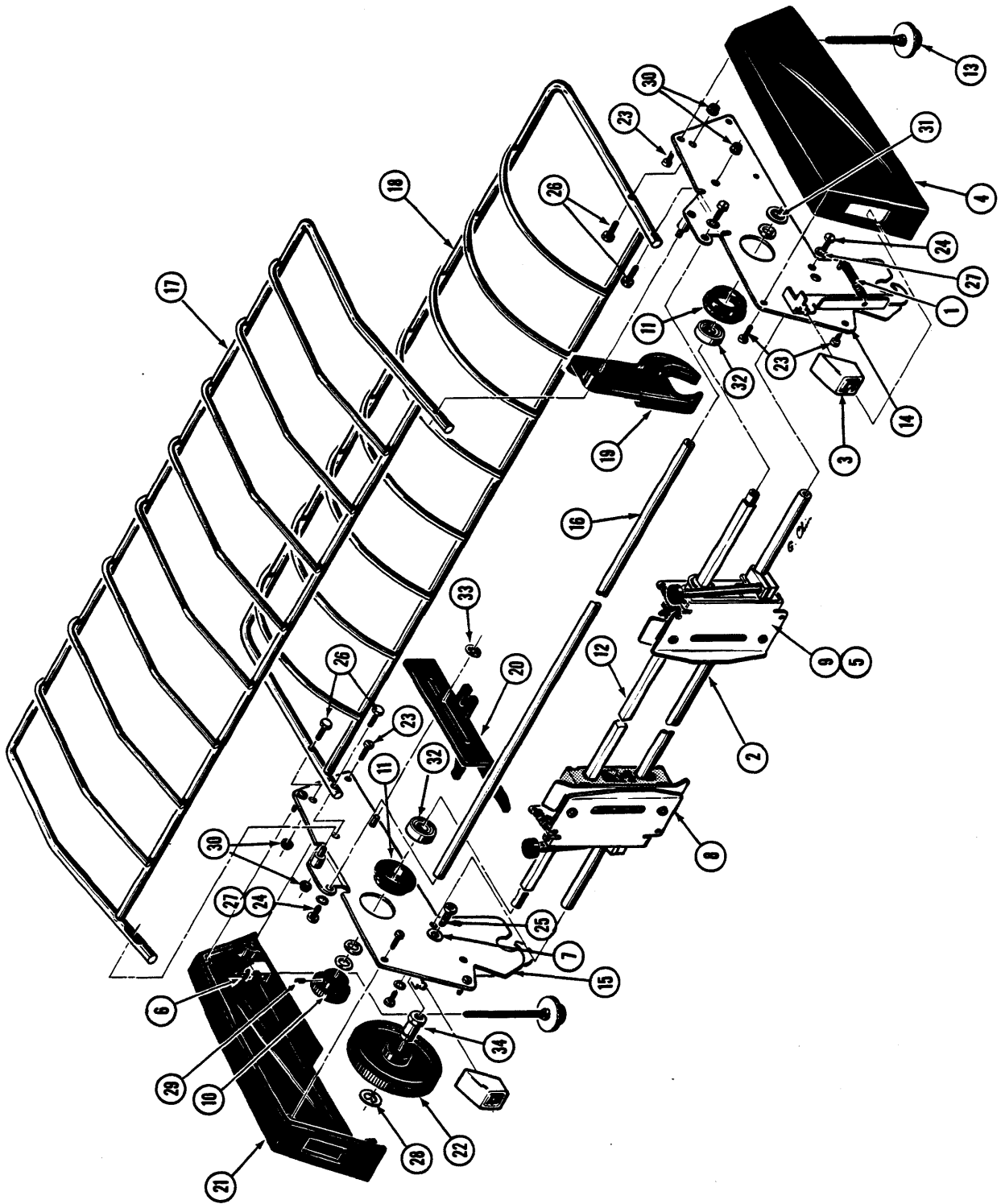


Figure 3-4  
24345-03 TRACTOR FEED ASSEMBLY



## SECTION III.4

## 24345-03 TRACTOR FEED ASSEMBLY

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>                               |
|-------------|-----------------|--------------------------------------------------|
| 1           | 20081-01        | Spring                                           |
| 2           | 20116           | Shaft Support                                    |
| 3           | 22493-01        | Knob, Latch                                      |
| 4           | 301858-02       | Cover, Right                                     |
| 5           | 46103-13        | Label, ID                                        |
| 6           | 100380-01       | Speed Nut                                        |
| 7           | 70179-08        | Washer, #8 Flat, Narrow                          |
| 8           | 301845-01       | Tractor, Left                                    |
| 9           | 301845-02       | Tractor, Right                                   |
| 10          | 22811-01        | Gear, 25T Spur                                   |
| 11          | 301903-01       | Bearing, Outer                                   |
| 12          | 22813-01        | Shaft, Tractor Drive                             |
| 13          | 22902-01        | Leveler Assembly                                 |
| 14          | 24347           | Frame Assembly, Right                            |
| 15          | 24348           | Frame Assembly, Left                             |
| 16          | 24328           | Shaft                                            |
| 17          | 301863-01       | Rack, Upper                                      |
| 18          | 301862-01       | Rack, Lower                                      |
| 19          | 24338           | Interlock, Pressure Roll                         |
| 20          | 24339           | Lever, Manifold                                  |
| 21          | 301858-01       | Cover, Left                                      |
| 22          | 24344           | Gear, 75T Spur                                   |
| 23          | 70805-02        | Screw, 4-20 X .375 P.H.                          |
| 24          | 70030-06        | Screw, 6-32 X .375 P.H.                          |
| 25          | 100246-02       | Screw, 8-32 X .375 P.H.                          |
| 26          | 70058-08        | Screw, 6-32 X .500 Hex Hd.                       |
| 27          | 70168-06        | Lockwasher, #6                                   |
| 28          | 70170-10        | Retaining Ring                                   |
| 29          | 70294-03        | Setscrew, 6-32 X .187<br>Hdls Hex Skt, Cup Point |
| 30          | 70318-06        | Nut, 6-32                                        |
| 31          | 100395-01       | Nut, Push-on                                     |
| 32          | 301902-01       | Bearing, Inner                                   |
| 33          | 70817-02        | Retaining Ring                                   |
| 34          | 24341-01        | Stud, Gear                                       |

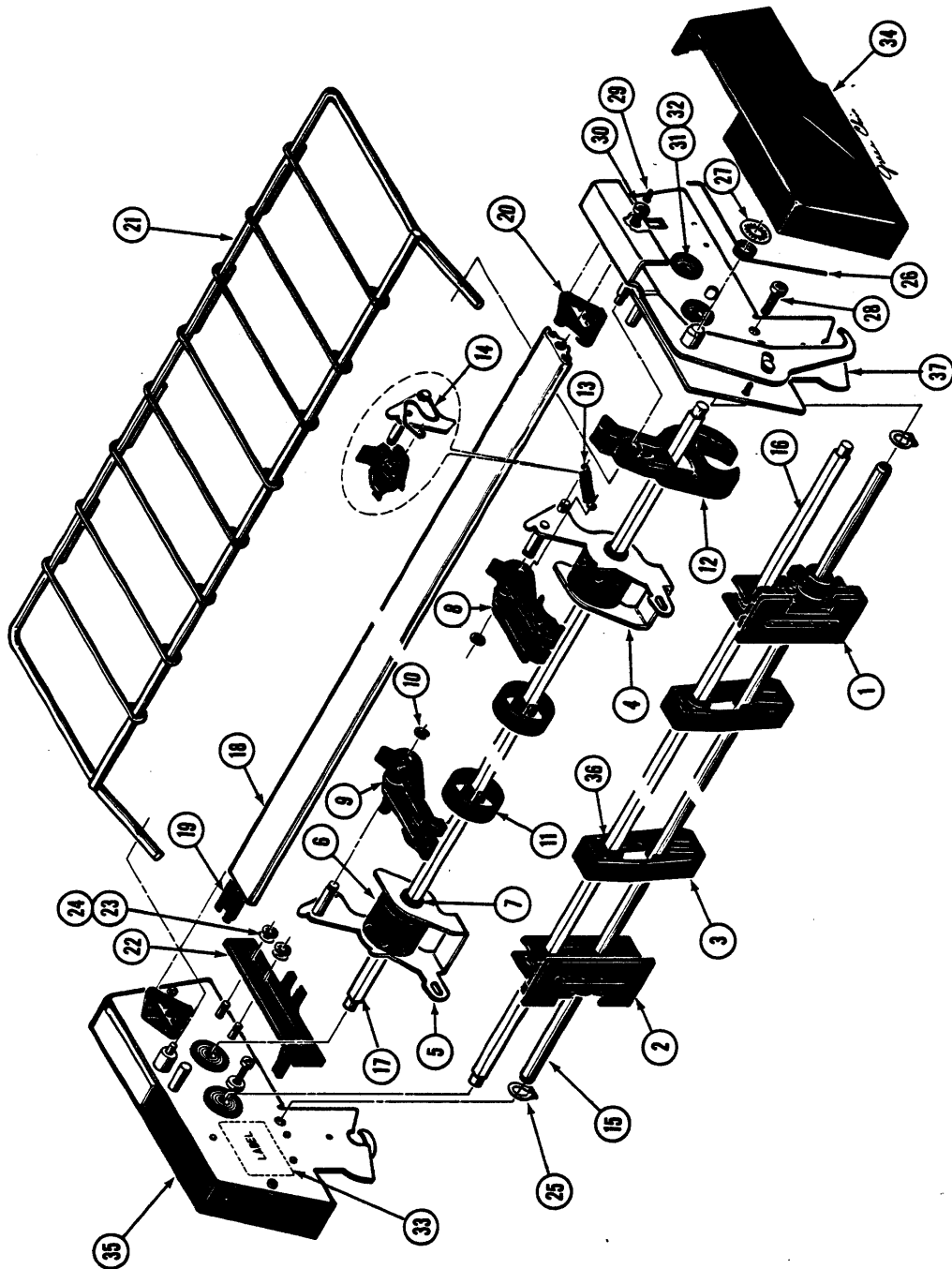
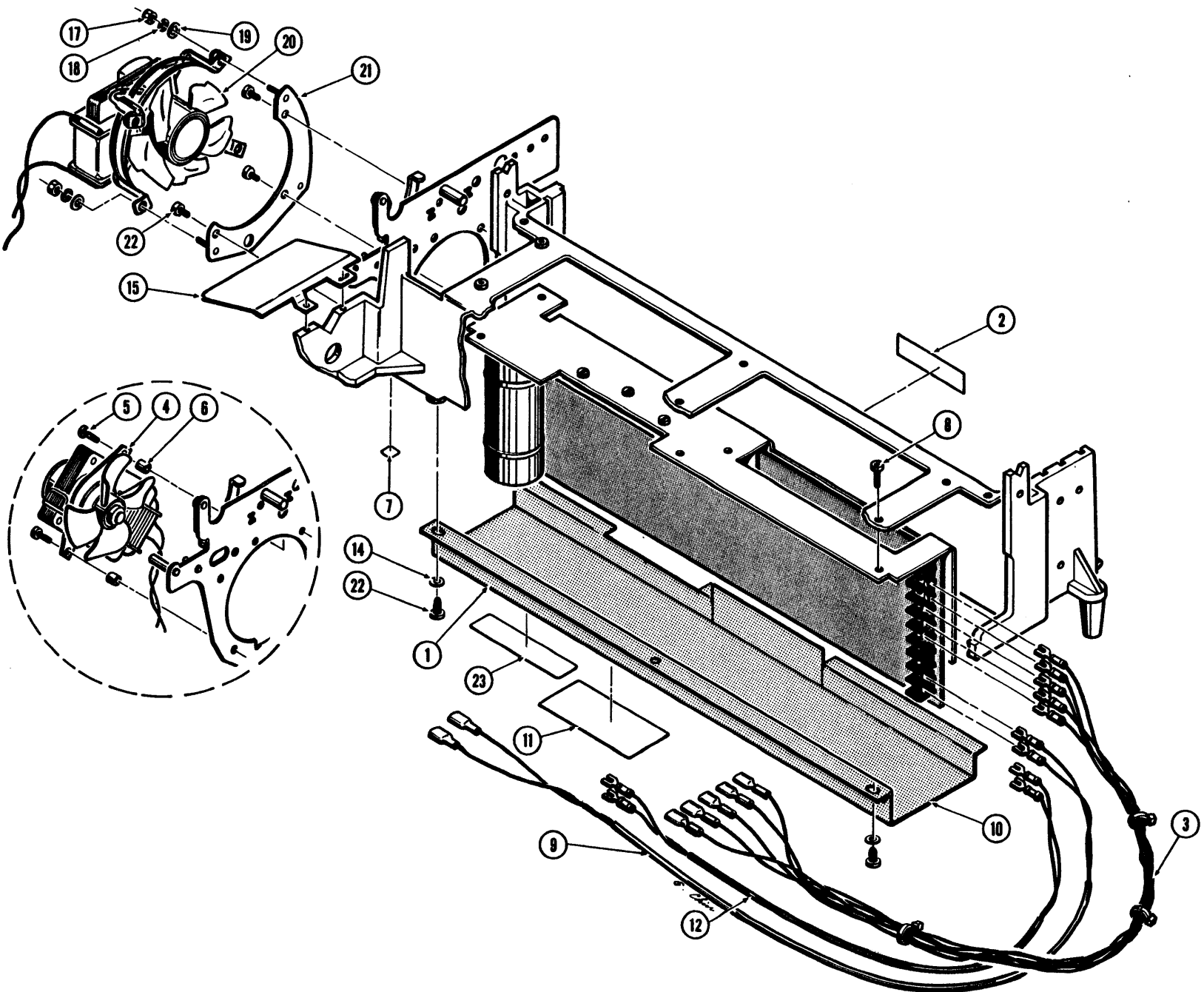


