

FEBRUARY, 1964

Series F

Burroughs
SERIES F 2000
COMPUTER

PARTS CATALOG



SUBJECT TO CHANGE WITHOUT NOTICE

CARRIAGES

KEYBOARD &
PRINTING

ACCUMULATION
& PRODUCT
ACCUMULATOR

COMPONENTS
UNIT

POWER

Property of and to be returned to

Burroughs Corporation

Detroit, Michigan 48232

In Canada: Burroughs Business Machines Ltd., Toronto, Canada

The Series F2000 Symbol Book contains the symbol numbers of parts and/or assemblies that are used only in the Series F2000 Computers. All other parts may be found in the Series F100 - F500 and F1000 Symbol Book, Form 2940.

Each style Series F2000 Computer is designated by the addition of 2000 to the style number of the corresponding basic Series F; for example, F501 - F2501. Therefore, a part for a style F2501 that is shown in the F100 - F500 and F1000 Symbol Book, would be listed under Style F501.

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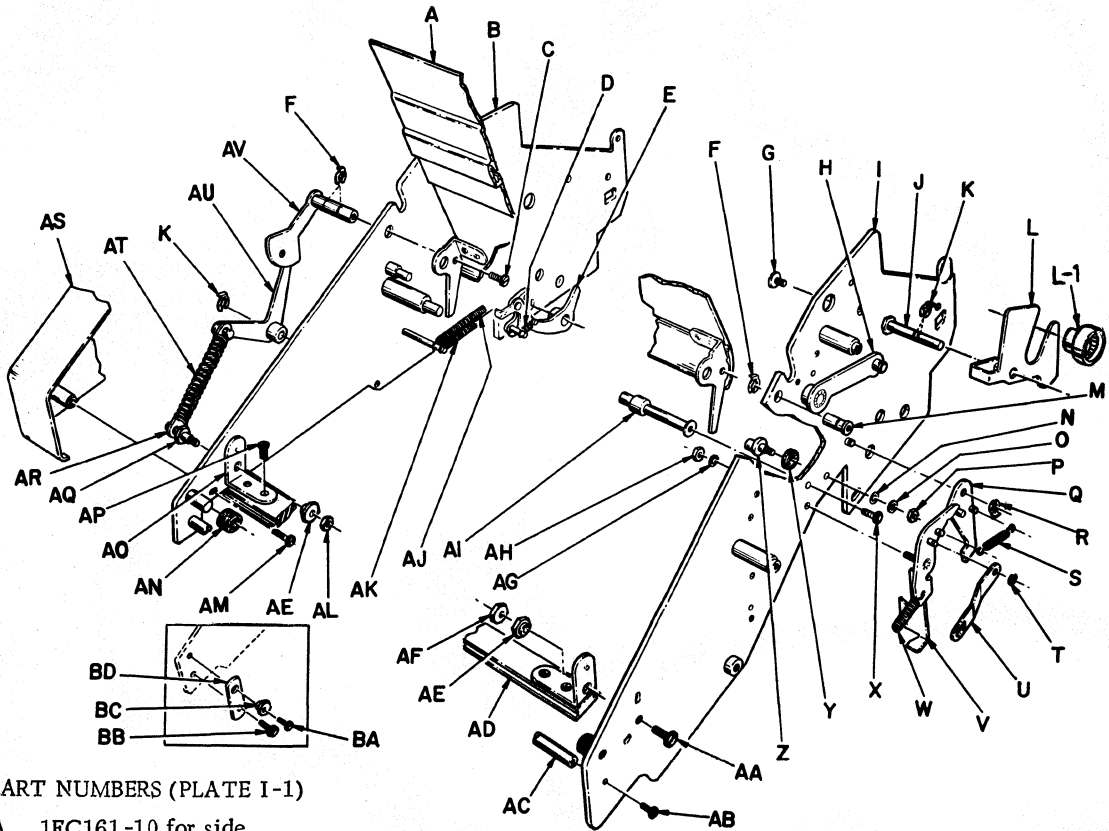
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CARRIAGE CONSTRUCTION (PLATE I-1)

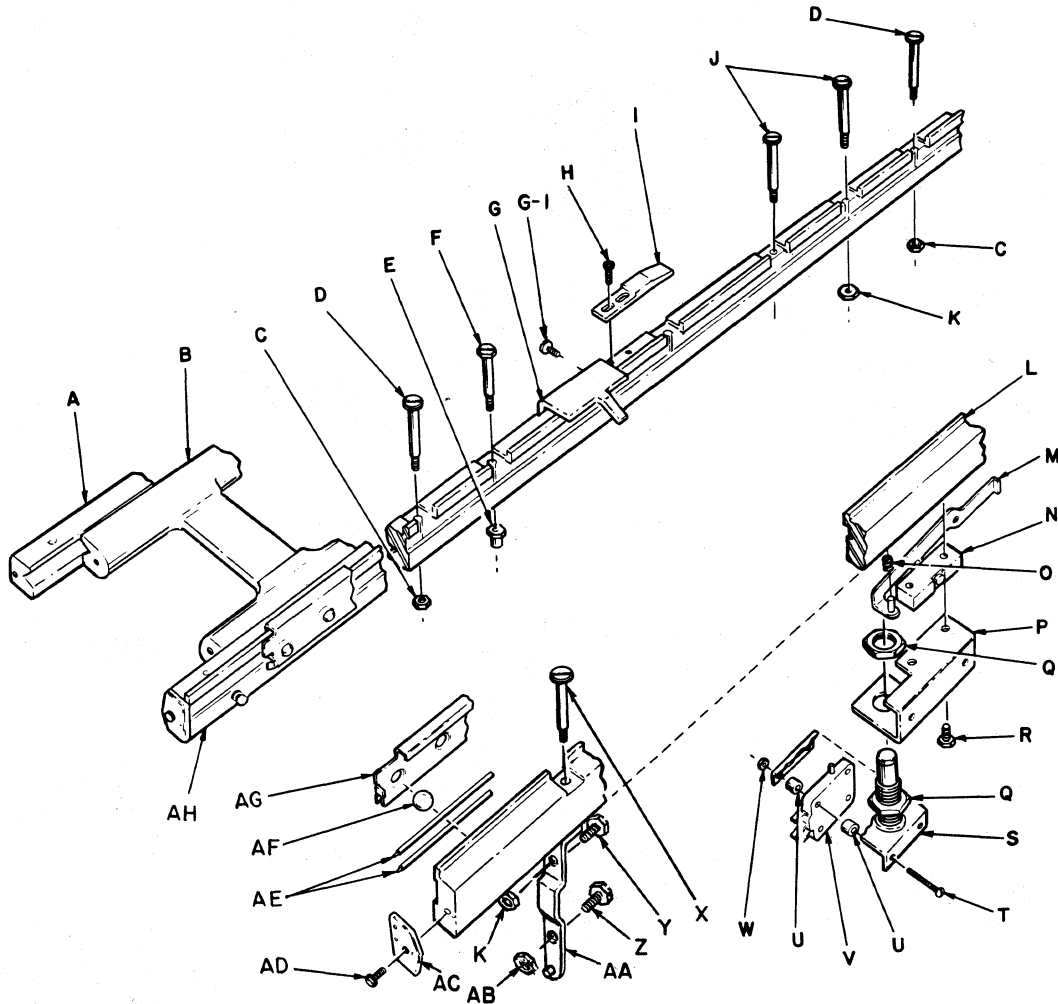


PART NUMBERS (PLATE I-1)

A	1FC161-10 for side insertion	N	3455 3/8 shim	AJ	9980 spring
	1FC161-7 prior to side insertion	O	FX1-19 spacer	AK	FX80-10 spring
B	1FC120-33 for side insertion	P	X170-100 nut	AL	AEX30-2 nut
	1FC120-26 prior to side insertion	Q	1FC414	AM	403571 screw
C	73612 screw	R	X133-107 clip	AN	403993
D	77801 spring	S	3280 1/8 spring	AO	FC420
E	1FC24-2	T	X133-105 clip	AP	FX99 screw
F	21 No. 10 clip	U	FC418	AQ	FX45-49 threaded post
G	FX60-16 screw	V	1FC413	AR	20 No. 2 spring anchor, included in AT
H	1FC8-3	W	75816	AS	1FC65-33 right } end cover
I	1FC120-34 for side insertion	X	X232-852 screw		1FC65-34 left } cover
	1FC120-27 prior to side insertion	Y	FX95-90	AT	1FX80-17 includes AR
J	FX45-48	Z	FX40-62 post	AU	1FC72-1
K	21 No. 9 clip	AA	AEX60-38	AV	11-403127R
L	FC299-2	AB	X232-857 screw, use X275-23 lock-washer	BA	79510 screw
L-1	15060478 clutch member, left end only	AC	FC14-2	BB	528 Fte. 216 screw
M	FC412	AD	FC419	BC	X10-30 eccentric nut
		AE	406325	BD	FC244-1
		AF	X30-37		
		AG	X275-125 washer		
		AH	X170-61 nut		
		AI	FC322-1 post		