Figure 3-5  
301180-03/-09 BIDIRECTIONAL TRACTOR

## SECTION III.5

301180-03/-09 BIDIRECTIONAL TRACTOR  
(see notes)

| ITEM | PART NO.  | DESCRIPTION                             | Notes:                                                                                                                                                                                                           |
|------|-----------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 301966-02 | Tractor Head, Right                     |                                                                                                                                                                                                                  |
| 2    | 301966-01 | Tractor Head, Left                      |                                                                                                                                                                                                                  |
| 3    | 301305-01 | Guide                                   | (1) Parts not numbered or shown are NOT available separately.                                                                                                                                                    |
| 4    | 301504-02 | Tractor Arm, Right<br>(Notes 2 and 3)   |                                                                                                                                                                                                                  |
|      | 301504-04 | Tractor Arm, Right (Note 4)             | (2) Used on early units, replace with 301695-01 (item 13), Guide 301483-03 or -04 (items 8 and 9), and Tractor Arm 301504-03 or -04 (items 4 and 5). All three revised parts must be installed at the same time. |
| 5    | 301504-01 | Tractor Arm, Left<br>(Notes 2 and 3)    |                                                                                                                                                                                                                  |
|      | 301504-03 | Tractor Arm, Left (Note 4)              |                                                                                                                                                                                                                  |
| 6    | 301478-01 | Sprocket                                |                                                                                                                                                                                                                  |
| 7    | 301481-01 | Bearing                                 |                                                                                                                                                                                                                  |
| 8    | 301483-02 | Guide, Right (Notes 2 and 3)            | (3) Used on 301180-03 only.                                                                                                                                                                                      |
|      | 301483-04 | Guide, Right (Note 4)                   |                                                                                                                                                                                                                  |
| 9    | 301483-01 | Guide, Left (Notes 2 and 3)             | (4) Used on 301180-09 only.                                                                                                                                                                                      |
|      | 301483-03 | Guide, Left (Note 4)                    |                                                                                                                                                                                                                  |
| 10   | 70172-04  | Retaining Ring                          |                                                                                                                                                                                                                  |
| 11   | 301413-01 | Guide Wheel, Sq                         |                                                                                                                                                                                                                  |
| 12   | 301359-01 | Interlock                               |                                                                                                                                                                                                                  |
| 13   | 301695-01 | Spring (Note 4)                         |                                                                                                                                                                                                                  |
| 14   | 301384-03 | Spring (Note 3)                         |                                                                                                                                                                                                                  |
| 15   | 301357-01 | Shaft, Tractor Support                  |                                                                                                                                                                                                                  |
| 16   | 301912-02 | Shaft, Square, Grooved                  |                                                                                                                                                                                                                  |
| 17   | 301912-01 | Shaft, Square                           |                                                                                                                                                                                                                  |
| 18   | 301313-02 | Brace                                   |                                                                                                                                                                                                                  |
| 19   | 301387-02 | Bumper                                  |                                                                                                                                                                                                                  |
| 20   | 301508-01 | Retainer, Brace                         |                                                                                                                                                                                                                  |
| 21   | 301358-02 | Rack                                    |                                                                                                                                                                                                                  |
| 22   | 301348-01 | Lever, Manifold (Note 3)                |                                                                                                                                                                                                                  |
|      | 301727-01 | Lever, Manifold (Note 4)                |                                                                                                                                                                                                                  |
| 23   | 70170-03  | Retaining Ring                          |                                                                                                                                                                                                                  |
| 24   | 302623-01 | Spring, Manifold (Note 4)               |                                                                                                                                                                                                                  |
| 25   | 70172-07  | Retaining Ring                          |                                                                                                                                                                                                                  |
| 26   | 301322-01 | Torsion Spring, Left (Note 3)           |                                                                                                                                                                                                                  |
|      | 301322-02 | Torsion Spring, Right (Note 3)          |                                                                                                                                                                                                                  |
|      | 302577-01 | Torsion Spring, Left (Note 4)           |                                                                                                                                                                                                                  |
|      | 302577-02 | Torsion Spring, Right (Note 4)          |                                                                                                                                                                                                                  |
| 27   | 70817-07  | Retaining Ring                          |                                                                                                                                                                                                                  |
| 28   | 301424-02 | Screw, 10-32 X .38 Torx                 |                                                                                                                                                                                                                  |
| 29   | 100379-01 | Screw, 4-20 X .375 H.H.                 |                                                                                                                                                                                                                  |
| 30   | 100211-03 | Screw, 10-16 X .625 T.F. P.H.           |                                                                                                                                                                                                                  |
| 31   | 301904-01 | Bearing, Outer                          |                                                                                                                                                                                                                  |
| 32   | 301902-01 | Bearing, Inner                          |                                                                                                                                                                                                                  |
| 33   | 46103-15  | Label, Tractor                          |                                                                                                                                                                                                                  |
| 34   | 301326-02 | Cover, Right (Note 3)                   |                                                                                                                                                                                                                  |
|      | 301326-06 | Cover, Right (Note 4)                   |                                                                                                                                                                                                                  |
| 35   | 301326-01 | Cover, Left (Note 3)                    |                                                                                                                                                                                                                  |
|      | 301326-05 | Cover, Left (Note 4)                    |                                                                                                                                                                                                                  |
| 36   | 301448-01 | Bearing, Guide                          |                                                                                                                                                                                                                  |
| 37   | 301525-01 | Frame Assembly, LH, Tractor<br>(Note 3) |                                                                                                                                                                                                                  |
|      | 301525-02 | Frame Assembly, RH, Tractor<br>(Note 3) |                                                                                                                                                                                                                  |
|      | 301525-07 | Frame Assembly, LH, Button<br>(Note 4)  |                                                                                                                                                                                                                  |
|      | 301525-08 | Frame Assembly, RH, Button<br>(Note 4)  |                                                                                                                                                                                                                  |



312230-XX/400774-XX POWER SUPPLY ASSEMBLY

Figure 4-1a

## SECTION IV.1a

312230-XX/400774-XX POWER SUPPLY ASSEMBLY  
(see notes)

| ITEM | PART NO.  | DESCRIPTION                                                                        |                                                                                                         |
|------|-----------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 1    | 26021-01  | Power Supply, 115VAC, Boschert (Note 5)                                            | Notes:                                                                                                  |
|      | 26021-02  | Power Supply, 230VAC, Boschert (Note 5)                                            | (1) Power Supply Assemblies:                                                                            |
|      | 301155-05 | Power Supply, 115/230VAC, Standard Universal (Note 7) (see Section IV.1b)          | 312230-01 115VAC, No Control Panel                                                                      |
|      | 301155-06 | Power Supply, 115/230VAC, VDE Universal (Note 7) (see Section IV.1b)               | 312230-02 230VAC, No Control Panel                                                                      |
|      | 301885-09 | Power Supply, 230VAC, Standard Systems M.B. Universal (Note 6) (see Section IV.1b) | 312230-03 230VAC, VDE, No Control Panel                                                                 |
|      | 301885-10 | Power Supply, 115VAC, Standard Systems M.B. Universal (Note 6) (see Section IV.1b) | 312230-04 115VAC, VDE, No Control Panel                                                                 |
|      | 301885-11 | Power Supply, 115VAC, VDE Universal (Note 6) (see Section IV.1b)                   | 400774-01 115VAC, With Control Panel                                                                    |
|      | 301885-12 | Power Supply, 230VAC, VDE Universal (Note 6) (see Section IV.1b)                   | 400774-02 230VAC, With Control Panel                                                                    |
|      |           |                                                                                    | 400774-03 230VAC, VDE, With Control Panel                                                               |
|      |           |                                                                                    | 400774-04 115VAC, VDE, With Control Panel                                                               |
| 2    | 14035-05  | Label, Voltage (Note 2)                                                            | (2) Used on rear of 230VAC Models only.                                                                 |
| 3    | 26097-01  | Cable, DC Power (Note 7)                                                           | (3) Used with Boschert Power Supplies only.                                                             |
| 4    | 14011-01  | Fan, 115VAC (Note 3)                                                               | (4) Used with Universal Power Supplies only.                                                            |
|      | 14012-01  | Fan, 230VAC (Note 3)                                                               | (5) Used in 400774-01, -02 assemblies only as an alternate.                                             |
| 5    | 70829-10  | Screw, 8-32 X .625 T.F. P.H. (Note 3)                                              | (6) Used on 312230-XX assemblies only.                                                                  |
| 6    | 20460     | Spacer (Note 3)                                                                    | (7) Used on 400774-XX assemblies only.                                                                  |
| 7    | 301613-01 | Label, Earth Symbol (Note 6)                                                       | (8) Used on 400774-03, -04 assemblies only. (May be used on 400774-01, -02 assemblies as an alternate.) |
| 8    | 70828-06  | Screw, 6-32 X .375 T.F. P.H.                                                       |                                                                                                         |
| 9    | 23856     | Cable, Fan (Note 8)                                                                |                                                                                                         |
| 10   | 301628-02 | Power Supply Cover                                                                 |                                                                                                         |
| 11   | 23147-01  | Label, Warning, 115VAC                                                             |                                                                                                         |
|      | 23147-07  | Label, Warning, 230VAC                                                             |                                                                                                         |
| 12   | 301916-01 | Cable, AC Interconnecting (Note 7)                                                 |                                                                                                         |
| 13   | -----     | Not Used                                                                           |                                                                                                         |
| 14   | 70169-08  | Washer                                                                             |                                                                                                         |
| 15   | 301468-01 | Shield, Fan                                                                        |                                                                                                         |
| 16   | -----     | Not Used                                                                           |                                                                                                         |
| 17   | 70166-66  | Nut, 6-32 Hex (Note 4)                                                             |                                                                                                         |
| 18   | 70168-06  | Lockwasher, #6 (Note 4)                                                            |                                                                                                         |
| 19   | 70853     | Flatwasher, #6 (Note 4)                                                            |                                                                                                         |
| 20   | 40809-01  | Fan, 115VAC                                                                        |                                                                                                         |
|      | 40809-02  | Fan, 230VAC                                                                        |                                                                                                         |
| 21   | 40783     | Plate, Fan Mounting (Note 4)                                                       |                                                                                                         |
| 22   | 70829-04  | Screw, 8-32 X .250 T.F. P.H. (Note 4)                                              |                                                                                                         |
| 23   | 301615-01 | Label, Warning (Note 6)                                                            |                                                                                                         |

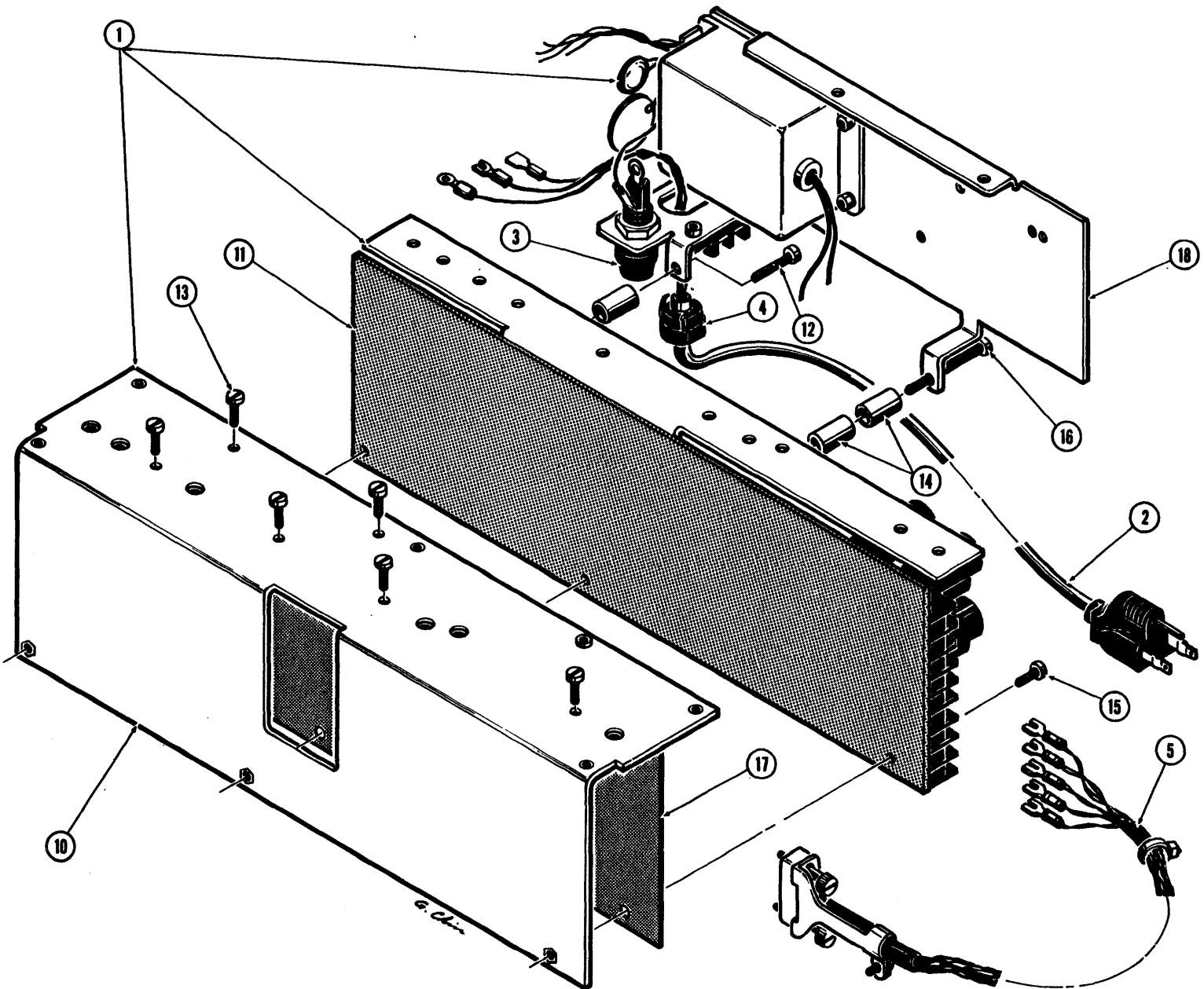


Figure 4-1b  
301885-XX UNIVERSAL POWER SUPPLY ASSEMBLY

## SECTION IV.1b

301885-XX UNIVERSAL POWER SUPPLY ASSEMBLY  
(see notes)

| ITEM | PART NO.  | DESCRIPTION                                                       |
|------|-----------|-------------------------------------------------------------------|
| 1    | 301155-05 | Power Supply, Standard Filter<br>115/230VAC (Notes 2 and 4)       |
|      | 301155-06 | Power Supply, VDE Filter<br>115/230VAC (Notes 2 and 6)            |
| 2    | 301882-01 | AC Line Cord Assembly, 115V<br>(Note 3)                           |
|      | Note:     | This assembly includes items 6 thru 9.<br>(Not shown separately). |
|      | 301883-01 | AC Line Cord Assembly, 230V<br>(Note 5)                           |
|      | Note:     | This assembly includes items 6 thru 8.<br>(Not shown separately). |
| 3    | 10604-07  | Fuse, 4 Amp, 250V (Note 3)                                        |
|      | 10604-08  | Fuse, 2 Amp, 250V (Note 5)                                        |
| 4    | 100387-03 | Strain Relief                                                     |
| 5    | 26097-01  | Cable, DC Power                                                   |
| 6    | 100306-02 | AC Power Cord (Note 3)                                            |
|      | 10974     | AC Power Cord (Note 5)                                            |
| 7    | 10616-06  | Lug, Ring Terminal, #6                                            |
| 8    | 10969-13  | Snap Spade, #5                                                    |
| 9    | 10913-01  | Terminal, Quick Disconnect, Female<br>(Note 3)                    |
| 10   | 301156-01 | Bracket Assembly                                                  |
| 11   | 301153-05 | PCB Assembly (Note 4)<br>(see Section II.10)                      |
|      | 301153-06 | PCB Assembly (Note 6)<br>(see Section II.10)                      |
| 12   | 70030-16  | Screw, 6-32 X 1.00 P.H.                                           |
| 13   | 70030-04  | Screw, 6-32 X .250 P.H.                                           |
| 14   | 100493-03 | Spacer, #6 X .750 Phenolic                                        |
| 15   | 70030-05  | Screw, 6-32 X .312 P.H.                                           |
| 16   | 70030-28  | Screw, 6-32 X 1.750 P.H.                                          |
| 17   | 301539-01 | Insulator                                                         |
| 18   | 301151-03 | Line Filter Assembly, Standard<br>(Note 4) (see Section IV.1c)    |
|      | 301151-04 | Line Filter Assembly, VDE<br>(Note 6) (see Section IV.1c)         |

## Notes:

- (1) Universal Power Supply Assemblies:
 

|           |                              |
|-----------|------------------------------|
| 301885-09 | 230VAC Standard Systems M.B. |
| 301885-10 | 115VAC Standard Systems M.B. |
| 301885-11 | 115VAC VDE                   |
| 301885-12 | 230VAC VDE                   |
- (2) Items 10 thru 18 may be obtained as an assembly by ordering item 1.
- (3) Used on 301885-10, -11 assemblies only.
- (4) Used on 301885-09, -10 assemblies only.
- (5) Used on 301885-09, -12 assemblies only.
- (6) Used on 301885-11, -12 assemblies only.

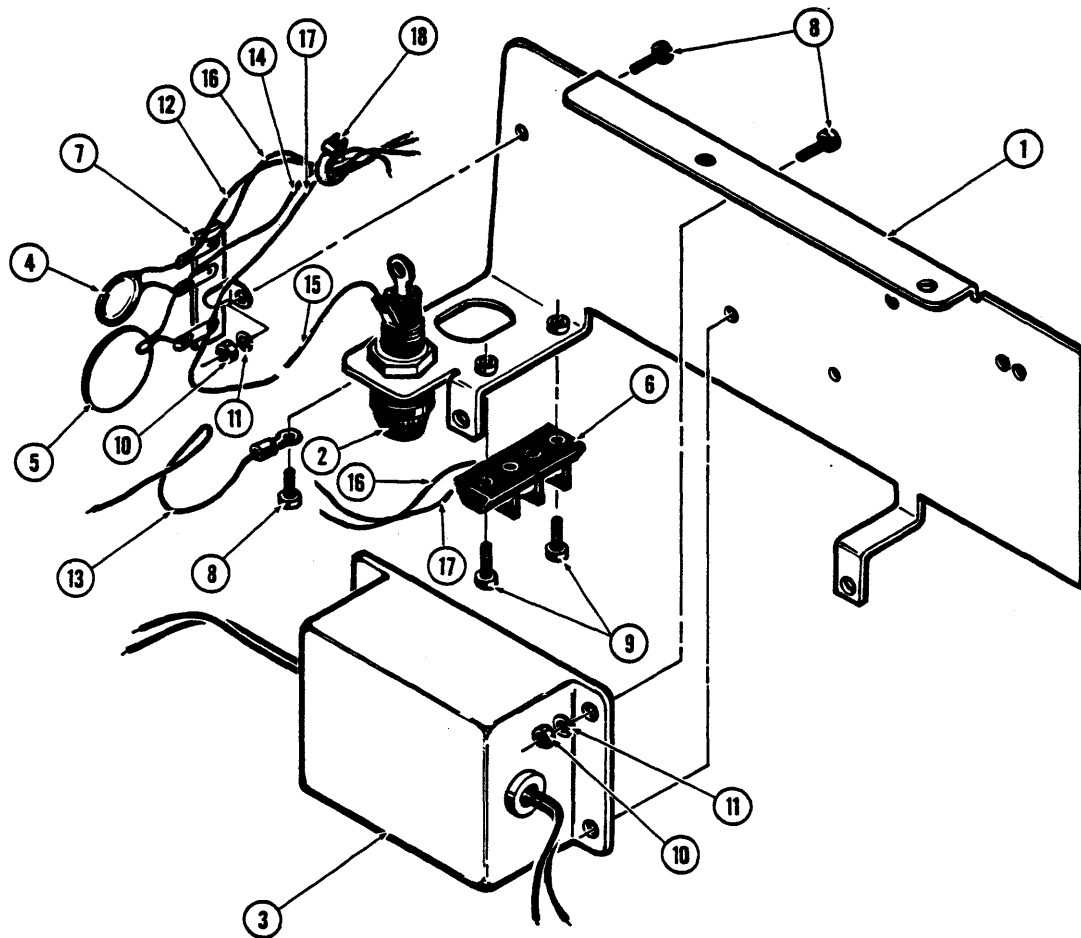


Figure 4-1c  
 301151-XX LINE FILTER ASSEMBLY, POWER SUPPLY



SECTION IV.1c

301151-XX LINE FILTER ASSEMBLY, POWER SUPPLY  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>           |
|-------------|-----------------|------------------------------|
| 1           | 301152-03       | Line Filter Bracket Assembly |
| 2           | 100323-01       | Fuse Holder                  |
| 3           | 100118-01       | EMI Filter (Note 3)          |
| 4           | 100119-01       | Metal Oxide Varistor         |
| 5           | 100120-01       | Thermistor Disc              |
| 6           | 10671-02        | Terminal Block               |
| 7           | 100121-01       | Terminal Strip               |
| 8           | 70030-04        | Screw, 6-32 X .250 P.H.      |
| 9           | 70030-08        | Screw, 6-32 X .500 P.H.      |
| 10          | 70166-66        | Nut, 6-32 X .250 Hex         |
| 11          | 70168-06        | Lockwasher, #6               |
| 12          | 10952-09        | Wire, 18 AWG, Wht (Note 2)   |
| 13          | 301048-03       | Wire Assembly, Grn           |
| 14          | 10952-00        | Wire, 18 AWG, Blk (Note 2)   |
| 15          | 10952-01        | Wire, 18 AWG, Brn            |
| 16          | 301048-09       | Wire Assembly, Blu           |
| 17          | 301048-10       | Wire Assembly, Brn           |
| 18          | 10538-01        | Cable Tie                    |

Notes:

- (1) Line Filter Assemblies:
- |           |                   |
|-----------|-------------------|
| 301151-03 | 115/230V Standard |
| 301151-04 | 115/230V VDE      |
- (2) Used on 301151-03 assembly only.
- (3) Used on 301151-04 assembly only.

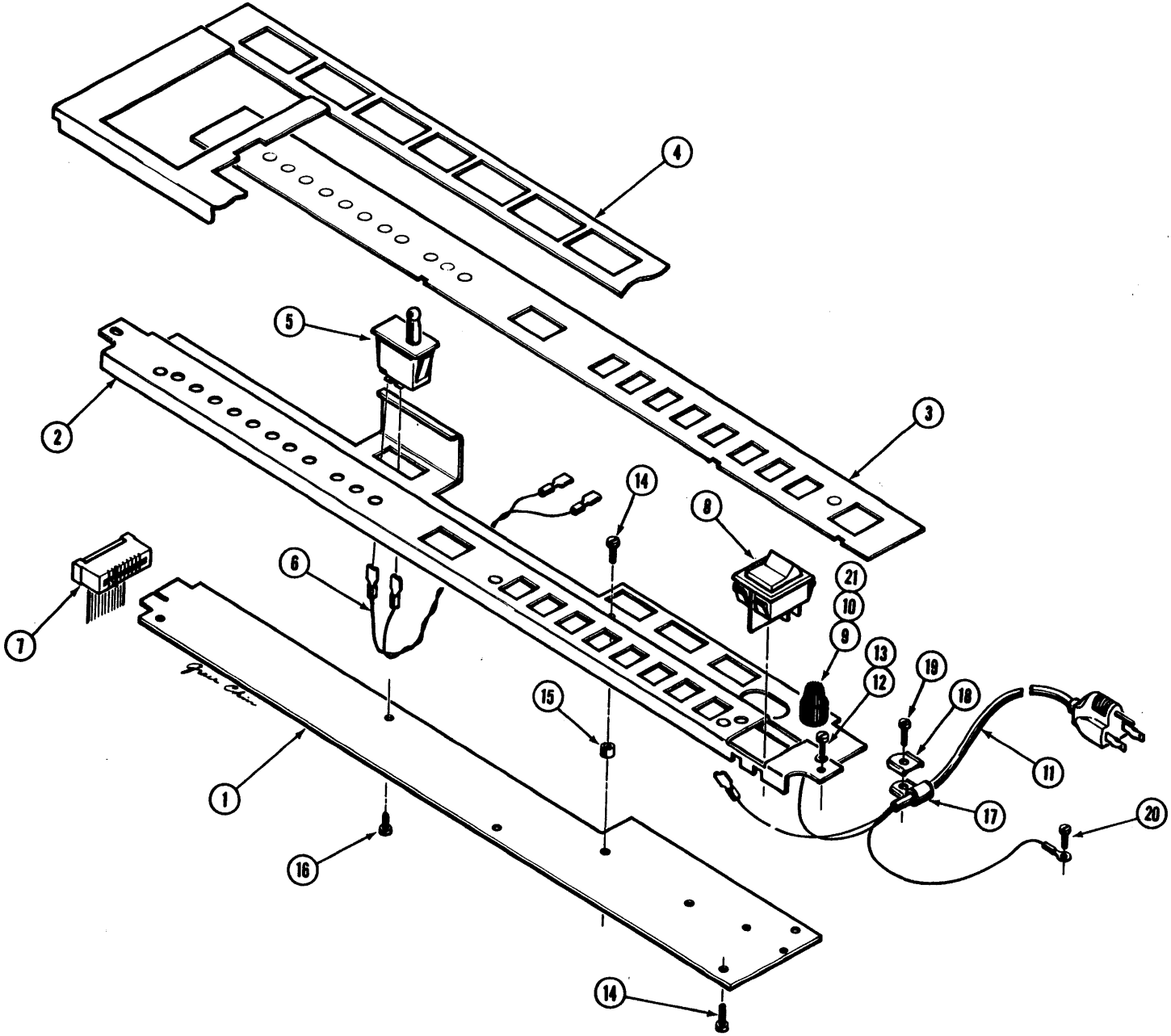


Figure 4-2  
400763-XX CONTROL PANEL ASSEMBLY

## SECTION IV.2

400763-XX CONTROL PANEL ASSEMBLY  
(see notes)

| ITEM | PART NO.  | DESCRIPTION                            |
|------|-----------|----------------------------------------|
| 1    | 400568-01 | H4CPN PCB Assembly<br>(see Section II) |
| 2    | 400552-02 | Control Panel                          |
| 3    | 400556-03 | Overlay, Control Panel<br>(Note 2)     |
|      | 400572-01 | Overlay, Control Panel<br>(Note 3)     |
|      | 400754-03 | Overlay, Control Panel<br>(Note 4)     |
|      | 400756-01 | Overlay, Control Panel<br>(Note 5)     |
| 4    | 400569-01 | Mask, Keyboard                         |
| 5    | 10961     | Switch, Cover Open                     |
| 6    | 23855-03  | Cable Assembly, Cover Open             |
| 7    | 400574-01 | Cable Assembly, Control Panel          |
| 8    | 100043-01 | Switch, Power 76522108                 |
| 9    | 10705     | Fuse Holder                            |
| 10   | 10717-05  | Fuse, 5A (Note 6)                      |
|      | 10962-10  | Fuse, 2.5A (Note 7)                    |
| 11   | 400015-01 | Cable Assembly, AC 115V<br>(Note 6)    |
|      | 400016-01 | Cable Assembly, AC 230V<br>(Note 7)    |
| 12   | 70691     | Screw, 6-20 X .500 P.H.<br>Sheet Metal |
| 13   | 70737-06  | Lockwasher, #6 Ext.                    |
| 14   | 70030-08  | Screw, 6-32 X .500 P.H.                |
| 15   | 70670-04  | Standoff, 6-32 X .250 Nylon            |
| 16   | 70030-06  | Screw, 6-32 X .375 P.H.                |
| 17   | 10535-18  | Cable Clamp                            |
| 18   | 10537     | "D" Washer                             |
| 19   | 70829-08  | Screw, 8-32 X .500 T.F. P.H.           |
| 20   | 70829-06  | Screw, 8-32 X .375 T.F. P.H.           |
| 21   | 23846     | Label, Fuse (Note 7)                   |

## Notes:

## (1) Control Panel Assemblies:

|           |               |
|-----------|---------------|
| 400763-01 | 1640 R/O 115V |
| 400763-02 | 1640 R/O 230V |
| 400763-03 | 1640 KSR 115V |
| 400763-04 | 1640 KSR 230V |
| 400763-05 | 1650 R/O 115V |
| 400763-06 | 1650 R/O 230V |
| 400763-07 | 1650 KSR 115V |
| 400763-08 | 1650 KSR 230V |

(2) Used on -05, -06 only.

(3) Used on -07, -08 only.

(4) Used on -01, -02 only.

(5) Used on -03, -04 only.

(6) Used on 115V units only.

(7) Used on 230V units only.

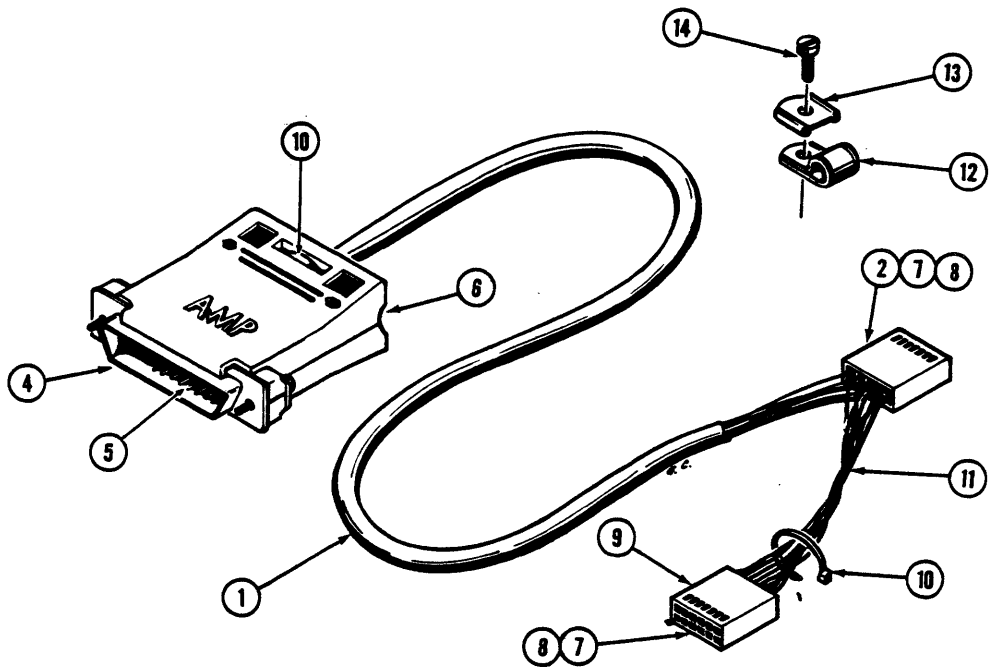


Figure 4-3  
301608-XX CURRENT LOOP CABLE KIT

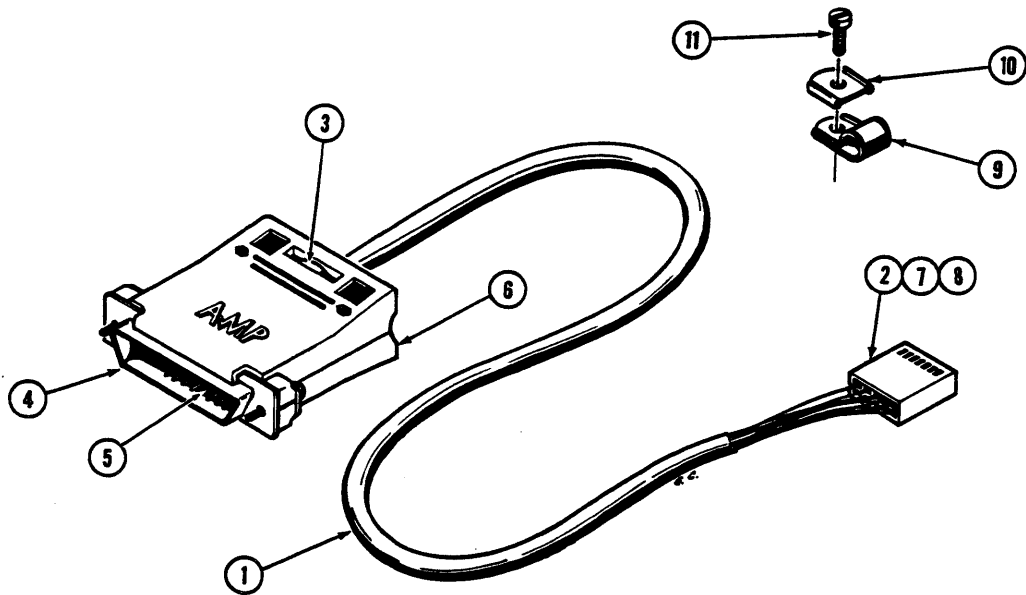


Figure 4-4  
400775-01 RS-232-3C CABLE KIT

## SECTION IV.3

301608-XX CURRENT LOOP CABLE KIT  
(see notes)

| ITEM | PART NO. | DESCRIPTION                  |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------|----------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 10904-05 | Cable                        | Notes:<br><br>(1) Current Loop Cable Kits:<br><br>301608-01 Standard<br>301608-02 European<br>301608-03 Special "H"<br><br>(2) Items 1 thru 11 are available as an assembly:<br>400017-02 Standard, 25-pin port<br>400017-03 European, 9-pin port<br>400017-04 Special "H", 25-pin port<br><br>(3) Used on 301608-01 only.<br>(4) Used on 301608-02 only.<br>(5) Used on 301608-03 only.<br>(6) Used on 301608-01, -03 only. |
| 2    | 10890-08 | Housing, Connector           |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3    |          | Not Used                     |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 4    | 10936-25 | Housing, Connector (Note 3)  |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | 10937-25 | Housing, Receptacle (Note 5) |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | 10845-09 | Connector, Male (Note 4)     |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 5    | 10939-01 | Contact, Pin (Note 3)        |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | 10938-01 | Contact, Socket (Note 5)     |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 6    | 10947    | Hood, Connector (Note 6)     |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | 42602-09 | Hood, Connector (Note 4)     |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 7    | 10891-02 | Contact, Pin                 |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 8    | 10892    | Key, Polarizing              |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 9    | 10890-04 | Housing, Connector           |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 10   | 10538-01 | Cable Tie                    |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 11   | 10954-00 | Wire, #22, Black             |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | 10954-01 | Wire, #22, Brown             |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | 10954-04 | Wire, #22, Yellow            |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | 10954-06 | Wire, #22, Blue              |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|      | 10954-08 | Wire, #22, Gray              |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 12   | 10535-13 | Cable Clamp                  |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 13   | 10537    | Washer "D"                   |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 14   | 70829-08 | Screw, 8-32 X .500 T.F. P.H. |                                                                                                                                                                                                                                                                                                                                                                                                                              |