used prior to side insertion

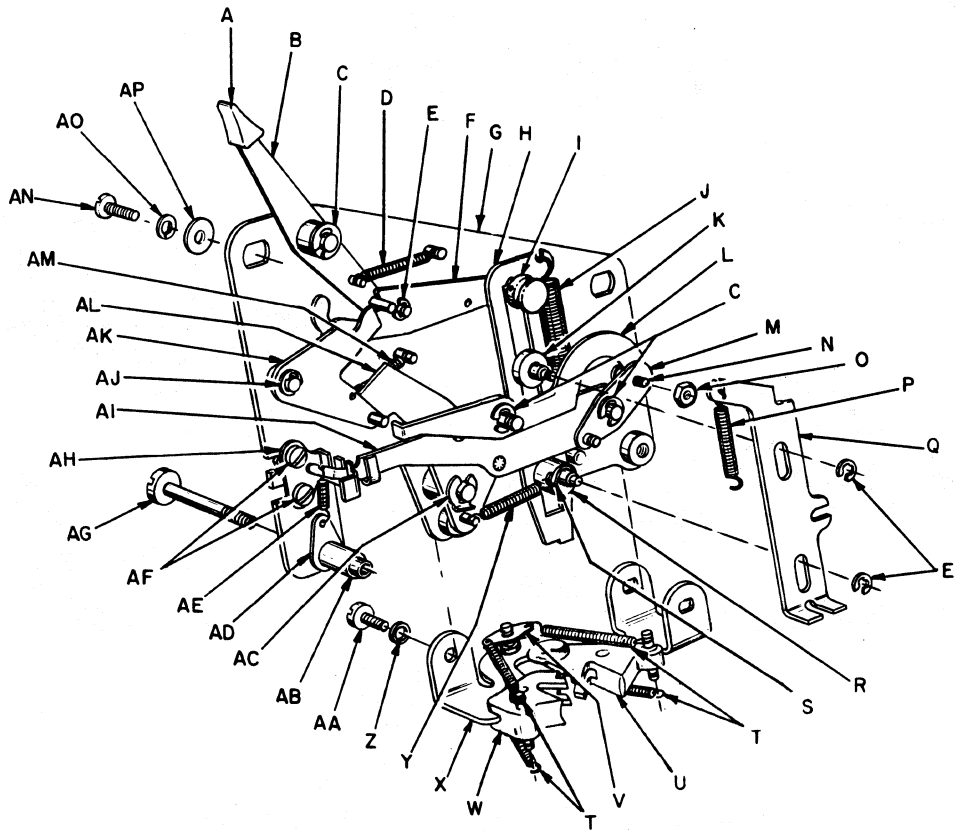
CARRIAGE AND PANEL RAILS (PLATE I-2)



PART NUMBERS (PLATE I-2)

- | | | | |
|-----|-------------------------------------|----|---|
| A | FC145-13 front carriage rail | R | 203560 1/2 screw |
| B | FC165-5 for 22"
FC165-4 for 18" | S | 1FB466-2 includes Q |
| C | 47 1/4 nut | T | X225-165 |
| D | FX60-346 | U | FX371 spacer |
| E | X30-46 nut | V | PX1846 |
| F | FX60-347 | W | X170-16 nut |
| G | FC73-2 | X | FX60-345 |
| G-1 | 404501 screw, use X275-4 lockwasher | Y | FX57-117 eccentric screw |
| H | X232-847 screw | Z | FX60-344 screw |
| I | FC375 | AA | FMB13 adjustable support |
| J | FX60-343 | AB | X170-66 nut |
| K | 47 nut | AC | FC376-1 cap right side
FC376-2 cap left side |
| L | 1FC145-38 panel rail | AD | 79505 screw |
| M | 1FC374 | AE | FC428 bearing rods |
| N | FC377 | AF | FX20-53 bearing |
| O | FX80-197 spring | AG | FC31-3 bearing retainer |
| P | FC381 | AH | 1FC145-37 rear carriage rail |
| Q | Included in S | | |

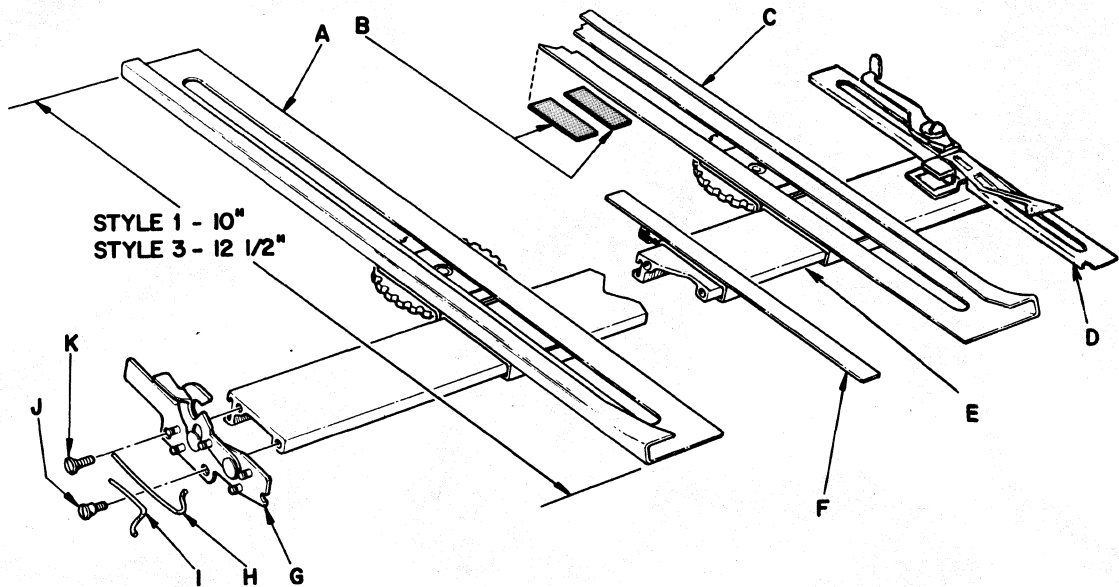
LATCH PLATE ASSEMBLY (PLATE I-3)



PART NUMBERS (PLATE I-3)

2FC379 complete latch plate assembly, includes A thru Z, AA thru AM	M	1FC391	AB	FX10-574 spacer
A	N	407500 screw	AC	21 No. 9 clip
B	O	49 1/4 nut, use 1097 5/16 washer	AD	20 No. 98 spring anchor
C	P	79824	AE	804 Fte. 217 spring
D	Q	FC393	AF	X232-812 screw, use X275-23 washer and X170-98 nut
E	R	FX57-118 threaded post, use FX1-87 washer, X170-66 nut	AG	200630 use X275-5 lockwasher and 47 nut
F	S	20 No. 85 spring anchor	AH	FC394
G	T	705828 spring	AI	1FC383
H	U	Included in X	AJ	X133-107 clip
I	V	FX85-18 spring anchor	AK	1FC385
J	W	Included in X	AL	1FC382
K	X	1FC388 includes U, W	AM	12084 1/4 spring
L	Y	7285 1/2 A	AN	X232-9
	Z	X275-6 washer	AO	X275-5 lockwasher
	AA	FX60-413	AP	X275-135

REAR FORM CHUTES (PLATE I-4)



PART NUMBERS (PLATE I-4)

Complete Assembled Rear Form Chutes

FOR 18" CARRIAGES

- 101-403903 (18) contains 1 set of style 3 chutes and 1 flat guide
- 111-403903 (18) contains 1 set of style 1 chutes and 1 flat guide
- 121-403903 (18) contains 2 sets of style 1 chutes and 2 flat guides
- 131-403903 (18) contains 3 sets of style 1 chutes
- 141-403903 (18) contains 1 set of style 1 chutes, 1 set of style 1 chutes for use with check limits, 1 set of check limits and 2 flat guides
- 151-403903 (18) contains 2 sets of style 3 chutes and 2 flat guides
- 161-403903 (18) contains 1 set of style 1 chutes and 3 flat guides

FOR 22" CARRIAGES

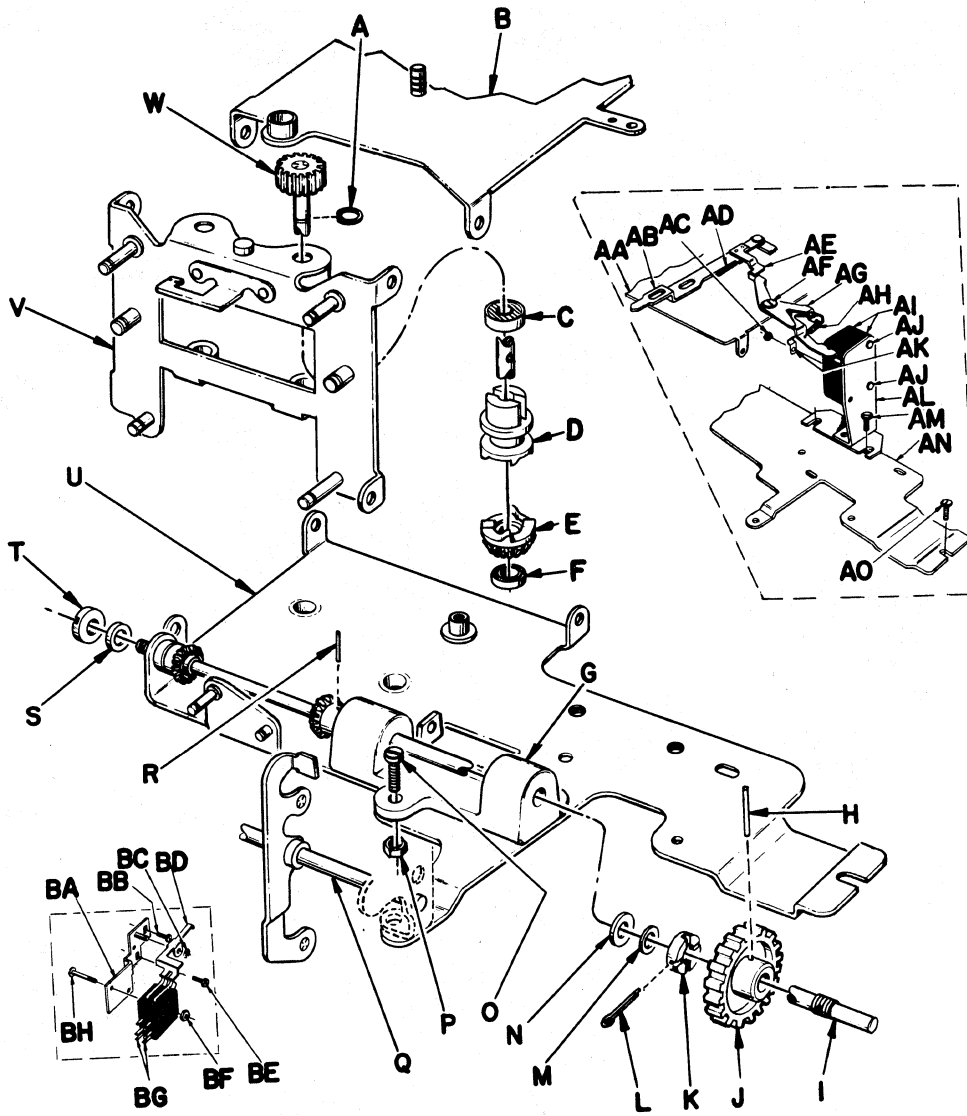
- 1FC144-1 contains 1 set of style 3 chutes and 1 flat guide.
- 1FC144-3 contains 2 sets of style 3 chutes and 2 flat guides.
- 15060304 contains 1 set of style 5-9A chutes for use with check limits, 1 set of style 9A check limits and 1 flat guide.