## SECTION IV.4

400775-01 RS-232-3C CABLE KIT  
(see notes)

| ITEM | PART NO. | DESCRIPTION                  |
|------|----------|------------------------------|
| 1    | 10904-10 | Cable                        |
| 2    | 10890-04 | Housing, Connector           |
| 3    | 10967-02 | Cable Tie                    |
| 4    | 10936-25 | Housing, Connector           |
| 5    | 10939-01 | Contact, Pin                 |
| 6    | 10947    | Hood, Connector              |
| 7    | 10891-02 | Contact, Pin                 |
| 8    | 10892    | Key, Polarizing              |
| 9    | 10535-13 | Cable Clamp                  |
| 10   | 10537    | Washer "D"                   |
| 11   | 70829-08 | Screw, 8-32 X .500 T.F. P.H. |

## Notes:

- (1) Items 1 thru 8 are available as an assembly:

23730-01

99P80219

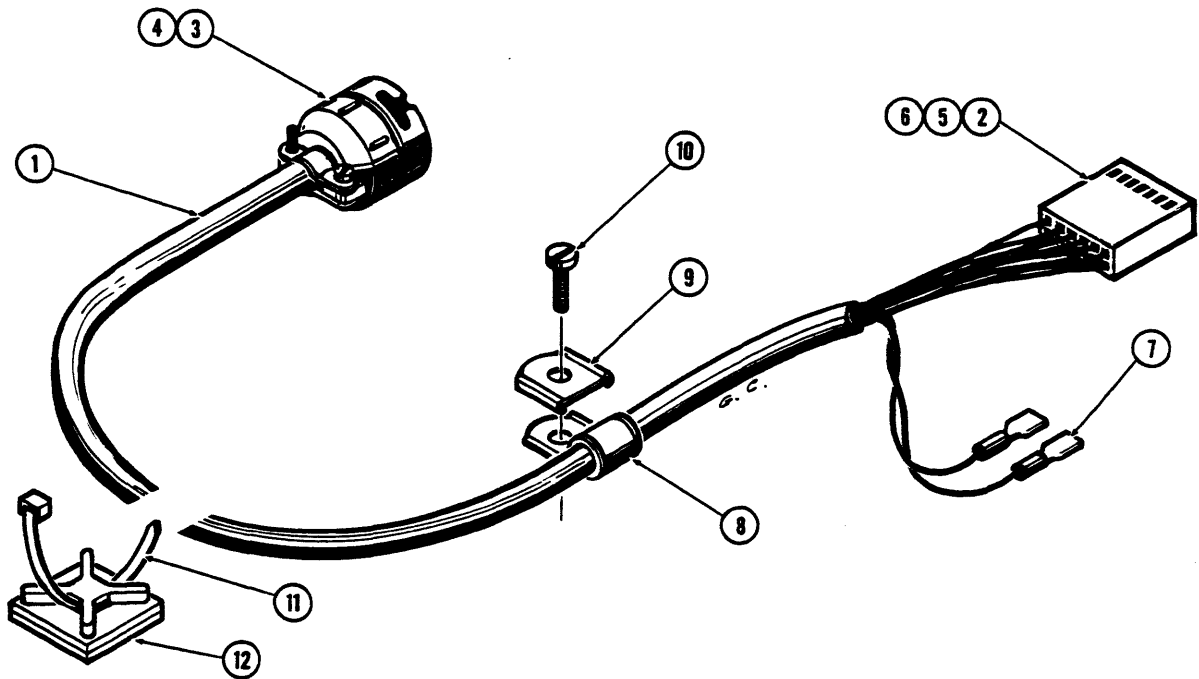


Figure 4-5a  
301603-01 HYFEED INTERFACE KIT—UNITS WITH XMEM2 PCB ASSEMBLIES

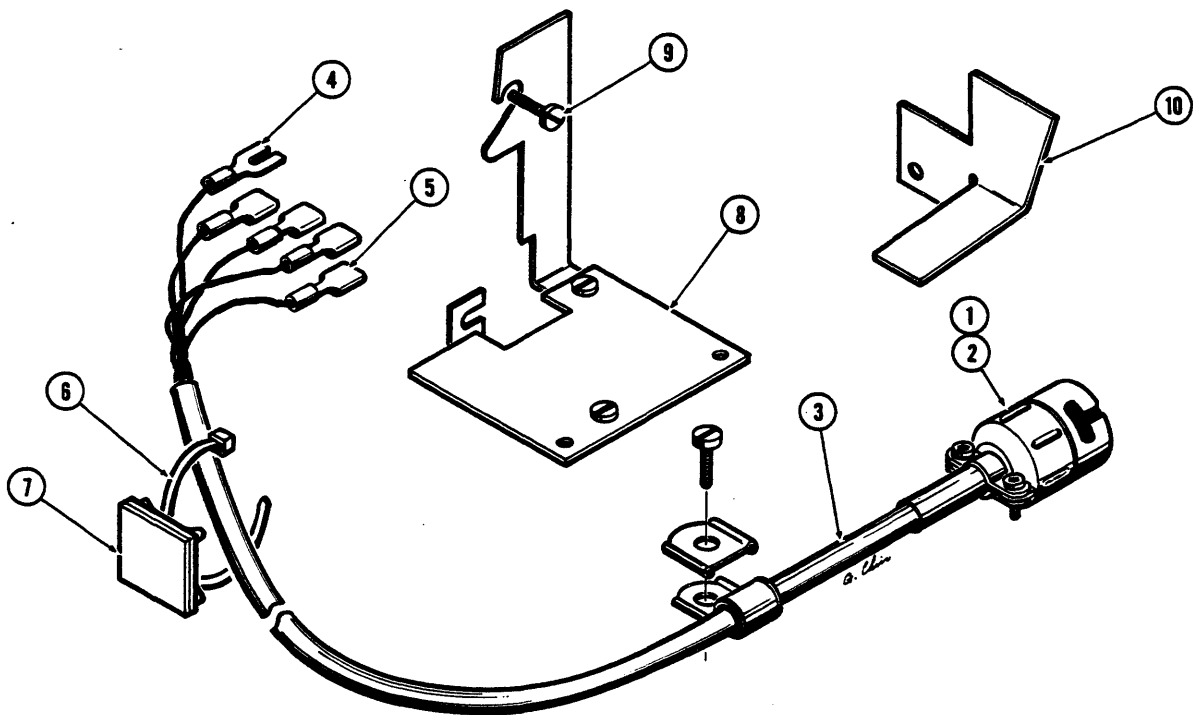


Figure 4-5b  
301603-02 HYFEED INTERFACE KIT—UNITS WITHOUT XMEM2 PCB ASSEMBLIES

SECTION IV.5a

301603-01 HYFEED INTERFACE KIT--UNITS WITH XMEM2 PCB ASSEMBLIES  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>           |
|-------------|-----------------|------------------------------|
| 1           | 10904-20        | Cable                        |
| 2           | 10890-01        | Housing, Connector           |
| 3           | 100265-01       | Housing, Circular            |
| 4           | 100266-01       | Contact, Female              |
| 5           | 10891-02        | Contact, Pin                 |
| 6           | 10892           | Key, Polarizing              |
| 7           | 10513-11        | Receptacle, Crimp on         |
| 8           | 10535-18        | Cable Clamp, .312"           |
| 9           | 10537           | Washer, "D"                  |
| 10          | 70829-08        | Screw, 8-32 X .500 T.F. P.H. |
| 11          | 10538-01        | Cable Tie                    |
| 12          | 10752-01        | Anchor, Cable Tie            |

Notes:

- (1) Items 1 thru 7 are available as an assembly:  
400800-01

SECTION IV.5b

301603-02 HYFEED INTERFACE KIT--UNITS WITHOUT XMEM2 PCB ASSEMBLIES  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>                 |
|-------------|-----------------|------------------------------------|
| 1           | 100265-01       | Housing, Circular                  |
| 2           | 100266-01       | Contact, Female                    |
| 3           | 10904-05        | Cable                              |
| 4           | 10969-15        | Terminal, Spade Lug                |
| 5           | 10513-10        | Receptacle, Crimp on               |
| 6           | 10538-01        | Cable Tie                          |
| 7           | 10752-01        | Anchor, Cable Tie                  |
| 8           | 305070-02       | PCB Connector Assembly<br>(Note 2) |
| 9           | 70829-06        | Screw, 8-32 X .375 T.F. P.H.       |
| 10          | 305072-01       | Shield                             |

Notes: (Con't)

- (2) The following parts are available for the  
PCB Connector Assembly:

|           |                                                |
|-----------|------------------------------------------------|
| 305064-01 | Bracket Assembly,<br>PCB Support, Lg           |
| 305065-01 | Bracket Assembly,<br>PCB Support, Sm           |
| 10023-10  | Resistor, 1K Ohm 1/4W 5%<br>(R1, R2)           |
| 10160     | Diode, 1N4454 (CR1, CR2)                       |
| 10367     | Transistor 2N3904 (Q1)                         |
| 22819     | Tab, 187 Series (T1-T5)                        |
| 70029-03  | Screw, 4-40 X .187 P.H.<br>(To mount brackets) |

Notes:

- (1) Items 1 thru 5 are available as an assembly:  
305066-01

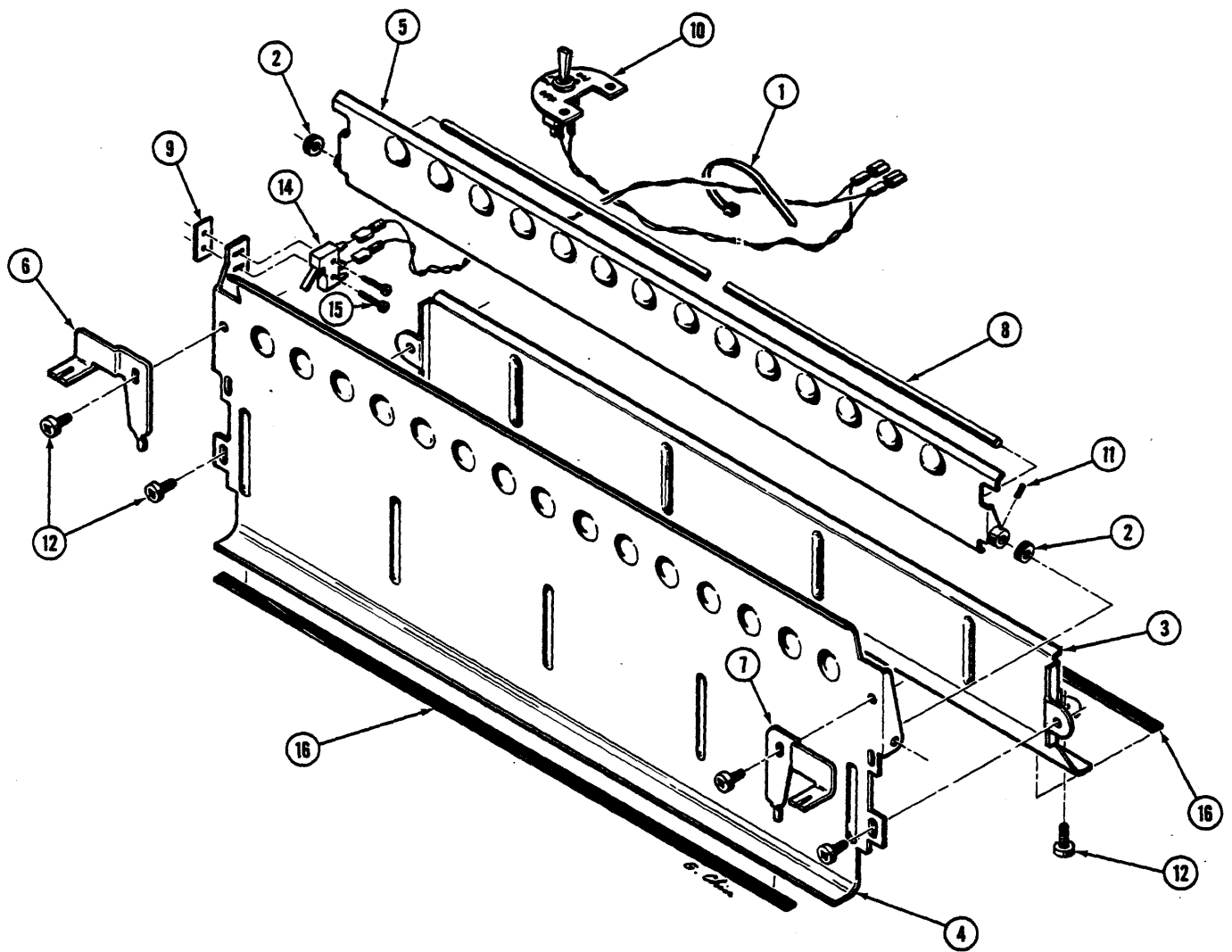


Figure 4-6  
40565-01 PAPER CHUTE ASSEMBLY



## SECTION IV.6

## 40565-01 PAPER CHUTE ASSEMBLY

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>              |
|-------------|-----------------|---------------------------------|
| 1           | 10538-01        | Cable Tie                       |
| 2           | 20218           | Oil Washer                      |
| 3           | 24381           | Paper Chute, Rear               |
| 4           | 24382-01        | Paper Chute, Front              |
| 5           | 24385-01        | Bail Assembly                   |
| 6           | 24386           | Mounting Bracket, Left          |
| 7           | 24387           | Mounting Bracket, Right         |
| 8           | 24389           | Shaft                           |
| 9           | 24397           | Nut Plate, #2-56                |
| 10          | 40804           | Switch and Harness Assembly     |
| 11          | 70292-03        | Setscrew, 4-40 X .187 Cup Point |
| 12          | 70829-04        | Screw, 8-32 X .250 P.H.         |
| 13          |                 | Not Used                        |
| 14          | 24436-02        | Switch                          |
| 15          | 70027-08        | Screw, 2-56 X .500 P.H.         |
| 16          | 40551-03        | Damping Material                |

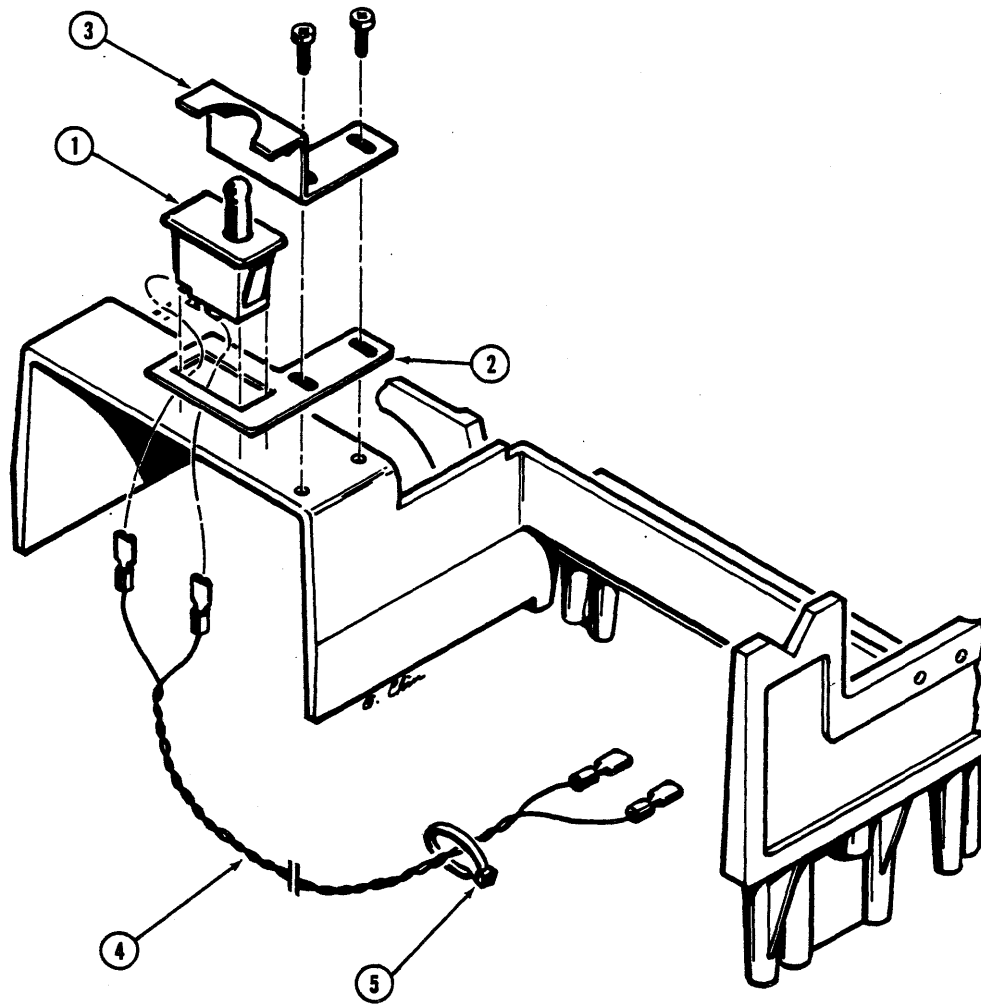


Figure 4-7  
40504-03 COVER OPEN INTERLOCK SWITCH ASSEMBLY

SECTION IV.7

40504-03 COVER OPEN INTERLOCK SWITCH ASSEMBLY

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>       |
|-------------|-----------------|--------------------------|
| 1           | 10961           | Switch                   |
| 2           | 23866           | Bracket, Switch Mounting |
| 3           | 23854           | Guard, Switch            |
| 4           | 40503-01        | Switch Harness Assembly  |
| 5           | 10538-01        | Cable Tie                |

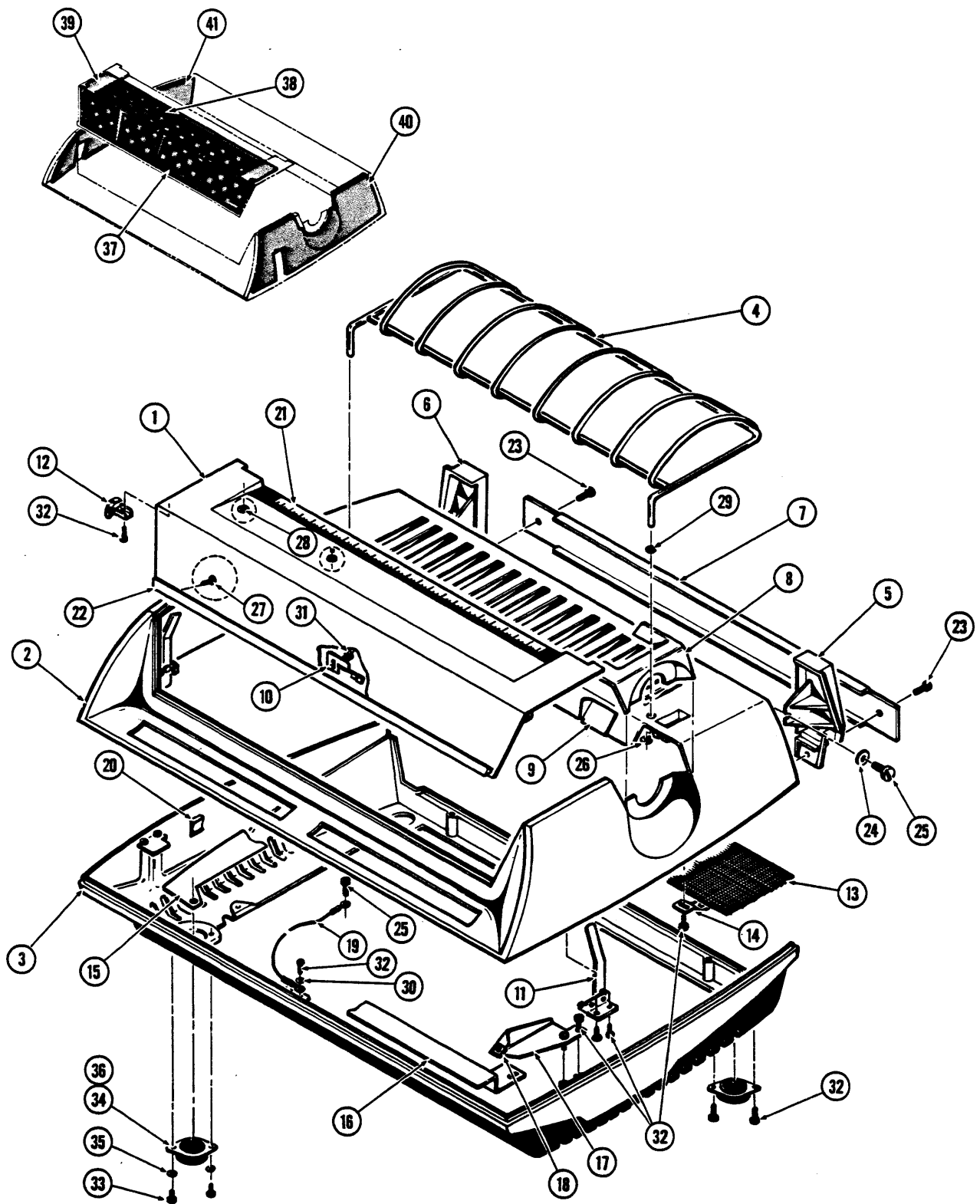


Figure 5-1  
400761-XX COVER SET ASSEMBLY, RO, METAL

## SECTION V.1

400761-XX COVER SET ASSEMBLY, RO, METAL  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>                                      |           |                                            |
|-------------|-----------------|---------------------------------------------------------|-----------|--------------------------------------------|
| 1           | 400579-01       | Access Cover, Black                                     | Notes:    |                                            |
|             | 400579-02       | Access Cover,<br>Very Light Warm Gray                   | (1)       | Cover Sets, RO, Metal:                     |
| 2           | 400578-01       | Top Cover, Black—for<br>Control Panel                   | 400761-51 | Black, for Control Panel                   |
|             | 400578-02       | Top Cover,<br>Very Light Warm Gray—for<br>Control Panel | 400761-52 | Very Light Warm Gray,<br>for Control Panel |
|             | 400578-21       | Top Cover, Black—w/o<br>Control Panel                   | 400761-71 | Black, no Control Panel                    |
|             | 400578-22       | Top Cover,<br>Very Light Warm Gray—w/o<br>Control Panel | 400761-72 | Very Light Warm Gray,<br>no Control Panel  |
| 3           | 400577-01       | Bottom Cover                                            |           |                                            |
| 4           | 301864-01       | Rack, Cover                                             |           |                                            |
| 5           | 24474-01        | Cover, Right Rear                                       |           |                                            |
| 6           | 24474-02        | Cover, Left Rear                                        |           |                                            |
| 7           | 24472           | Cover Strip, Rear                                       |           |                                            |
| 8           | 24415-01        | Skirt, Right, Black                                     |           |                                            |
|             | 23847-02        | Skirt, Right, Very Light Warm Gray                      |           |                                            |
|             | 24416-01        | Skirt, Left, Black                                      |           |                                            |
|             | 23848-02        | Skirt, Left, Very Light Warm Gray                       |           |                                            |
| 9           | 22904-01        | Paper Index Assembly                                    |           |                                            |
| 10          | 400566-01       | Actuator, Switch                                        |           |                                            |
| 11          | 46042-01        | Latch Assembly, Right                                   |           |                                            |
|             | 46042-02        | Latch Assembly, Left                                    |           |                                            |
| 12          | 40844-02        | Catch, Access Cover                                     |           |                                            |
| 13          | 26119-01        | Screen, Top                                             |           |                                            |
| 14          | 23976-01        | Clip, Screen Mounting                                   |           |                                            |
| 15          | 400206-01       | Barrier, Side                                           |           |                                            |
| 16          | 23966-01        | Barrier, Front                                          |           |                                            |
| 17          | 301855-01       | Bracket, Control Panel, Left                            |           |                                            |
|             | 301855-02       | Bracket, Control Panel, Right                           |           |                                            |
| 18          | 70702-24        | "U" Nut                                                 |           |                                            |
| 19          | 23831-17        | Ground Strap                                            |           |                                            |
| 20          | 10924           | Cable Clamp                                             |           |                                            |
| 21          | 22932-01        | Scale, Proportional                                     |           |                                            |
| 22          | 20780-01        | Lip, Access Cover                                       |           |                                            |
| 23          | 70805-02        | Screw, 4-20 X .375 T.F.                                 |           |                                            |
| 24          | 70179-08        | Washer, #8 Flat                                         |           |                                            |
| 25          | 70829-06        | Screw, 8-32 X .375 Tx Dr                                |           |                                            |
| 26          | 70413-03        | Speed Nut                                               |           |                                            |
| 27          | 70029-05        | Screw, 4-40 X .312 P.H.                                 |           |                                            |
| 28          | 70413-02        | Speed Nut                                               |           |                                            |
| 29          | 100392-01       | Washer, Flat Trim                                       |           |                                            |
| 30          | 70737-06        | Lockwasher, #6 External Tooth                           |           |                                            |
| 31          | 70029-06        | Screw, 4-40 X .375 P.H.                                 |           |                                            |
| 32          | 70828-04        | Screw, 6-32 X .250 Tx Dr                                |           |                                            |
| 33          | 70828-06        | Screw, 6-32 X .375 Tx Dr                                |           |                                            |
| 34          | 20571-02        | Shock Mount                                             |           |                                            |
| 35          | 70701-06        | Kepnut, 6-32                                            |           |                                            |
| 36          | 70829-12        | Screw, 8-32 X .750 Tx Dr                                |           |                                            |
| 37          | 304004-01       | Damping, Access Cover                                   |           |                                            |
| 38          | 304005-01       | Damping, Access Cover                                   |           |                                            |
| 39          | 304006-01       | Soundfoam, Access Cover                                 |           |                                            |
| 40          | 304010-01       | Soundfoam, Top Right Side                               |           |                                            |
| 41          | 304010-02       | Soundfoam, Top Left Side                                |           |                                            |

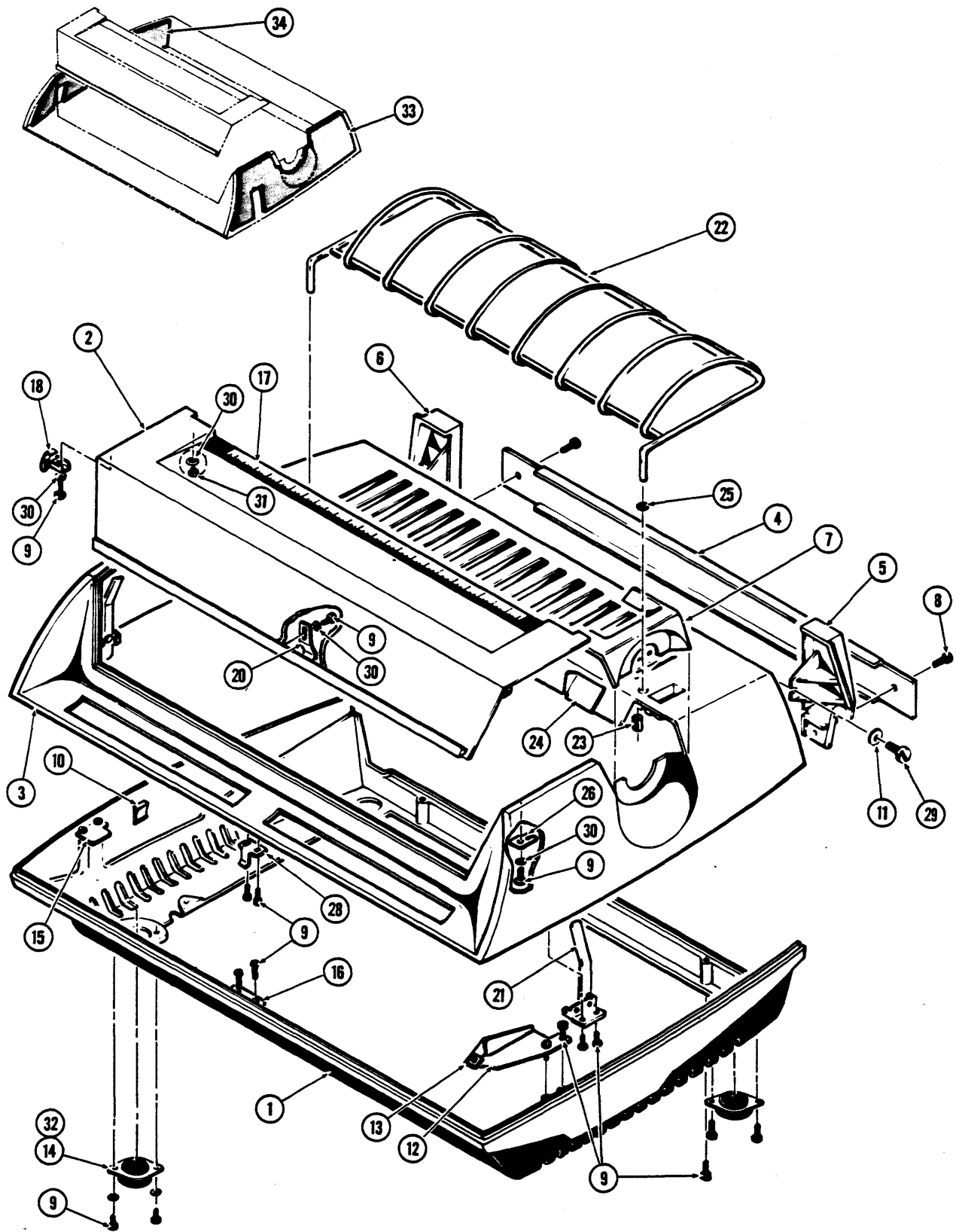


Figure 5-2  
 320015-XX COVER SET ASSEMBLY, RO, PLASTIC

## SECTION V.2

320015-XX COVER SET ASSEMBLY, RO, PLASTIC  
(see notes)