CONTINUED

PART NUMBERS (PLATE I-4) CONTINUED

- | | |
|---|--|
| <p>A Complete assembled left form chutes
 2FC33-18 for 18" style 1
 2FC33-22 for 18" style 1 for use with
 check limits
 2FC33-20 for 18" style 3
 2FC33-26 for 22" style 3
 2FC33-28 for 22" style 5-9A for use
 with check limits style 9A
 15060213 for 22" style 4-5 scootover
 Left form chute only
 1FC33-18 for 18" style 1
 1FC33-22 for 18" style 1 for use with
 check limits
 1FC33-20 for 18" style 3
 1FC33-26 for 22" style 3
 1FC33-28 for 22" style 5-9A for use
 with check limits style 9A
 1FC33-23 for 22" style 4-5 scootover</p> | <p>D Complete assembled check limits style 9A
 15060171 left limit
 15060163 right limit
 Check limit - leaf only
 15060148 left leaf
 15060155 right leaf</p> |
| <p>B FC368 billiard cloth, included in A, C</p> | <p>E 403903 (18) for 18" table only
 FC144-2 for 22"</p> |
| <p>C Complete assembled right form chute
 2FC33-17 for 18" style 1
 2FC33-21 for 18" style 1 for use with
 check limits
 2FC33-19 for 18" style 3
 2FC33-25 for 22" style 3
 2FC33-27 for 22" style 5-9A for use
 with check limits style 9A
 15060221 for 22" style 4-5 scootover
 Right form chute only
 1FC33-17 for 18" style 1
 1FC33-21 for 18" style 1 for use with
 check limits
 1FC33-19 for 18" style 3
 1FC33-25 for 22" style 3
 1FC33-27 for 22" style 5-9A for use with
 check limits style 9A
 1FC33-24 for 22" style 4-5 scootover</p> | <p>F 21A-403128 side insertion only
 11A-403128 for side insertion machines
 with split and normal platens</p> <p>G 1FC91-3 left hanger } { for side inser-
 1FC91-2 right hanger } { tion only</p> <p>H X81-11 } torsion spring</p> <p>I 403802 }</p> <p>J X60-113</p> <p>K X60-114</p> |

CARRIAGE DRIVE UNIT AND IN TAB SWITCHES (PLATE I-5)



PART NUMBERS (PLATE I-5)

Complete Carriage Drive Units
 3FG110-16 for chain drive
 3FG110-11 for side insertion
 3FG110-7 for 1/10" tab
 3-408110-5 for 5/8" tab

A X133-130 clip, included in V
 B 2FG111-7 top plate for side insertion

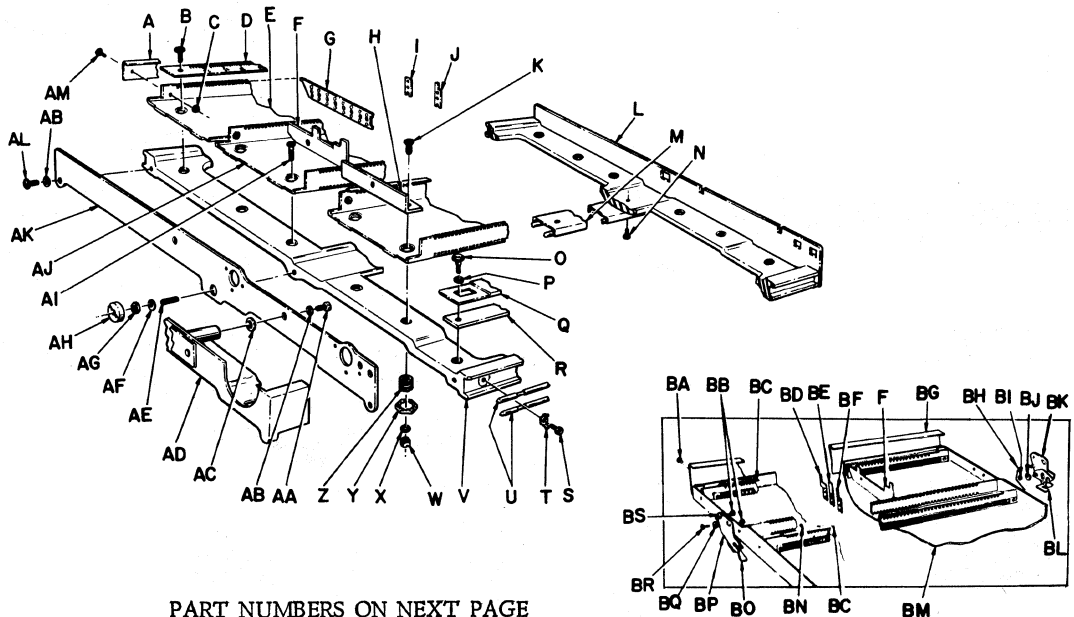
C	1BCX20-8 bearing	
D	FG261-4 for tab	} included
	FG261-3 for return	
E	1FG261-2 for tab	} in V
	1FG261-1 for return	
F	1FX20-41 bearing	
G	FG219-2 casting included in I	

CONTINUED

PLATE NUMBERS (PLATE I-5) CONTINUED

H	FX38		AC	X170-16 nut
I	1FG217-5 for chain drive 1FG217-3 for side insertion	} includes G, H, J, K, M, N, R	AD	FX80-169 spring
J	Included in I		AE	Included in AB
K	FG262-2 nut, included in I		AF	FX60-16 screw
L	FX36-51 cotter pin		AG	1FG249
M	510 1/2 spacer	} included in I	AH	71803 spring
N	FX10-541 spacer		AI	1X83-34 switch
O	12060 9/16 screw		AJ	X60-103 screw
P	47 1/8 nut		AK	X66-3 clamp
Q	1FG3-3 tab shaft		AL	1FG247 switch bracket
R	FX32 included in I		AM	2858 1/4A screw
S	FX10-540 spacer		AN	1FG23-3 bottom plate, prior to side insertion
T	FG262-1 nut, use FX36-51 cotter pin		AO	73612 screw
U	15025851 bottom plate for side insertion		BA	1FG240-1 switch bracket
V	15025877 back plate, includes A, C, D, E, F, W beginning with serial F146481P use 15025885, 15025851 for side inser- tion prior to serial F146481P		BB	X228-408 screw
W	1FG260 spindle included in V		BC	X133-105 clip
AA	2FG111-3 top plate, prior to side insertion		BD	FG241-1
AB	1FG82-2 for side insertion 1FG82-3 prior to side insertion, includes AE		BE	FX388 screw
			BF	X170-36 nut
			BG	1FX83-17 switch
			BH	X228-447 screw

CONTROL UNIT (PLATE I-6)



PART NUMBERS ON NEXT PAGE

PART NUMBERS (PLATE I-6)

COMPLETE ASSEMBLED CONTROL UNIT,

specify unit number or furnish form layout

- 3FC134-40-1 for 22"
- 3FC134-38-1 for 18", 1/10" tab
- 3FC134-26 for 18", 5/8" tab

PARTIAL CONTROL UNIT ASSEMBLY

includes stop and disk shaft, etc.