| ITEM | PART NO.  | DESCRIPTION                          | ITEM | PART NO.  | DESCRIPTION                   |
|------|-----------|--------------------------------------|------|-----------|-------------------------------|
| 1    | 400577-51 | Bottom Cover, Black—for              | 28   | 22674     | Clip, Top Cover (Note 3)      |
|      |           | Control Panel                        | 29   | 70829-06  | Screw, 8-32 X .375 Tx Dr/T.F. |
|      | 400577-52 | Bottom Cover,                        | 30   | 70853     | Washer, #6 Flat               |
|      |           | Very Light Warm Gray—for             | 31   | 70828-05  | Screw, 6-32 X .312 Tx Dr/T.F. |
|      |           | Control Panel                        | 32   | 70829-14  | Screw, 8-32 X .375 Tx Dr/T.F. |
|      | 301947-02 | Bottom Cover, Black—w/o              | 33   | 304010-01 | Soundfoam, Top Right Side     |
|      |           | Control Panel                        | 34   | 304010-02 | Soundfoam, Top Left Side      |
| 2    | 320009-01 | Access Cover, Black—for              |      |           |                               |
|      |           | Control Panel                        |      |           |                               |
|      | 320009-02 | Access Cover,                        |      |           |                               |
|      |           | Very Light Warm Gray—for             |      |           |                               |
|      |           | Control Panel                        |      |           |                               |
|      | 301959-02 | Access Cover, Black—w/o              |      |           |                               |
|      |           | Control Panel                        |      |           |                               |
|      | 301959-04 | Access Cover,                        |      |           |                               |
|      |           | Very Light Warm Gray—w/o             |      |           |                               |
|      |           | Control Panel                        |      |           |                               |
| 3    | 320014-01 | Top Cover, Black—for                 |      |           |                               |
|      |           | Control Panel                        |      |           |                               |
|      | 320014-02 | Top Cover,                           |      |           |                               |
|      |           | Very Light Warm Gray                 |      |           |                               |
|      |           | —for Control Panel                   |      |           |                               |
|      | 301946-01 | Top Cover,                           |      |           |                               |
|      |           | Very Light Warm Gray                 |      |           |                               |
|      |           | —w/o Control Panel                   |      |           |                               |
|      | 301946-02 | Top Cover, Black—w/o                 |      |           |                               |
|      |           | Control Panel                        |      |           |                               |
| 4    | 320069-01 | Cover Strip, Rear                    |      |           |                               |
| 5    | 24474-01  | Cover, Rear, Right                   |      |           |                               |
| 6    | 24474-02  | Cover, Rear, Left                    |      |           |                               |
| 7    | 24415-01  | Skirt, Right, Black                  |      |           |                               |
|      | 23847-02  | Skirt, Right,                        |      |           |                               |
|      |           | Very Light Warm Gray                 |      |           |                               |
|      | 24416-01  | Skirt, Left, Black                   |      |           |                               |
|      | 23848-02  | Skirt, Left,                         |      |           |                               |
|      |           | Very Light Warm Gray                 |      |           |                               |
| 8    | 70805-02  | Screw, 4-20 X .375 T.F.              |      |           |                               |
| 9    | 70828-04  | Screw, 6-32 X .250 Tx Dr/T.F.        |      |           |                               |
| 10   | 10924     | Cable Clamp                          |      |           |                               |
| 11   | 70179-08  | Washer, #8 Flat                      |      |           |                               |
| 12   | 301855-01 | Bracket, Control Panel, Left         |      |           |                               |
|      |           | (Note 2)                             |      |           |                               |
|      | 301855-02 | Bracket, Control Panel, Right        |      |           |                               |
|      |           | (Note 2)                             |      |           |                               |
| 13   | 70702-24  | "U" Nut (Note 2)                     |      |           |                               |
| 14   | 20571-03  | Shock Mount                          |      |           |                               |
| 15   | 20667     | Latch, Stop (Note 3)                 |      |           |                               |
| 16   | 22675     | Plate, Bottom Cover (Note 3)         |      |           |                               |
| 17   | 22932-01  | Scale, Proportional                  |      |           |                               |
| 18   | 40844-03  | Catch, Access Cover                  |      |           |                               |
| 19   |           | Not Used                             |      |           |                               |
| 20   | 320036-01 | Actuator, Cover Open Switch (Note 2) |      |           |                               |
|      | 400217-01 | Actuator, Cover Open Switch (Note 3) |      |           |                               |
| 21   | 46042-01  | Latch Assembly, Right                |      |           |                               |
|      | 46042-02  | Latch Assembly, Left                 |      |           |                               |
| 22   | 301864-01 | Rack, Cover (Note 2)                 |      |           |                               |
| 23   | 100183-01 | Tip, Vinyl (Note 2)                  |      |           |                               |
| 24   | 22904-01  | Paper Index Assembly                 |      |           |                               |
| 25   | 100392-01 | Washer, Flat Trim (Note 2)           |      |           |                               |
| 26   | 301945-01 | Striker Plate                        |      |           |                               |
| 27   |           | Not Used                             |      |           |                               |

## Notes:

(1) Cover Sets, RO, Plastic:

|           |                                         |
|-----------|-----------------------------------------|
| 320015-01 | Black, for Control Panel                |
| 320015-02 | Very Light Warm Gray, for Control Panel |
| 320015-21 | Black, no Control Panel                 |
| 320015-22 | Very Light Warm Gray, no Control Panel  |

(2) Used on 320015-01, -02 assemblies only.

(3) Used on 320015-21, -22 assemblies only.

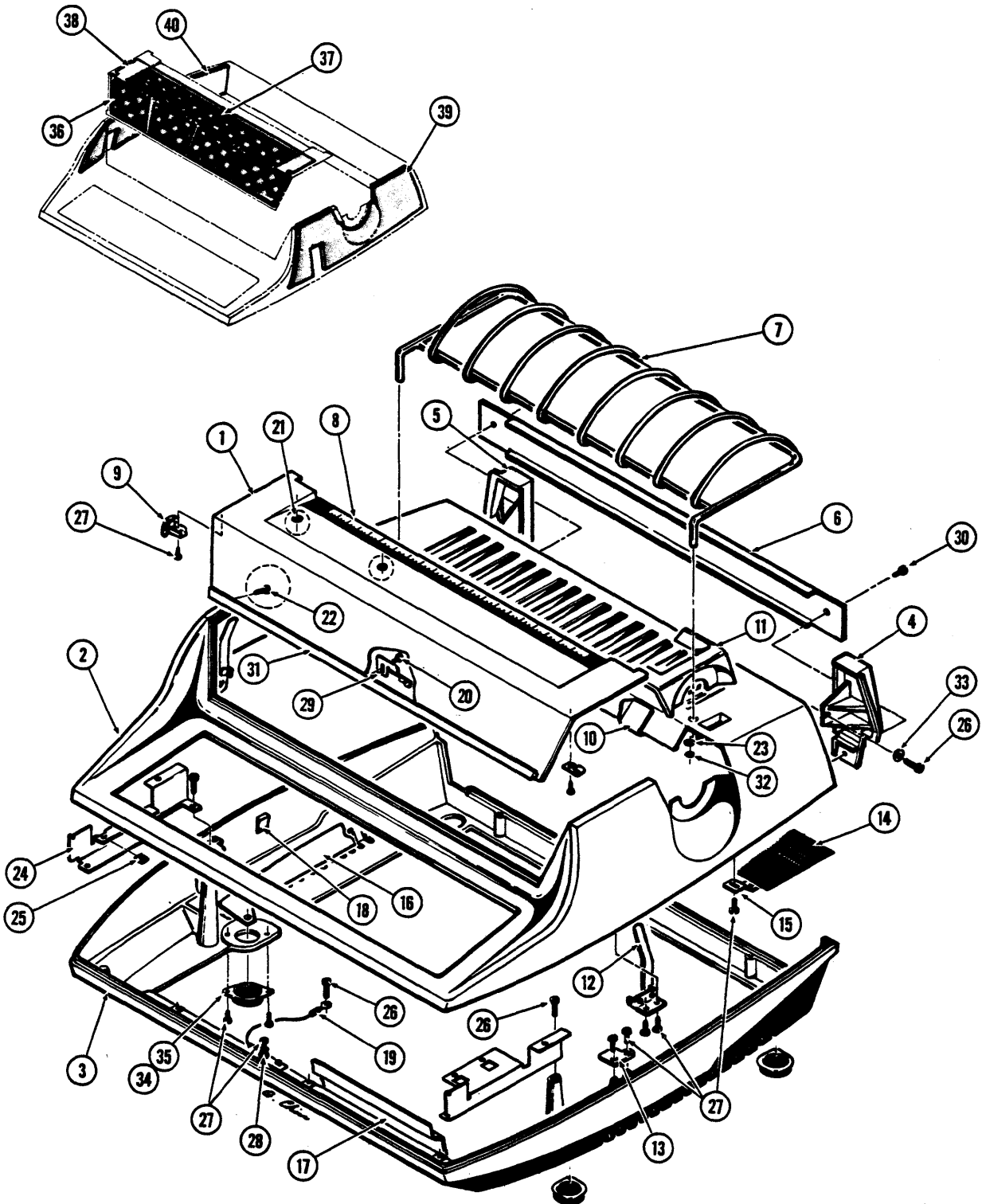


Figure 5-3  
400762-XX COVER SET ASSEMBLY, KSR, METAL



## SECTION V.3

400762-XX COVER SET ASSEMBLY, KSR, METAL  
(see notes)

| ITEM | PART NO.                                     | DESCRIPTION                                                                                                          |                                                                                                                               |
|------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 1    | 400579-01<br>400579-02                       | Access Cover Assembly, Black<br>Access Cover Assembly,<br>Very Light Warm Gray                                       | Notes:                                                                                                                        |
| 2    | 400593-01<br>400593-02                       | Top Cover Assembly, Black—for<br>Control Panel<br>Top Cover Assembly, Very Light<br>Warm Gray—for Control Panel      | (1) Cover Sets, KSR, Metal:<br><br>400762-51 Black, for Control Panel<br>400762-52 Very Light Warm Gray, for<br>Control Panel |
| 3    | 400592-01                                    | Bottom Cover Assembly                                                                                                |                                                                                                                               |
| 4    | 24474-01                                     | Rear Cover, Right                                                                                                    |                                                                                                                               |
| 5    | 24474-02                                     | Rear Cover, Left                                                                                                     |                                                                                                                               |
| 6    | 24472                                        | Cover Strip, Rear                                                                                                    |                                                                                                                               |
| 7    | 301864-01                                    | Rack, Cover                                                                                                          |                                                                                                                               |
| 8    | 22932-01                                     | Scale, Porportional                                                                                                  |                                                                                                                               |
| 9    | 40844-02                                     | Catch, Access Cover                                                                                                  |                                                                                                                               |
| 10   | 22904-01                                     | Paper Index Assembly                                                                                                 |                                                                                                                               |
| 11   | 24415-01<br>23847-02<br>24416-01<br>23848-02 | Skirt, Right, Black<br>Skirt, Right, Very Light Warm Gray<br>Skirt, Left, Black<br>Skirt, Left, Very Light Warm Gray |                                                                                                                               |
| 12   | 46042-01<br>46042-02                         | Latch Assembly, Right<br>Latch Assembly, Left                                                                        |                                                                                                                               |
| 13   | 20667                                        | Latch, Stop                                                                                                          |                                                                                                                               |
| 14   | 26119-01                                     | Screen, Top                                                                                                          |                                                                                                                               |
| 15   | 23976-01                                     | Clip, Screen Mounting                                                                                                |                                                                                                                               |
| 16   | 400206-01                                    | Barrier, Side                                                                                                        |                                                                                                                               |
| 17   | 23965-01                                     | Barrier, Front                                                                                                       |                                                                                                                               |
| 18   | 10924                                        | Cable Clamp                                                                                                          |                                                                                                                               |
| 19   | 23831-17                                     | Ground Strap                                                                                                         |                                                                                                                               |
| 20   | 70029-06                                     | Screw, 4-40 X .375                                                                                                   |                                                                                                                               |
| 21   | 70413-02                                     | Speed Nut                                                                                                            |                                                                                                                               |
| 22   | 70029-05                                     | Screw, 4-40 X .312 P.H.                                                                                              |                                                                                                                               |
| 23   | 70413-03                                     | Speed Nut                                                                                                            |                                                                                                                               |
| 24   | 400594-01<br>400595-01                       | Bracket, Keyboard, Left<br>Bracket, Keyboard, Right                                                                  |                                                                                                                               |
| 25   | 70702-24                                     | "U" Nut                                                                                                              |                                                                                                                               |
| 26   | 70829-06                                     | Screw, 8-32 X .375 Tx Dr                                                                                             |                                                                                                                               |
| 27   | 70828-04                                     | Screw, 6-32 X .250 Tx Dr                                                                                             |                                                                                                                               |
| 28   | 70737-06                                     | Lockwasher, #6, External Tooth                                                                                       |                                                                                                                               |
| 29   | 400566-01                                    | Actuator, Switch                                                                                                     |                                                                                                                               |
| 30   | 70805-02                                     | Screw, 4-20 X .375 T.F.                                                                                              |                                                                                                                               |
| 31   | 20780-01                                     | Lip, Access Cover                                                                                                    |                                                                                                                               |
| 32   | 100392-01                                    | Washer, Flat Trim                                                                                                    |                                                                                                                               |
| 33   | 70179-08                                     | Washer, #8 Flat                                                                                                      |                                                                                                                               |
| 34   | 70829-12                                     | Screw, 8-32 X .750 Tx Dr                                                                                             |                                                                                                                               |
| 35   | 20571-02                                     | Shock Mount                                                                                                          |                                                                                                                               |
| 36   | 304004-01                                    | Damping, Access Cover                                                                                                |                                                                                                                               |
| 37   | 304005-01                                    | Damping, Access Cover                                                                                                |                                                                                                                               |
| 38   | 304006-01                                    | Soundfoam, Access Cover                                                                                              |                                                                                                                               |
| 39   | 304010-01                                    | Soundfoam, Top Right Side                                                                                            |                                                                                                                               |
| 40   | 304010-02                                    | Soundfoam, Top Left Side                                                                                             |                                                                                                                               |