- 4FC134-40-1 for 22"
- 4FC134-38 for 18", 1/10" tab
- 4FC134-26 for 18", 5/8" tab

COMPLETE UNASSEMBLED CONTROL UNIT,

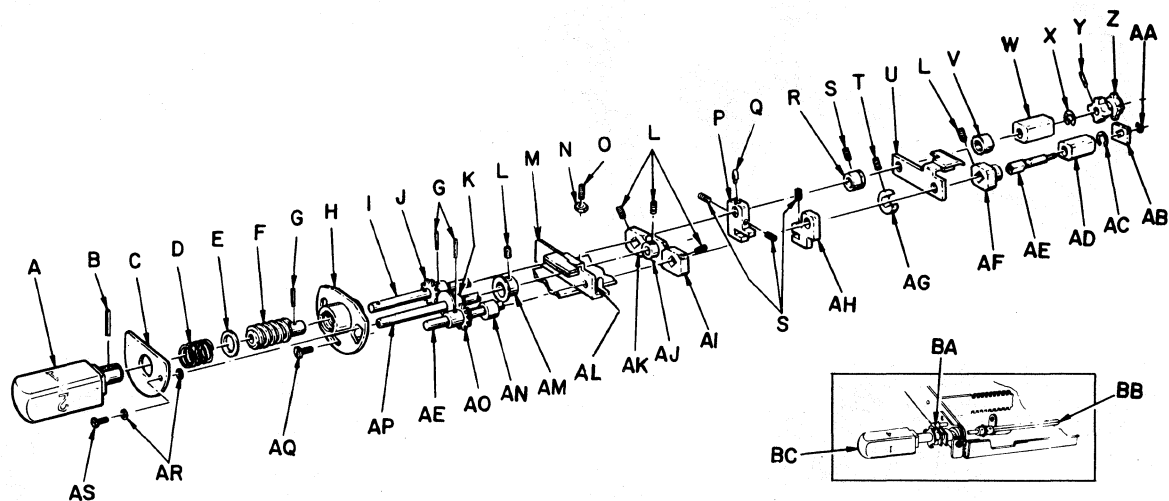
standard parts assembly

- 5FC134-40-1 for 22"
- 5FC134-38 for 18", 1/10" tab
- 5FC134-26 for 18", 5/8" tab

- A FC44-5
- B FX60-348 screw
- C 49 1/4 nut
- D 15107972 scale
- E 1FC42-18
- F FC156-13 for 1/10" tab
FC156-12 for 5/8" tab
- G FC156-14 magazine for rear tray, use 15050651
1FC156-14 river assembled magazine for rear tray, used as a gauge.
- H FC425
- I FC56-4-99 } electrical lane pins for
- J 15107980 } side insertion
- K FX60-398 screw
- L 15107964 left end plate
- M 1FC407
- N FX99 screw
- O FX60-350 screw
- P FX10-577 washer
- Q FC405-1 mounting strip
- R FC406
- S FX60-140 screw
- T FX66-24 spring clip
- U FC378-1 diameter .1230 } track rods
FC378-2 diameter .1240 }
FC378-3 diameter .1250 }
FC378-4 diameter .1260 }
FC378-5 diameter .1270 }
- V 15107725 casting
- W 15060536 round nut
- X X275-5 lockwasher
- Y FX30-82 lock nut
- Z FC410 threaded insert
- AA X232-965 screw

- AB X275-6 washer
- AC X275-140 washer
- AD 1FC409
- AE X255-124 slotted set screw
- AF FX57-119 eccentric washer
- AG FX30-80 nut
- AH FX30-81 slotted nut
- AI FX60-349 screw
- AJ 1FC42-19 magazine tray with eight mounting holes
1FC42-17 magazine tray with six mounting holes
- AK 15107774 right end plate
- AL X228-906 screw
- AM 403546 screw
- BA FX60-234 screw
- BB 46 nut
- BC FC44-4
- BD FC56-36 for 1/10" tab
FC56-34 for 5/8" tab
- BE FC56-37 for 1/10" tab
FC56-28 for 5/8" tab
- BF FC56-35 for 1/10" tab
FC56-29 for 5/8" tab
- FC56-2-22 } special combination pins
FC56-2-33 } lanes 33 thru 44 for
FC56-2-35 } machines with 1/10" tab
FC56-2-37 }
FC56-2-77 }
FC56-3-1 } pins lanes 41 and 42 only -
FC56-3-15 } for machines with multiple
FC56-3-17 } factor storage
- BG 1FC90-10 for 18", 1/10" tab
1FC90-7 for 18", 5/8" tab
- BH FX81-20 spring
- BI FX30-53 nut
- BJ 72307 eccentric nut
- BK 1FC125-4
- BL 1FC43-4
- BM 1FC134-38 for 18", 1/10" tab } control
1FC134-26 for 18", 5/8" tab } unit pan
only,
beige 125
- BN FX60-223 screw
- BO 1FC43-3
- BP 1FC125-3
- BQ 79333A No. 2 eccentric nut
- BR FC286 screw
- BS FX60-234 screw

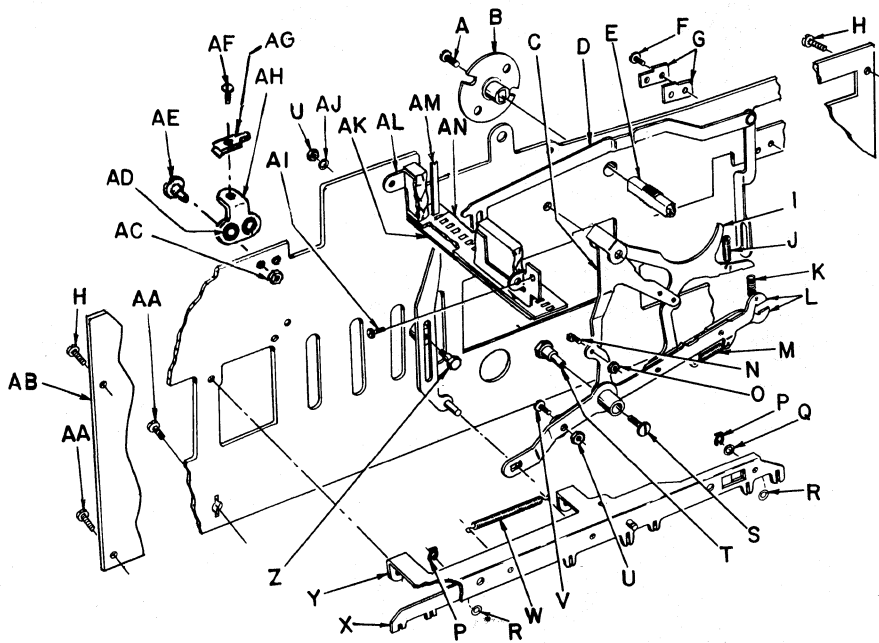
CONTROL UNIT - STOP DOG AND SKIP DISK SHAFTS (PLATE I-7)



PART NUMBERS (PLATE I-7)

A	2FC131-18	Y	82501 pin, included in I
B	X190-128 pin	Z	Included in I
C	FC424	AA	X133-105 clip
D	83835 spring	AB	FC282-2
E	71223 washer	AC	21 No. 26 clip
F	Included in I	AD	FX20-55
G	62 1/2 pin, included in I, AE	AE	1FC7-17 includes G, AO
H	FC396	AF	1FC130-1
I	15112105 disk shaft, includes F, G, J, Y, Z	AG	542 1/2
J	Included in I	AH	FC157-4
K	1FC132-2 idler gear	AI	FC130-3
L	FX64-3 set screw	AJ	15110356 detent
M	15115892 bracket	AK	FC130-2
N	FX30-95 nut	AL	Included in M
O	FX60-399 set screw	AM	FC137-1
P	FC157-5	AN	FX10-576
Q	FX50-472 lock pin	AO	Included in AE
R	FX15-48	AP	FC402
S	X255-159 set screw	AQ	FX60-140 screw
T	X255-61 set screw	AR	X275-2 washer
U	1FC399	AS	X232-684 screw
V	15107824 collar	BA	1FC292-2 idler shaft
W	FX20-54	BB	1FC7-11 includes BC
X	21 No. 32 clip	BC	Included in BB

SENSING UNIT (PLATE I-8)



PART NUMBERS (PLATE I-8)

Complete Sensing Units

3FS1-65 for side insertion

3FS1-52 for 1/10" tab

3FS1-28 for 5/8" tab

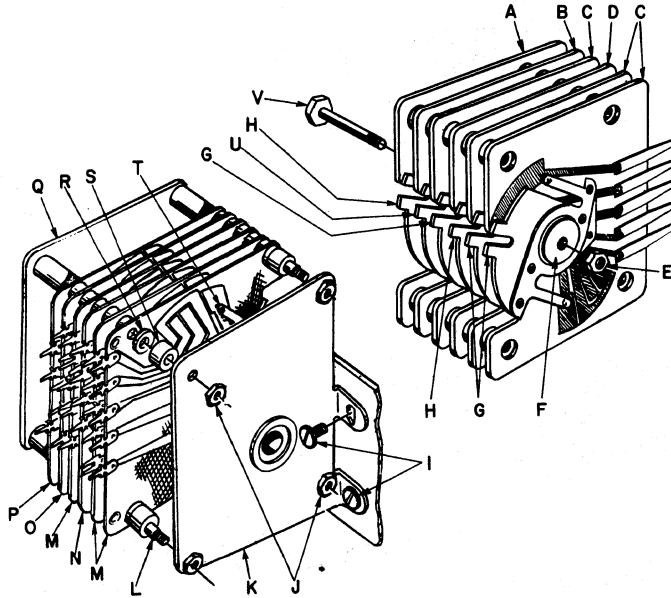
Complete Tappet Units

1FS52-20 for all 1/10" tab

1-405900A No. 14 for 5/8" tab

A	X231-21	S	FX76
B	1FS121	T	405525
C	1FS29-1	U	46 included in L
D	11-405106 No. 8 lane 19	V	405524 included in L
E	1FS1-69 camshaft only	W	409802
	2FS1-23 complete sensing camshaft	X	1FB278-5
	2FS1-35 complete sensing camshaft for machines with repeat of columns (specify) carriage controlled	Y	1FB276-2
F	75602	Z	79598
G	FS138	AA	1050 1/16
H	FX60-290 screw	AB	1FS110-3
I	FS21-1	AC	46 nut
J	53804	AD	FX329 rubber grommet
K	984	AE	FX328 screw
L	2FS30-1 includes M, U, V	AF	FX60-341 screw
M	10784 spring included in L	AG	FX31-1 speed nut
N	FS106	AH	FB584-3 case bracket left side FB584-4 case bracket right side
O	49	AI	705503 1/2 screw
P	21 No. 7	AJ	X275-5 lockwasher
Q	3819 1/8	AK	FS13-10 retainer plate
R	3220 1/2	AL	FS88 bracket
		AM	Sensing tappets
			FS22-27 for 1/10" tab } lane 7
			FS22-18 for 5/8" tab } lane 7
			FS22-28 for 1/10" tab } lane 12
			FS22-19 for 5/8" tab } lane 12
			1FS22-29 for 1/10" tab } lane 25
			1FS22-21 for 5/8" tab } lane 25
		AN	FS13-11 guide plate

SENSING UNIT - PRINTED CIRCUIT ASSEMBLY (PLATE I-9)



PART NUMBERS (I-9)

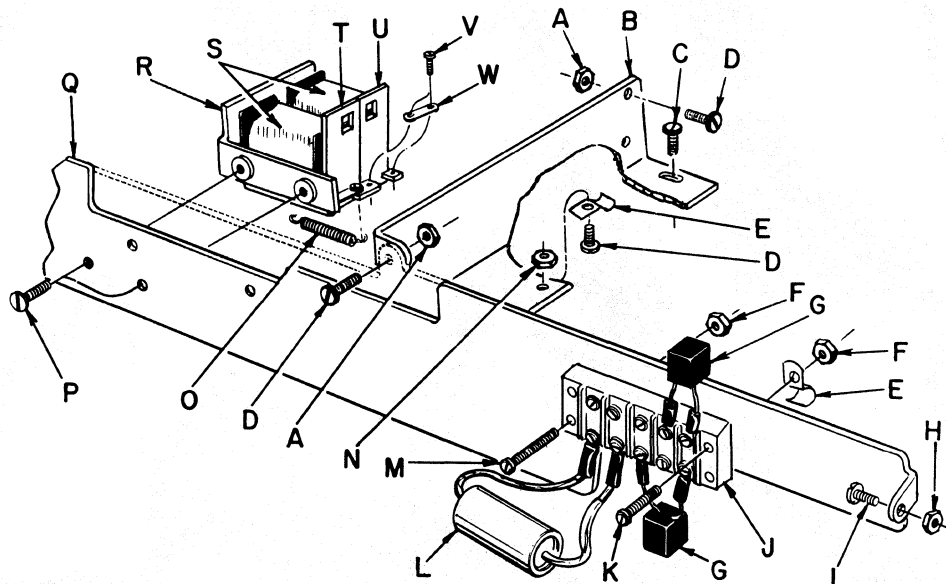
2FMS25-1 Complete Printed
Circuit Switch Assembly

- A 1FMS29-7 } circuit
- B 1FMS29-8 } boards with-
- C 1FMS29-10 } out wiping
- D 1FMS29-9 } contacts
- E X170-26 nut
- F FMS26-1 spacer for re-
movable wiping con-
tacts only
- G 1FMS28-5 removable
wiping contact
- H 1FMS28-3 removable
wiping contact
- I 74587
- J 46
- K FMS25-3 mounting bracket, used

beginning with serial F111910P
Use FMS25-3 and FMS34 spacer prior
to serial F111910P

- L Included in Q
- M 1FMS29-4 } includes
- N 1FMS29-3 } wiping
- O 1FMS29-2 } contact
- P 1FMS29-1 } T
- Q 1FMS25-1 includes L
- R FX10-236
- S FX10-234
- T Wiping contact, included
in M, N, O, P
- U 1FMS28-4 removable
wiping contact
- V FX60-285

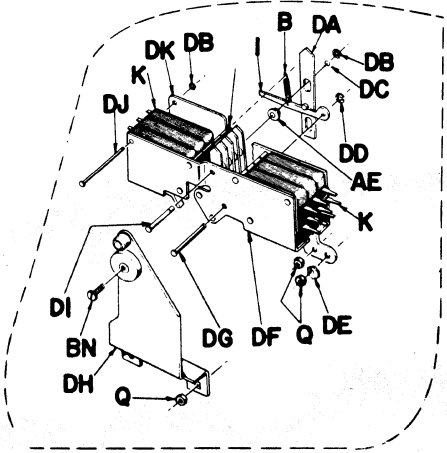
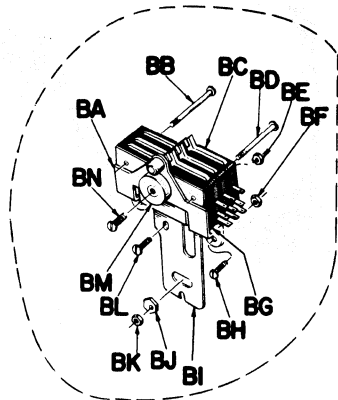
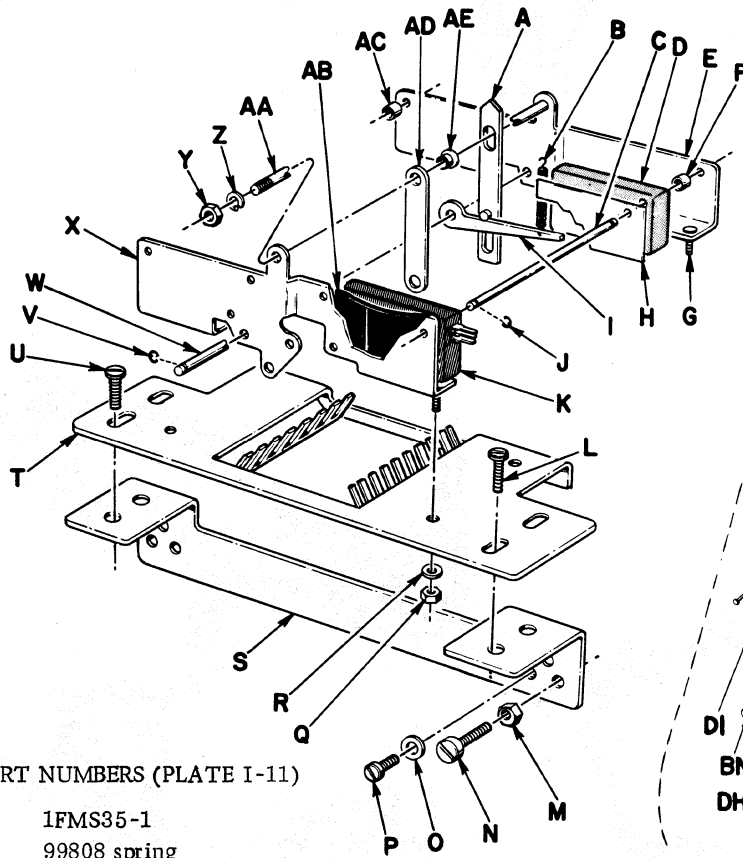
AUXILIARY SENSING UNIT - BACK PLATE (PLATE I-10)



PART NUMBERS (PLATE I-10)

3FMS1-2 complete auxiliary sensing unit for side insertion	K	X228-433
3FMS1-1 complete auxiliary sensing unit for 1/10" tab, prior to side insertion	L	1AEX89-1 capacitor 1 mfd, 450 WV
3FMS1 complete auxiliary sensing unit for 5/8" tab	M	X228-447
A	N	46 1/8
B	O	3981
C	P	89570 1/4
D	Q	1FMS110-1 for 1/10" tab 1FMS110 for 5/8" tab
E	R	1FMS11-1 solenoid and bracket for 1/10" tab, includes S 1FMS11 solenoid bracket for 5/8" tab
F	S	1FB614-1 solenoid coil
G	T	1FMS7-4 for 1/10" tab 1FMS7-2 for 5/8" tab
H	U	1FMS7-3 for 1/10" tab 1FMS7-1 for 5/8" tab
I	V	X228-172
J	W	FMS8-1