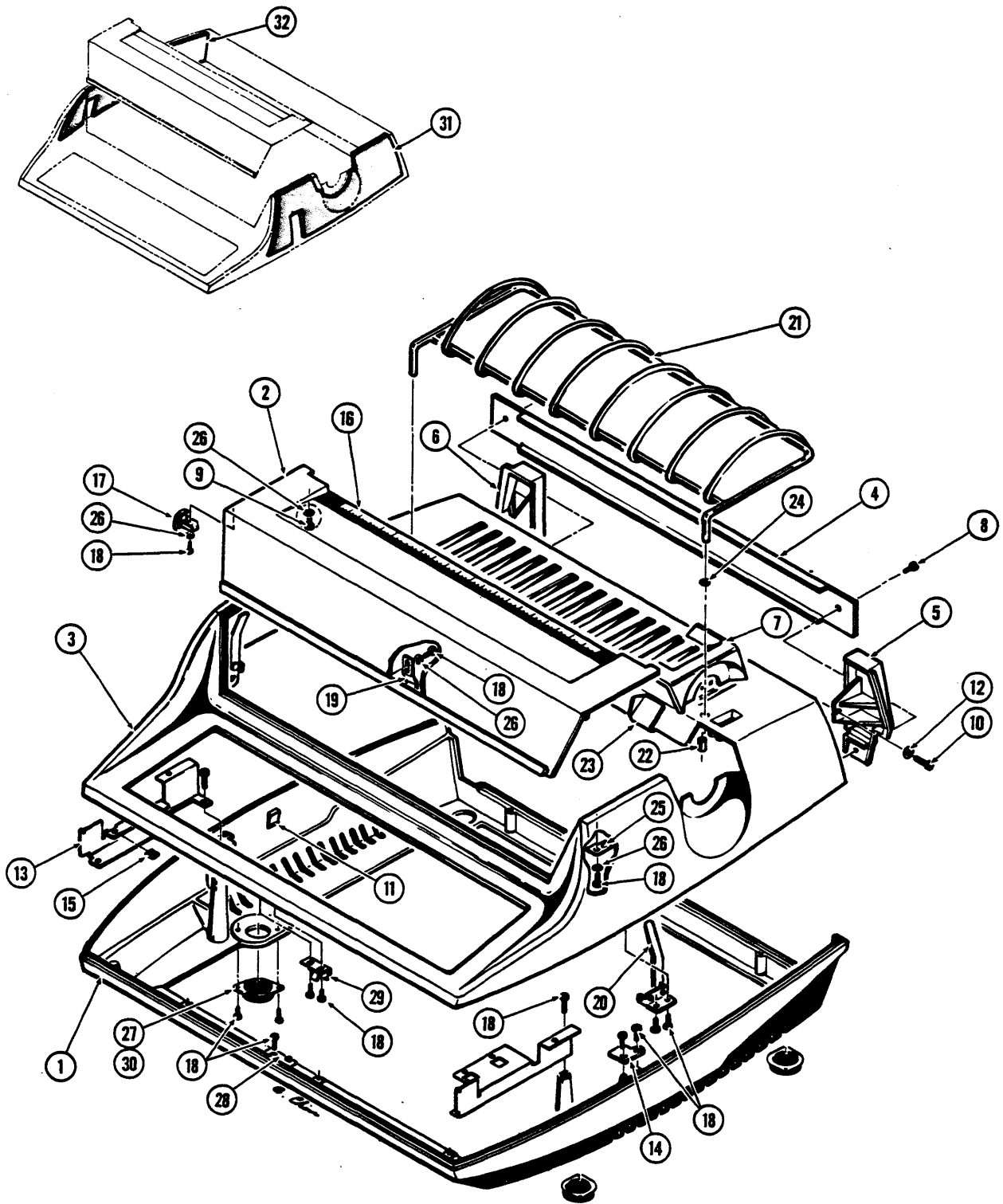


Figure 5-4  
320010-XX COVER SET ASSEMBLY, KSR, PLASTIC

## SECTION V.4

320010-XX COVER SET ASSEMBLY, KSR, PLASTIC  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>                 |
|-------------|-----------------|------------------------------------|
| 1           | 400592-51       | Bottom Cover, Black                |
|             | 400592-52       | Bottom Cover, Very Light Warm Gray |
| 2           | 320009-01       | Access Cover, Black                |
|             | 320009-02       | Access Cover, Very Light Warm Gray |
| 3           | 320013-01       | Top Cover, Black                   |
|             | 320013-02       | Top Cover, Very Light Warm Gray    |
| 4           | 320069-01       | Cover Strip, Rear                  |
| 5           | 24474-01        | Cover, Rear, Right                 |
| 6           | 24474-02        | Cover, Rear, Left                  |
| 7           | 24415-01        | Skirt, Right, Black                |
|             | 23847-02        | Skirt, Right, Very Light Warm Gray |
|             | 24416-01        | Skirt, Left, Black                 |
|             | 23848-02        | Skirt, Left, Very Light Warm Gray  |
| 8           | 70805-02        | Screw, 4-20 X .375 T.F.            |
| 9           | 70828-05        | Screw, 6-32 X .312 Tx Dr           |
| 10          | 70829-06        | Screw, 8-32 X .375 Tx Dr           |
| 11          | 10924           | Cable Clamp                        |
| 12          | 70179-08        | Washer, #8 Flat                    |
| 13          | 400594-01       | Bracket, Keyboard, Left            |
|             | 400595-01       | Bracket, Keyboard, Right           |
| 14          | 20667           | Latch, Stop                        |
| 15          | 70702-24        | "U" Nut                            |
| 16          | 22932-01        | Scale, Proportional                |
| 17          | 40844-03        | Catch, Access Cover                |
| 18          | 70828-04        | Screw, 6-32 X .250 Tx Dr           |
| 19          | 320036-01       | Actuator, Switch                   |
| 20          | 46042-01        | Latch Assembly, Right              |
|             | 46042-02        | Latch Assembly, Left               |
| 21          | 301864-01       | Rack, Cover                        |
| 22          | 100183-01       | Tip, Vinyl                         |
| 23          | 22904-01        | Paper Index Assembly               |
| 24          | 100392-01       | Washer, Flat Trim                  |
| 25          | 301945-01       | Striker Plate                      |
| 26          | 70853           | Washer, #6 Flat                    |
| 27          | 20571-03        | Shock Mount                        |
| 28          | 22675           | Plate, Bottom Cover                |
| 29          | 320072-01       | Clip, Top Cover                    |
| 30          | 70829-14        | Screw, 8-32 X .375 Tx Dr           |
| 31          | 304010-01       | Soundfoam, Top, Right              |
| 32          | 304010-02       | Soundfoam, Top, Left               |

## Notes:

- (1) Cover Sets, KSR, Plastic:
- |           |                      |
|-----------|----------------------|
| 320010-01 | Black                |
| 320010-02 | Very Light Warm Gray |

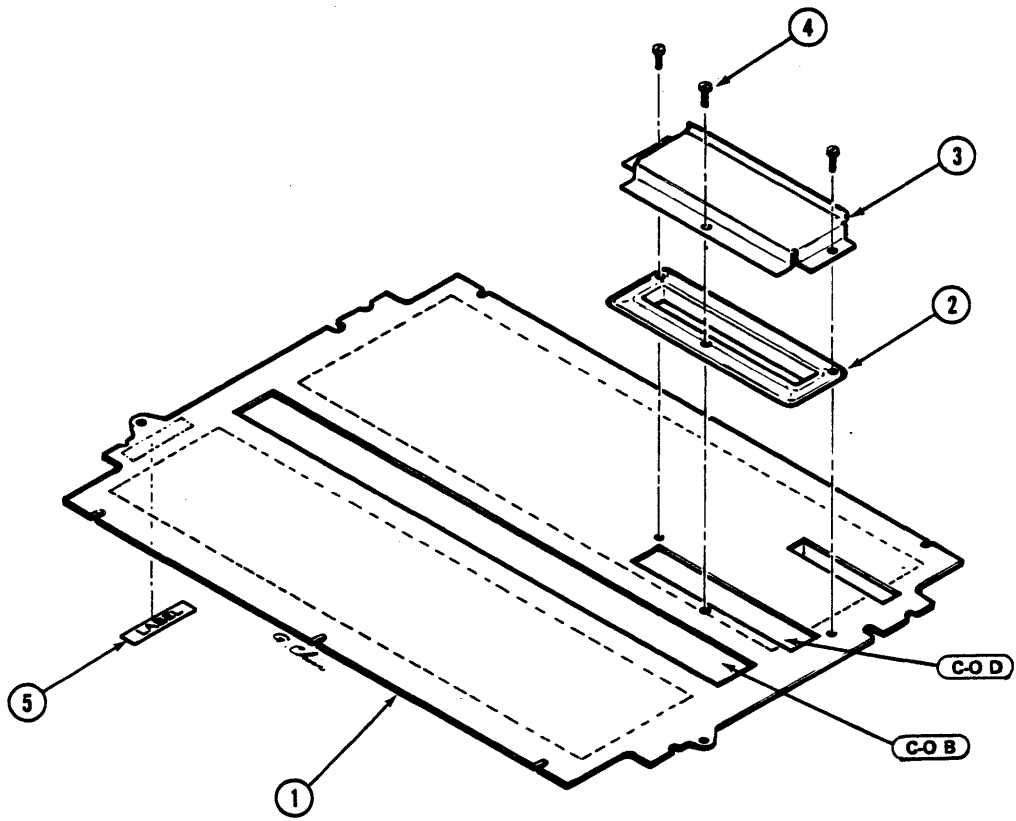


Figure 5-5  
301582-XX BOTTOM PAN ASSEMBLY—SHORT

SECTION V.5

301582-XX BOTTOM PAN ASSEMBLY—SHORT  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>                 |
|-------------|-----------------|------------------------------------|
| 1           | 24391-07        | Bottom Pan, Short C-O D (Note 2)   |
|             | 24391-08        | Bottom Pan, Short C-O B,D (Note 3) |
| 2           | 46086           | Grommet, Cable                     |
| 3           | 46088           | Hood, Cable                        |
| 4           | 70112-04        | Screw, 6-32 X .250 P.H.            |
| 5           | 301580-27       | Label (Note 2)                     |
|             | 301580-28       | Label (Note 3)                     |

Notes:

- (1) Bottom Pan Assemblies—Short
  - 301582-07 Standard
  - 301582-08 Bottom Feed
- (2) Used on 301582-07 only.
- (3) Used on 301582-08 only.

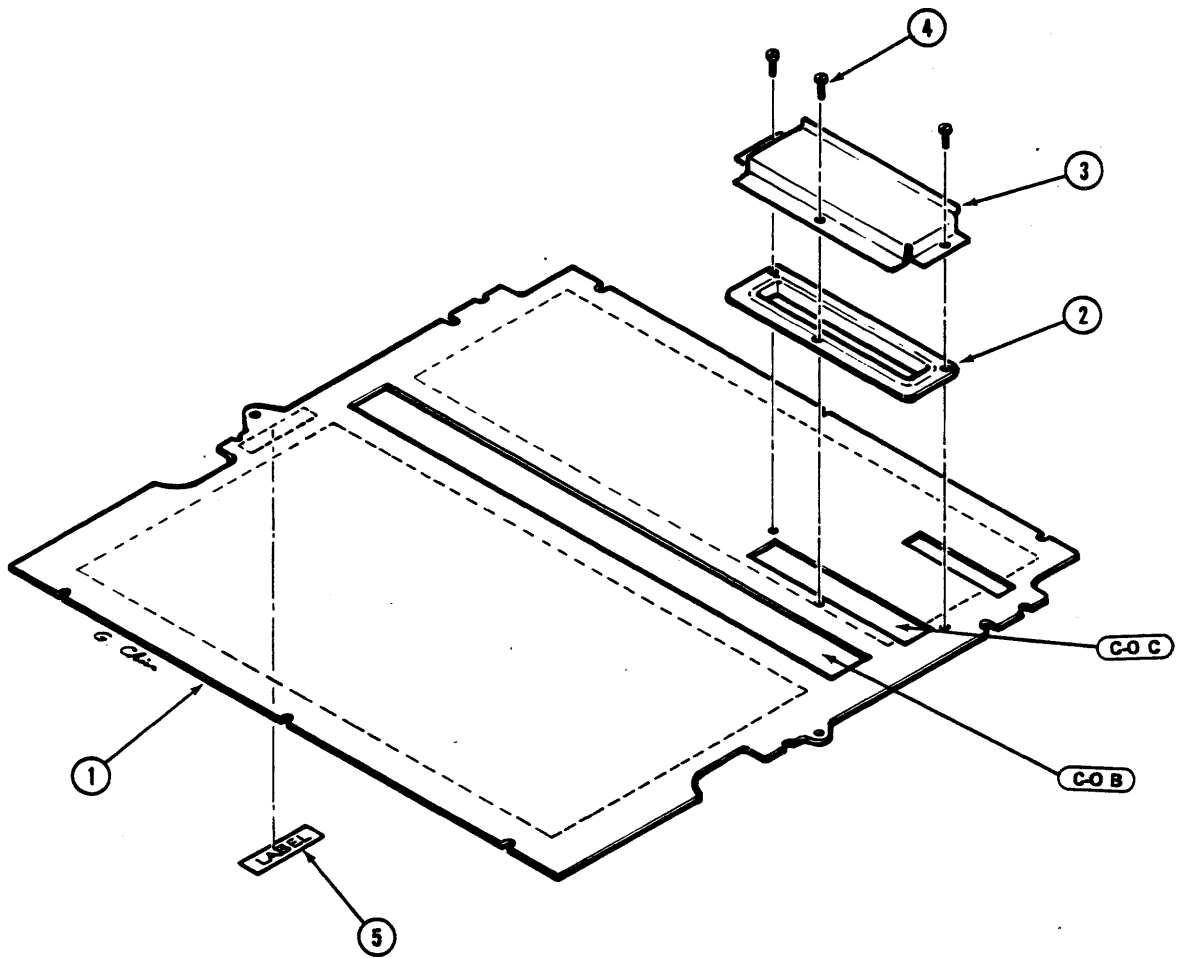


Figure 5-6  
301584-XX BOTTOM PAN ASSEMBLY—LONG

SECTION V.6

301584-XX BOTTOM PAN ASSEMBLY—LONG  
(see notes)

| <u>ITEM</u> | <u>PART NO.</u> | <u>DESCRIPTION</u>                |
|-------------|-----------------|-----------------------------------|
| 1           | 24392-05        | Bottom Pan, Long C-O C (Note 2)   |
|             | 24392-06        | Bottom Pan, Long C-O B,C (Note 3) |
| 2           | 46086           | Grommet, Cable                    |
| 3           | 46088           | Hood, Cable                       |
| 4           | 70112-04        | Screw, 6-32 X .250 P.H.           |
| 5           | 301580-65       | Label (Note 2)                    |
|             | 301580-66       | Label (Note 3)                    |

Notes:

- (1) Bottom Pan Assemblies—Long:
- |           |             |
|-----------|-------------|
| 301584-05 | Standard    |
| 301584-06 | Bottom Feed |
- (2) Used on 301584-05 only.
- (3) Used on 301586-06 only.





APPENDIX "A"

OPTIONS AND ACCESSORIES

KEYBOARD OPTIONS 400773-XX

| <u>Part No.</u> | <u>Description</u>                      |
|-----------------|-----------------------------------------|
| 301873-51       | Typewriter Paired Keyboard (Preferred)  |
| 400716-51       | Typewriter Paired Keyboard (Alternate)  |
| 301873-52       | French AZERTY Keyboard (Preferred)      |
| 400716-52       | French AZERTY Keyboard (Alternate)      |
| 301873-54       | Scandinavian Keyboard (Preferred)       |
| 400716-54       | Scandinavian Keyboard (Alternate)       |
| 301873-55       | Norsk Keyboard (Preferred)              |
| 400716-55       | Norsk Keyboard (Alternate)              |
| 301873-56       | German Keyboard (Preferred)             |
| 400716-56       | German Keyboard (Alternate)             |
| 301873-57       | APL Keyboard (Preferred)                |
| 400716-57       | APL Keyboard (Alternate)                |
| 301873-58       | Logical Bit Paired Keyboard (Preferred) |
| 400716-58       | Logical Bit Paired Keyboard (Alternate) |
| 301938-01       | Keyboard Cable Assembly (Note 2)        |
| 400555-02       | Keyboard Cable Assembly (Note 3)        |
| 400569-01       | Keyboard Mask With Cutouts              |
| 400569-02       | Keyboard Mask Without Cutouts           |
| 70691           | Screw, 6-20 X .500 P.H.                 |
| 70737-06        | Lockwasher, #6 Ext Tooth                |

Notes:

(1) Keyboard Options:

|           |                                    |
|-----------|------------------------------------|
| 400773-00 | Typewriter Paired Keyboard Option  |
| 400773-10 | French Azerty Keyboard Option      |
| 400773-20 | Norsk Keyboard Option              |
| 400773-30 | Scandinavian Keyboard Option       |
| 400773-40 | German Keyboard Option             |
| 400773-50 | APL Keyboard Option                |
| 400773-60 | Logical Bit Paired Keyboard Option |

Each Keyboard Option includes a keyboard, a cable assembly, necessary screws and lockwashers.

(2) For use with 301873-XX Keyboards.

(3) For use with 400716-xx Keyboards.