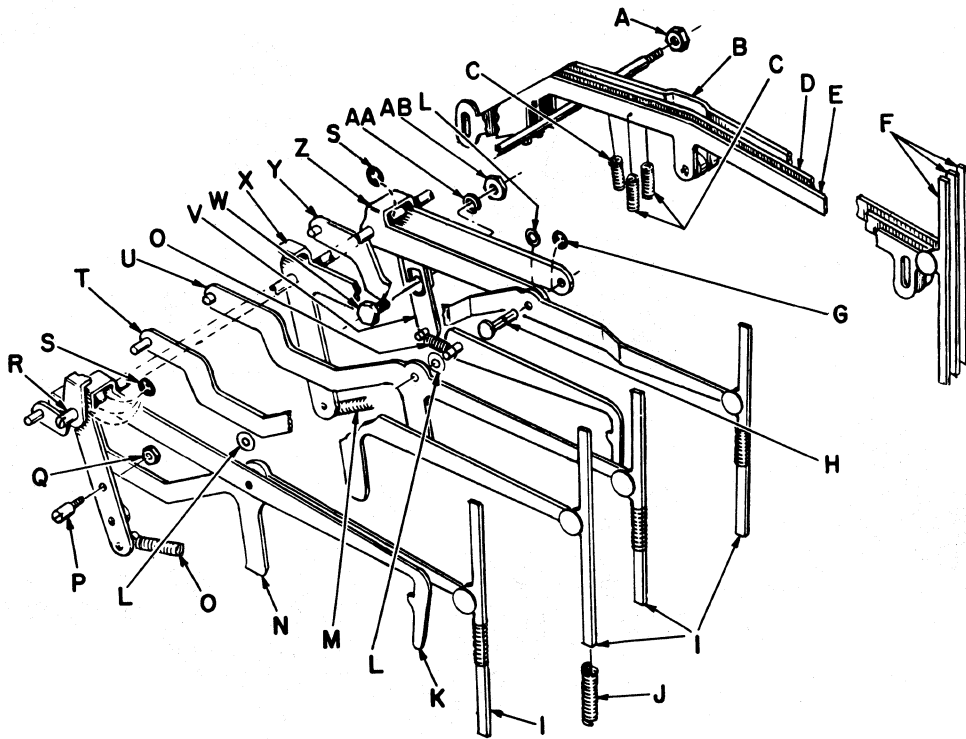
AUXILIARY SENSING UNIT - ELECTRICAL LANE SWITCHES (PLATE I-11)



PART NUMBERS (PLATE I-11)

A	1FMS35-1	U	X60-113 screw, use X275-6 washer, 47 nut	BJ	FX57-45 eccentric
B	99808 spring	V	X133-105 clip	BK	X170-56 nut
C	FS134-2 shaft	W	FS134-3	BL	71541 screw
D	FMS32-1 spacer block	X	1FS169-1	BM	FX10-85 roller
E	1FS169-4 includes G, AA	Y	49 nut	BN	75615 No. 2 screw
F	X10-183 spacer	Z	407149 washer	DA	1FC56-38
G	Included in E	AA	Included in E	DB	21 No. 24 clip
H	FX79-21 insulator	AB	FX81-27 spring	DC	* 3220 1/2 (.010) * 79156 No. 2 (.008) * 79156 No. 1 (.006) * shim as required
I	FMS33	AC	FX10-386 spacer	DD	X133-105 clip
J	X133-103 clip	AD	FMS38-1	DE	79333A No. 2 eccentric
K	1FX83-51 switch	AE	FX10-387 flanged spacer	DE	1FMS19-1
L	X232-29 screw, use X275-6 washer, X170-66 nut	BA	FMS20	DG	FX36-46
M	FX57-123 eccentric nut	BB	FX60-137 screw	DH	1FMS31
N	FX60-191 screw, use X275-6 washer, X170-66 nut	BC	1FX83-17 switch	DI	FX36-45
O	X275-135 washer	BD	FX60-138 screw	DJ	FX36-44
P	X232-34 washer, use X275-6 lockwasher	BE	47 1/8 nut	DK	FMS32
Q	46 nut	BF	46 1/8 nut		
R	X275-125 washer	BG	FMD17 spacer block		
S	FMS37	BH	73611 screw		
T	1FMS36	BI	FMS19		

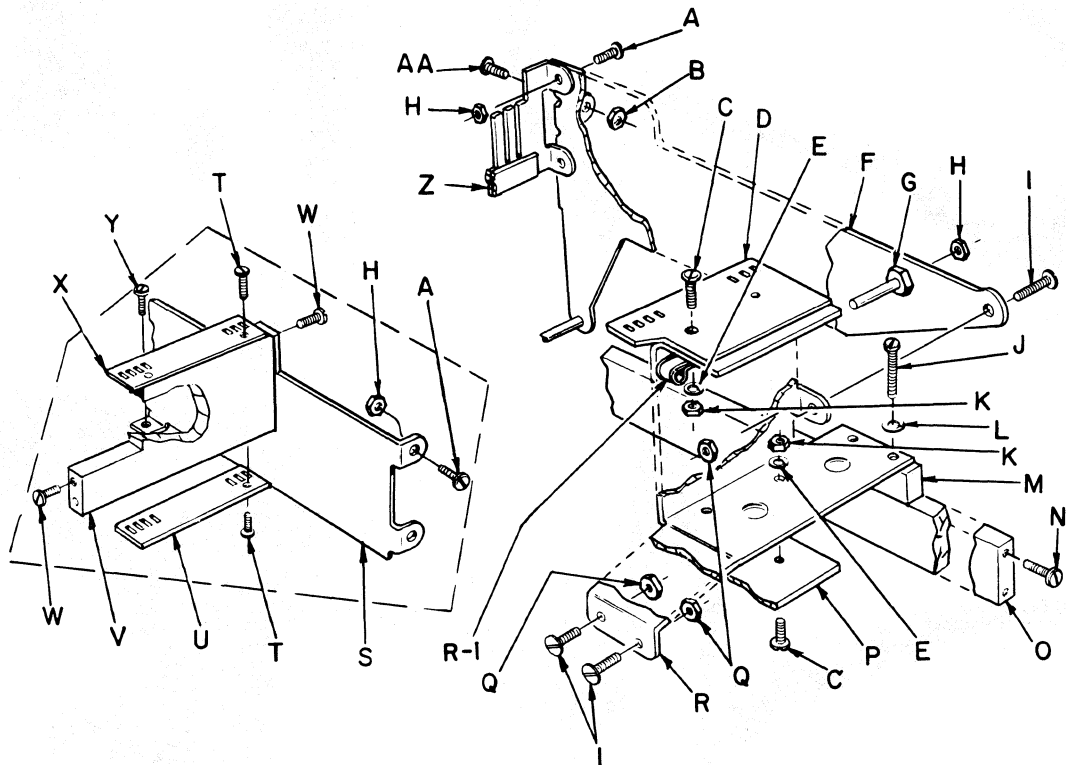
AUXILIARY SENSING UNIT - TAPPETS AND SENSING LEVERS (PLATE I-12)



PART NUMBERS (PLATE I-12)

A	46 1/4 nut		
B	1FMS10-5		
C	1-405800A No. 2		
D	1FS10-12		
E	1FS10-13		
F	FMS22-4 for 1/10" tab FMS22-2 for 5/8" tab		
G	X133-105 clip		
H	FX36-26		
I	FMS22-3 for 1/10" tab FMS22-1 for 5/8" tab		
J	FX80-92		
K	1FMS18-3		
L	3220 1/2 washer		
M	FX80-127 spring		
N	1FMS10-4		
O	FX80-16 spring		
P	FX57-9		
Q	X170-16 nut		
R	FMS17-1 shaft for machines with side inser- tion panel	AA	X275-4 washer
		AB	X170-51
			Use FMS17-1, FMS18-4 sensing arm, 1FMS18- 5 sensing arm, FX57-132 screw, X170-51 nut, X275-4 washer, FC56-2-(1) (15) and (17) sensing pins, for machines without side insertion panel
		S	21 No. 32 clip
		T	1FMS10-2
		U	1FMS10-3
		V	1FMS18-5
		W	FX57-132
		X	1FMS18-1
		Y	1FMS10-1
		Z	FMS18-4 for machines with side insertion panel
			Use FMS18-4, FMS17-1 shaft, 1FMS18-5 sensing arm, FX57-132 screw, X170-51 nut, X275-4 washer, FC56-2-(1) (15) and (17) sensing pins, for machines without side insertion panel

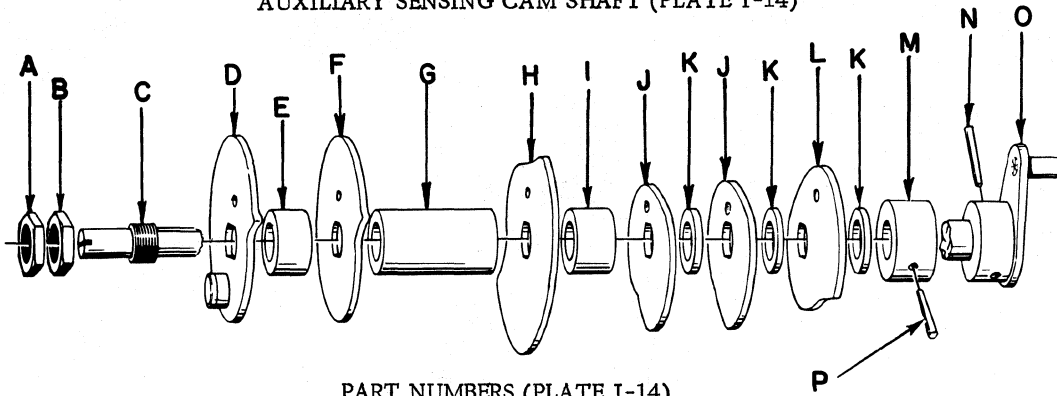
AUXILIARY SENSING UNIT - TAPPET BLOCKS AND GUIDE PLATES (PLATE I-13)



PART NUMBERS (PLATE I-13)

A	73611 screw	P	FMS13-4 lower tappet guide plate for 1/10" tab
B	46 nut	Q	X170-36 nut
C	8054 screw	R	FMS52-1
D	FMS13-3 for 1/10" tab	R-1	93 1/8 No. 4 cable clamp
E	X275-130 washer	S	1FMS5 front plate for 5/8" tab
F	1FMS5-1 front plate for 1/10" tab	T	255 1/4 screw
G	FMS21	U	FMS13-2
H	46 1/4 nut	V	FMS52
I	FX60-66 screw	W	79547 screw
J	X228-447 screw	X	FMS13-1 for 5/8" tab
K	45 1/4 nut	Y	X228-408 screw
L	X275-120 nut	Z	1FMS16
M	FMB36	AA	79505 screw
N	79587 screw, use X275-4 washer		
O	FMB21		