PUBLICATIONS

| <u>Part No.</u> | <u>Description</u>                                     |
|-----------------|--------------------------------------------------------|
| 90405-XX        | Series 1650 Operators Guide                            |
| 90415-XX        | Series 1640 Operators Guide                            |
| 90412-XX        | Product Description, Series 1640/1650                  |
| 90413-XX        | Maintenance Manual, Series 1640/1650                   |
| 90007-XX        | Printer Supplies Catalog                               |
| 90420-XX        | HyFeed Sheet Feeder Operation and Maintenance Manual   |
| 90421-XX        | Mechanical Front Feed Operation and Maintenance Manual |
| 90422-XX        | Auto Front Feed Operation and Maintenance Manual       |

**SERVICE AIDS**

| <u>Part No.</u> | <u>Description</u>                     |
|-----------------|----------------------------------------|
| 23744-15        | Extension Cable (ELA) 15 Ft.           |
| 46095-02        | Extender Card                          |
| 400625-02       | Touch-up Lacquer, Very Light Warm Gray |
| 400625-04       | Touch-up Lacquer, Warm Black           |

**PAPER HANDLING**

| <u>Part No.</u> | <u>Description</u>             |
|-----------------|--------------------------------|
| 305028-01       | HyFeed Sheet Feeder (Note 1)   |
| 305026-01       | Mechanical Front Feed (Note 1) |
| 26033-01        | Pedestal Mount                 |
| 26068-01        | Paper Rack                     |
| 305027-XX       | Auto Front Feed (Note 1)       |
| 305037-02       | Bidirectional Tractor (Note 2) |

**Notes:**

- (1) See your Diablo Sales Representative for information on feeders.
- (2) Used in conjunction with the Auto Front Feed.

**APPENDIX "B"**

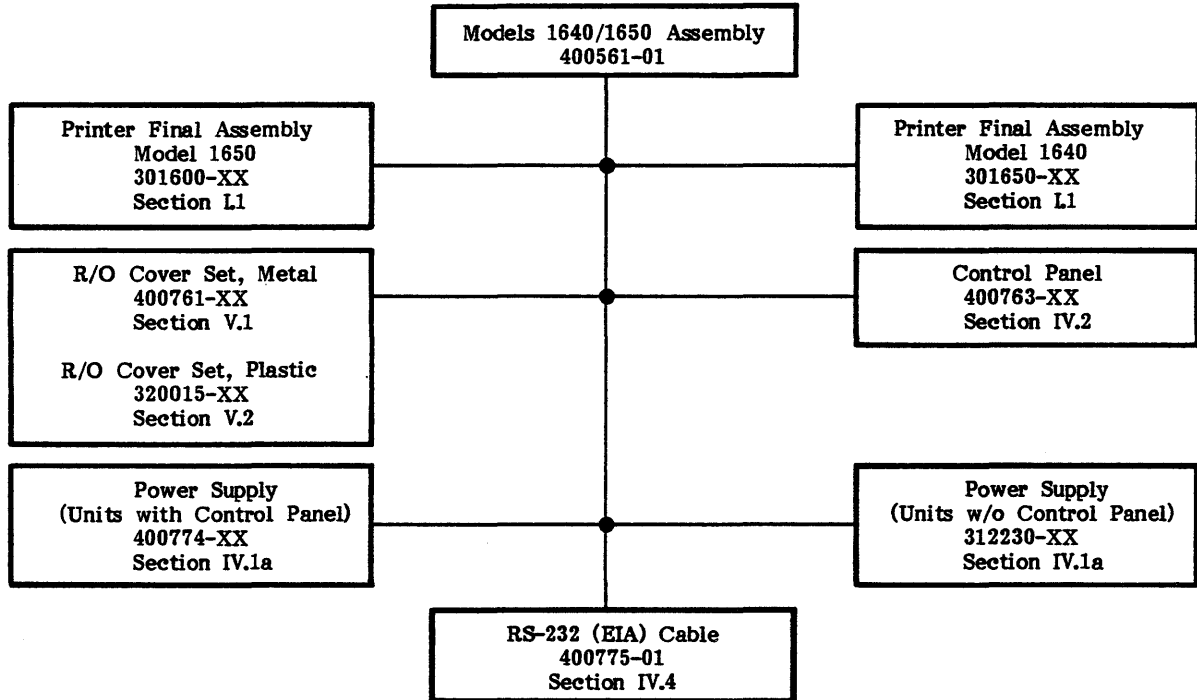
**FINAL ASSEMBLY CONFIGURATIONS**

|                   | 1355WP No HPRO4 | 1355WPP Parallel | 1355WPS Serial/Parallel | 1345A No HPRO4 | 1345P Parallel | 1345S Serial/Parallel |
|-------------------|-----------------|------------------|-------------------------|----------------|----------------|-----------------------|
| <u>Model 1650</u> |                 |                  |                         |                |                |                       |
| 301600-01         |                 |                  | X                       |                |                |                       |
| 301600-02         |                 | X                |                         |                |                |                       |
| 301600-03         | X               |                  |                         |                |                |                       |
| <u>Model 1640</u> |                 |                  |                         |                |                |                       |
| 301650-01         |                 |                  |                         |                |                | X                     |
| 301650-02         |                 |                  |                         |                | X              |                       |
| 301650-03         |                 |                  |                         | X              |                |                       |

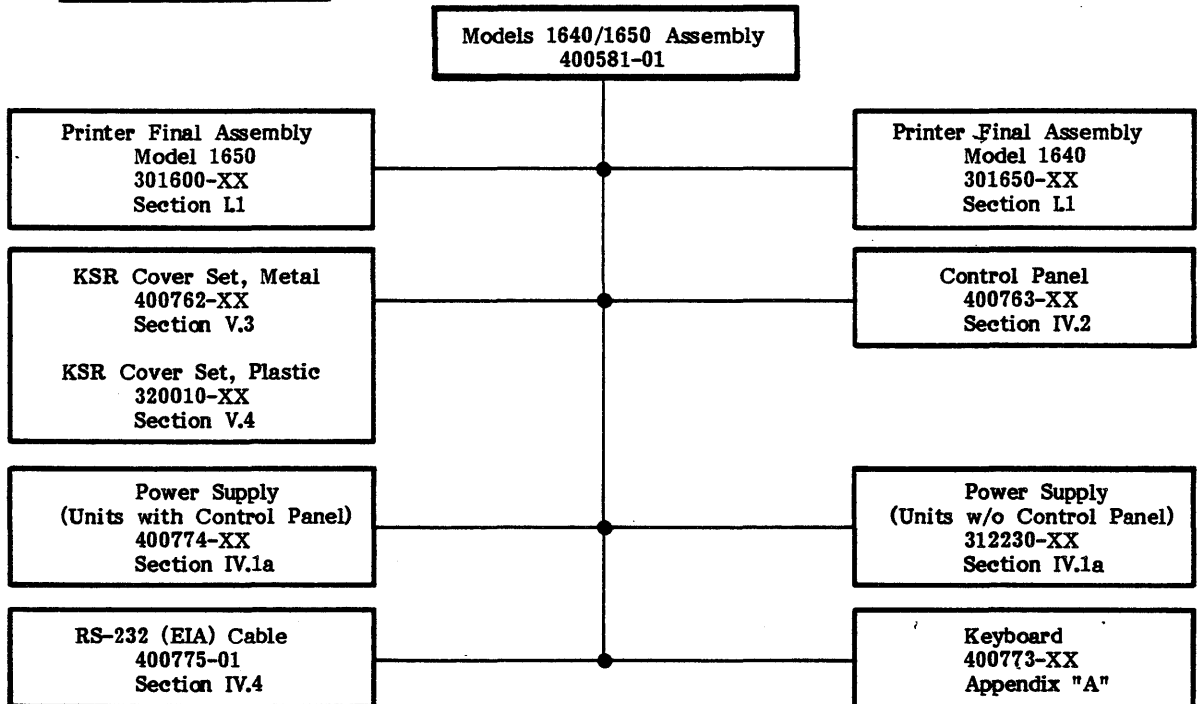
APPENDIX "C"

1640/1650 TERMINALS GUIDE CHART

Models 1640/1650, R/O:



Models 1640/1650, KSR:



APPENDIX "D"

320160-XX PIN FEED PLATEN ASSEMBLIES

| <u>ASSEMBLY NO.</u> | <u>PAPER WIDTH<br/>(inches)</u> | <u>CORE NO.</u> |
|---------------------|---------------------------------|-----------------|
| 320160-01           | 6.000                           | 22487-01        |
| 320160-02           | 8.000                           | 22487-02        |
| 320160-03           | 8.500                           | 22487-03        |
| 320160-04           | 9.000                           | 22487-04        |
| 320160-05           | 9.875                           | 22487-05        |
| 320160-06           | 10.625                          | 22487-06        |
| 320160-07           | 12.844                          | 22487-07        |
| 320160-08           | 13.625                          | 22487-08        |
| 320160-09           | 14.875                          | 22487-09        |
| 320160-10           | 15.000                          | 22487-10        |
| 320160-12           | 5.812                           | 22487-12        |
| 320160-13           | 9.500                           | 22487-13        |
| 320160-14           | 10.375                          | 22487-14        |
| 320160-15           | 14.949                          | 22487-15        |
| 320160-16           | 5.750                           | 22487-16        |
| 320160-17           | 6.500                           | 22487-17        |
| 320160-18           | 10.500                          | 22487-18        |
| 320160-19           | 11.750                          | 22487-19        |
| 320160-20           | 12.000                          | 22487-20        |
| 320160-21           | 13.000                          | 22487-21        |
| 320160-22           | 14.500                          | 22487-22        |
| 320160-23           | 10.000                          | 22487-23        |
| 320160-24           | 4.750                           | 22487-24        |
| 320160-25           | 15.250                          | 22487-25        |
| 320160-26           | 7.250                           | 22487-26        |
| 320160-27           | 4.000                           | 22487-27        |
| 320160-33           | 8.500                           | 22487-03        |
| 320160-35           | 9.875                           | 22487-05        |



| <u>PART NO.</u> | <u>DESCRIPTION</u>       | <u>LOCATION(S)</u>                                                                                | <u>PART NO.</u> | <u>DESCRIPTION</u>   | <u>LOCATION(S)</u>                 |
|-----------------|--------------------------|---------------------------------------------------------------------------------------------------|-----------------|----------------------|------------------------------------|
|                 | <u>DIODES</u>            |                                                                                                   |                 | <u>MISCELLANEOUS</u> |                                    |
| 10160           | 1N4454                   | B17,B42,B50<br>B52,B56,C15<br>C39,C40,C50<br>C51,F40,F41<br>G36,G37,G38<br>G39,G65,G66<br>H47,H53 | 22753           | Jumper Module        | G23,D33                            |
|                 |                          |                                                                                                   | 10626-00        | Switch, Toggle       | A36,A67                            |
|                 |                          |                                                                                                   | 24376-02        | Heat Sink            | (Mounted to PCB)                   |
| 10369           | 1N4002                   | D45,D61,E45<br>E55,E61,G61<br>G62                                                                 | 70373-10        | Standoff             | (Between Heat Sink and PCB)        |
| 13009-31        | 5.1V Zener, 1N5231B      | F69,F70,F72<br>F73,H16,H31                                                                        | 70111-07        | Screw, 4-40 X .4375  | (To mount Heat Sink)               |
| 13054           | 1N5415                   | E10,E11,E26<br>E27                                                                                | 70111-04        | Screw, 4-40 X .250   | (Transistor mounting)              |
| 10103-02        | 6.2V Zener               | C37                                                                                               | 70813           | Insulator            | (Transistor mount screws)          |
|                 | <u>TRANSISTORS</u>       |                                                                                                   | 70812           | Insulator            | (Between transistor and Heat Sink) |
| 13070           | PN3644                   | C44,D5,D21<br>D43,D50,D58<br>D64,E35,G67<br>H18,H35,H50<br>H67                                    |                 |                      |                                    |
| 13013           | 2N4401                   | C4,C19,C65<br>E58,F16,F32<br>F45,F48,F64<br>G47,H61                                               |                 |                      |                                    |
| 10444-01        | 2N5322                   | E6,E22                                                                                            |                 |                      |                                    |
| 10443-01        | 2N5320                   | E14,E30,H59                                                                                       |                 |                      |                                    |
| 10445-01        | 2N6103                   | C10,C26,G10<br>G26                                                                                |                 |                      |                                    |
| 13007           | TIP125                   | C73                                                                                               |                 |                      |                                    |
|                 | <u>LC's</u>              |                                                                                                   |                 |                      |                                    |
| 10165           | 72747                    | A45,E74                                                                                           |                 |                      |                                    |
| 10166           | 748                      | A19,A31                                                                                           |                 |                      |                                    |
| 10168           | 319                      | A64                                                                                               |                 |                      |                                    |
| 100300-01       | Resistor Network,<br>10K | A50,A51                                                                                           |                 |                      |                                    |

Notes:

- (1) Thermal compound #10549 required between power transistors, insulators and Heat Sink.

## SECTION IL9

## 400568-01 H4CPN PCB ASSEMBLY

| <u>PART NO.</u> | <u>DESCRIPTION</u>      | <u>LOCATION(S)</u>                                     | <u>PART NO.</u> | <u>DESCRIPTION</u>         | <u>LOCATION(S)</u>                                             |
|-----------------|-------------------------|--------------------------------------------------------|-----------------|----------------------------|----------------------------------------------------------------|
|                 | <u>RESISTORS</u>        |                                                        |                 | <u>MISCELLANEOUS</u>       |                                                                |
| 10022-15        | 150 Ohm 1/4W 5%         | R1,R2,R3,R4<br>R5,R6,R7,R8<br>R9,R10,R11<br>R13        | 42503-01        | Buzzer                     | DS1                                                            |
|                 |                         |                                                        | 70027-05        | Screw, 2-56 X .312<br>P.H. | DS1                                                            |
| 10224-10        | Pot., 1K 1/2W 10%       | R12                                                    | 70168-02        | Lockwasher, #2             | DS1                                                            |
|                 |                         |                                                        | 100065-03       | Switch, 4 X SPDT           | S1,S2,S3                                                       |
|                 | <u>CAPACITORS</u>       |                                                        | 42501-10        | Switch, SPDT               | S8,S9,S10<br>S11                                               |
| 10038-01        | .1uF 50V                | C2,C3,C4,C5<br>C6,C7,C8                                | 42502-10        | Switch SPDT,<br>Momentary  | S4,S5,S6,S7                                                    |
| 10410-22        | 22uF 15V                | C1                                                     |                 |                            |                                                                |
| 10077-22        | 22uF 35V                | C9                                                     | 14022-03        | Spacer                     | CR1,CR2,CR3<br>CR4,CR5,CR6<br>CR7,CR8,CR9<br>CR10,CR11<br>CR13 |
|                 | <u>DIODES</u>           |                                                        |                 |                            |                                                                |
| 10160           | 1N4454                  | CR12                                                   | 70166-02        | Nut, 2-56                  | DS1                                                            |
| 14005-01        | L.E.D. Red              | CR1,CR2,CR3<br>CR4,CR5,CR6<br>CR7,CR8,CR9<br>CR10,CR13 |                 |                            |                                                                |
| 42222-01        | L.E.D. Green            | CR11                                                   |                 |                            |                                                                |
|                 | <u>LC's</u>             |                                                        |                 |                            |                                                                |
| 10209-01        | 74LS04                  | U3                                                     |                 |                            |                                                                |
| 10390           | 7416                    | U1,U4                                                  |                 |                            |                                                                |
| 100228-01       | 74LS139                 | U2                                                     |                 |                            |                                                                |
| 42412-01        | 74LS244                 | U6                                                     |                 |                            |                                                                |
| 42407-03        | 8255A                   | U5                                                     |                 |                            |                                                                |
| 10761           | Resistor Network,<br>1K | U7,U8                                                  |                 |                            |                                                                |