AUXILIARY SENSING CAM SHAFT (PLATE I-14)



PART NUMBERS (PLATE I-14)

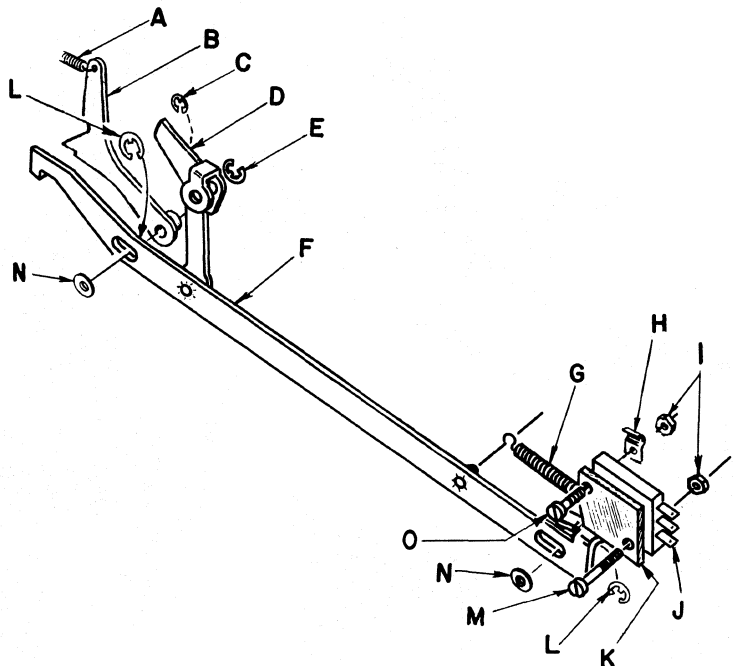
2FMS1 complete auxiliary cam shaft, includes A thru P

A	FX30-41	F	FMS9-3	K	FX10-233
B	FX30-40	G	FX10-231	L	FMS9-2
C	Included in O	H	FMS9-4	M	Included in O
D	1FMS9-1	I	FX10-232	N	52 1/4
E	FX10-230	J	FS9-19	O	1FMS1 includes C, M, N, P
				P	52

DECIMAL SHIFT ENABLING TIMING SLIDE (PLATE I-15)

PART NUMBERS (PLATE I-15)

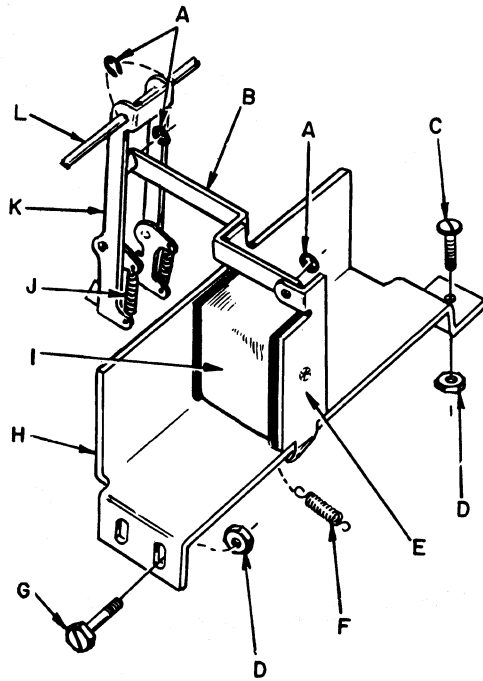
A	99808
B	1FMS14
C	21 No. 24
D	FMS6-1 for 1/10" tab FMS6 for 5/8" tab
E	X5-7
F	1FMS4-1 for 1/10" tab 1FMS4 for 5/8" tab
G	71805
H	FX66-13
I	409314
J	1FX83-74 switch
K	FMD17
L	21 No. 32
M	X228-447
N	FX1-19 spacer
O	X228-438



"A" SUBTRACT AND RED RIBBON SOLENOID ASSEMBLY (PLATE I-16)

PART NUMBERS (PLATE I-16)

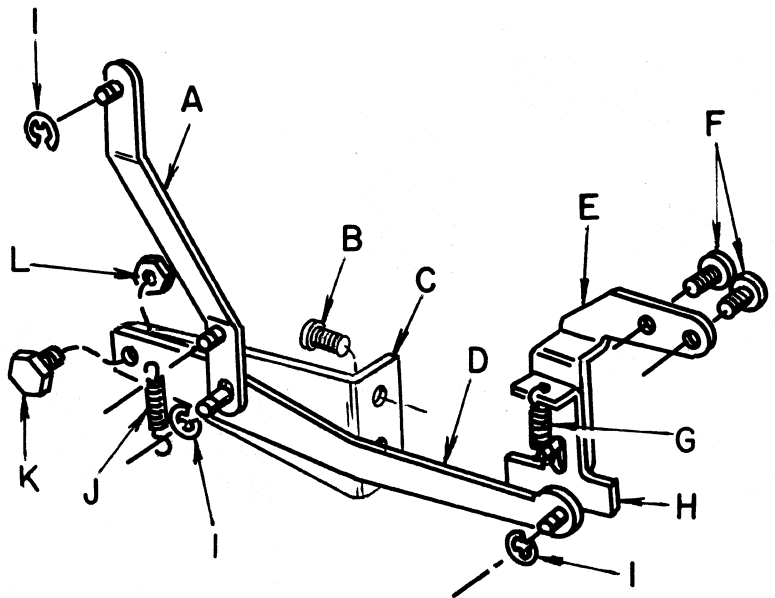
- A X133-105 clip
- B FS109
- C 75602
- D 46 3/4
- E 1FS92
- F 3981
- G 79648
- H 1FS90-1
- I 1FB614-9
- J 82809 included in K
- K 1FS96-7 includes J
- L FS94-1



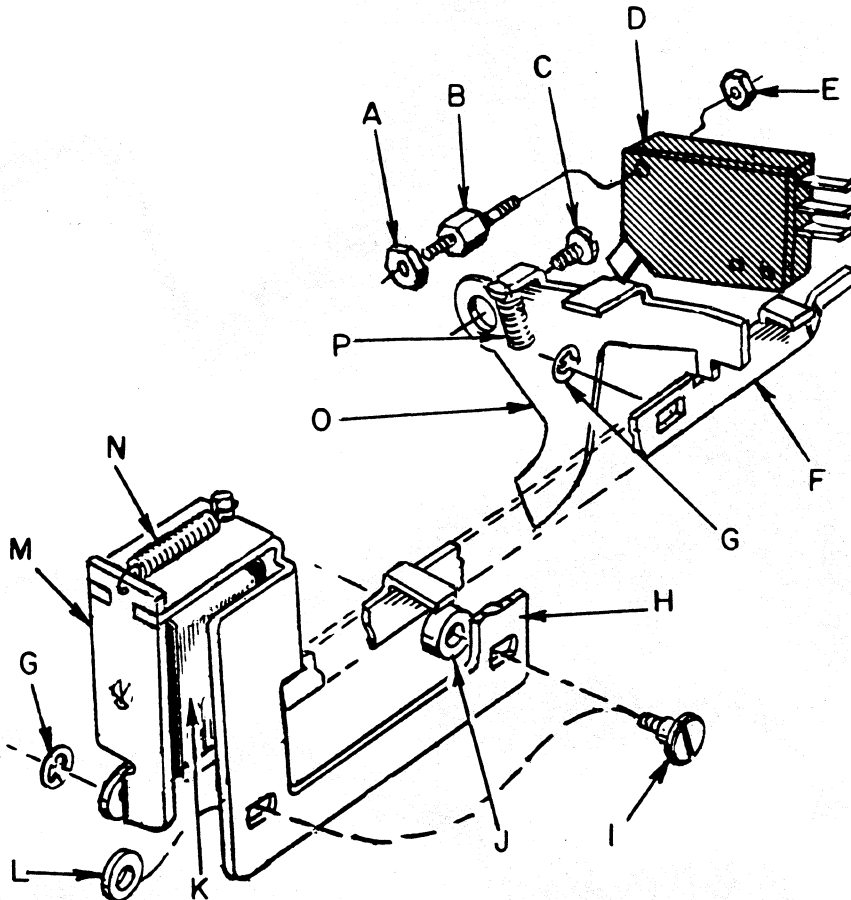
LANE 32 PRO-RATE LINKAGE (PLATE I-17)

PART NUMBERS (PLATE I-17)

- A 1FMB3
- B X228-408
- C FMB1
- D 1FMB2
- E 2FMB5 includes H
2FMB5-1 includes H for
decimal shift 0, 3, 6
and 8
- F 73611
- G 8388
- H Included in E
- I X133-105 clip
- J 73806A
- K FX57-7 eccentric
- L X170-36



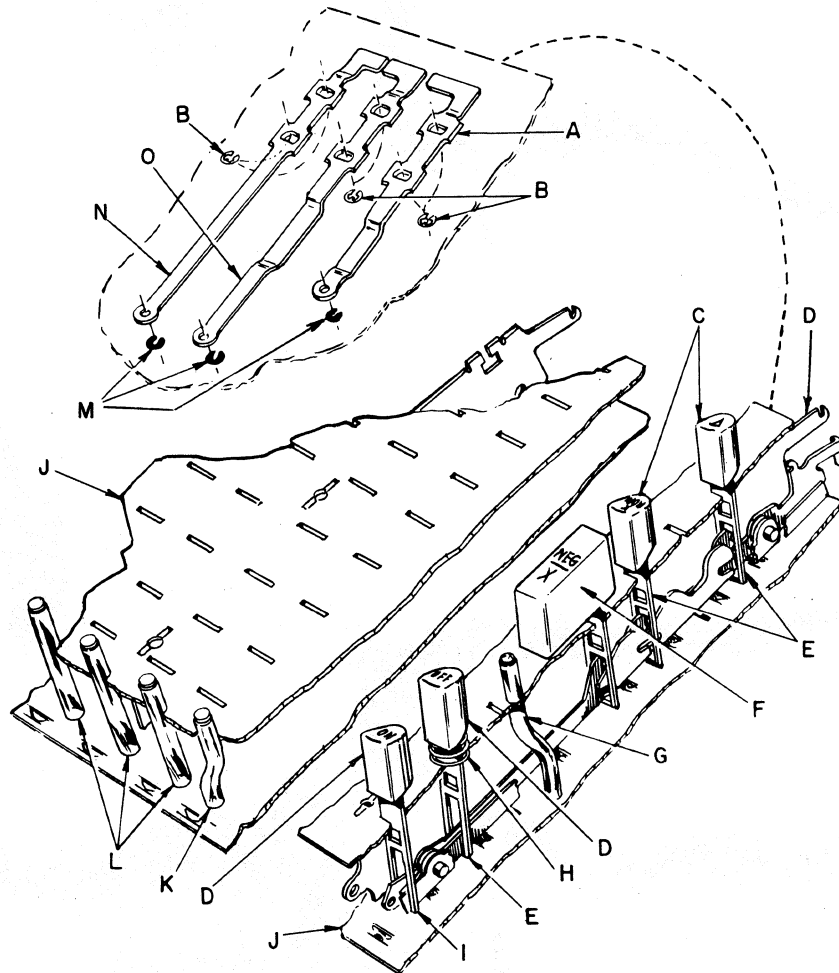
CARRIAGE DIRECTIONAL KEY BLOCK SOLENOID (PLATE I-18)



PART NUMBERS (PLATE I-18)

A	X170-46	I	79505
B	FX45-29	J	76302 No. 3
C	X60-132	K	1FB614-11
D	1FX83-74	L	824 1/4
E	X170-36	M	1FB738
F	FB728	N	284
G	X5-7	O	1FB748
H	1FB727	P	7480B

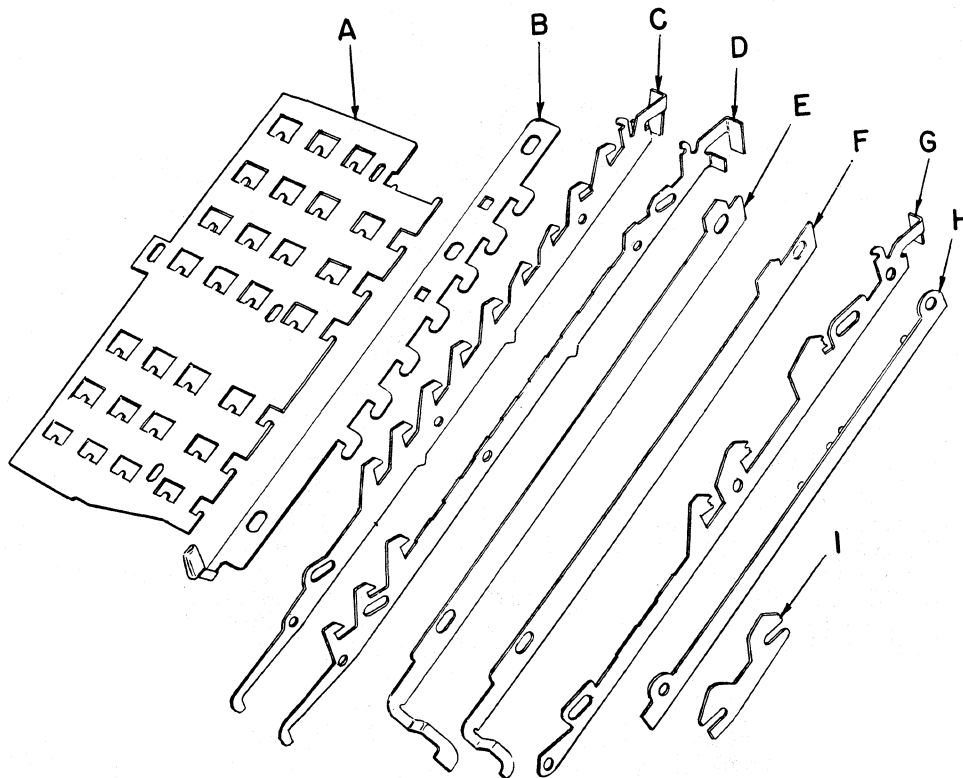
KEYBOARD CONSTRUCTION (PLATE II-1)



PART NUMBERS (PLATE II-1)

- | | | |
|--|---|--|
| <p>A FK9-2</p> <p>B X133-105 clip</p> <p>C Keytops:
 FK291-14-6 for non-multiply
 FK291-14-7 for "off"
 FK291-14-8 for "on"
 FK291-14-9 for delta clear
 FK291-6-15 for "M"
 FK291-6-16 for "C"</p> <p>D FK13-27 separator strip</p> | <p>E Refer to Keystem Chart and/or Keyboard Construction (F1000) for keystems not listed</p> <p>F 1FK221-23-3 includes keystem</p> <p>G FK124-3</p> <p>H FX80-69 spring</p> <p>I FK221-35 keystem</p> <p>J Order upper and/or lower keyboard plates by part number stamped on</p> | <p>plate; or by description, specifying machine style and serial number. For styles with special features also furnish Factory Order No. and describe feature</p> <p>K FK124-2</p> <p>L FK124-1</p> <p>M 21 No. 20 clip</p> <p>N 402101AL slide</p> <p>O FK9-3 slide</p> |
|--|---|--|

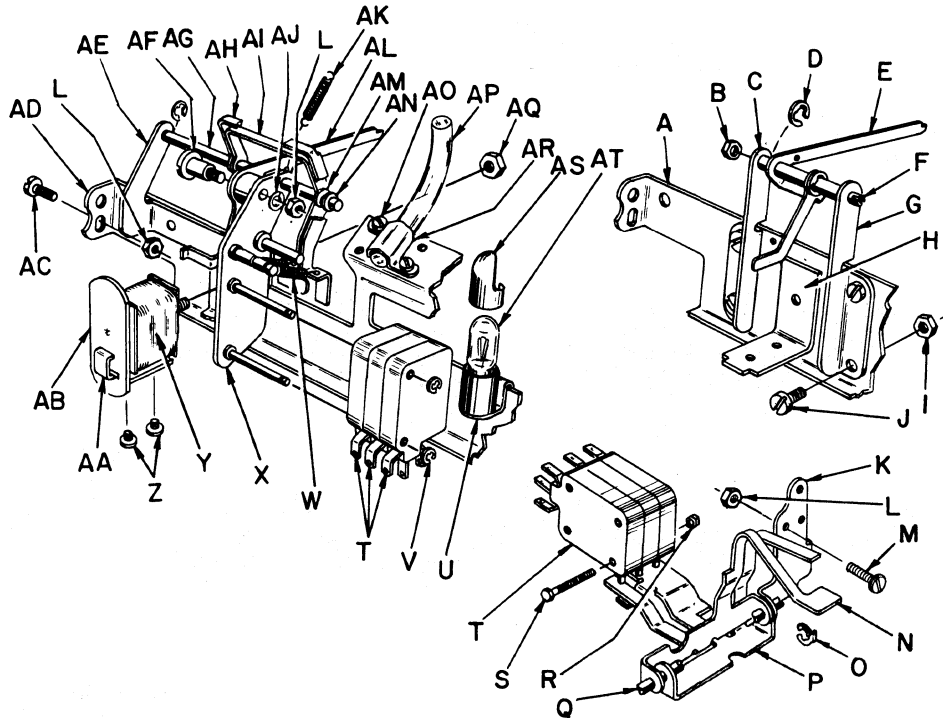
LOCK SLIDES, LIMIT STRIPS, INTERLOCKS (PLATE II-2)



PART NUMBERS (PLATE II-2)

- | | | |
|---|---|--|
| A | FK156-14 lock slide for locks with keys to prevent depression or release of control keys (specify) | 402119 No. 5 lock slide column 12 position 1 through 3 for 5/8" tab |
| B | 1FK156-11 lock slide for latch down keys positive, column 12
1FK156-19 lock slide for latch down keys positive, column "O" | E
FK12-20 keystem limit strip column 12 for "C" key, for 1/10" tab
402106 No. 1 keystem limit strip column 12 for 5/8" tab |
| C | FK19-81 lock slide column 12 positions 4-12 through 12-12 for 1/10" tab
402119A No. 6 lock slide column 12 positions 4-12 through 12-12 for 5/8" tab | F
FK12-19 keystem limit strip column 12 for "C" key, for 1/10" tab
402106 No. 1 keystem limit strip column 12 for 5/8" tab |
| D | FK19-80 lock slide column 12 position 1 through 3 for 1/10" tab | G
FK19-62 lock slide column D
H
1FK12-13 limit strip column D
I
FK10-10 interlock column D |

REGISTER DESIGNATION BLOCKING SOLENOID AND C & M KEYS LINKAGE (PLATE II-3)



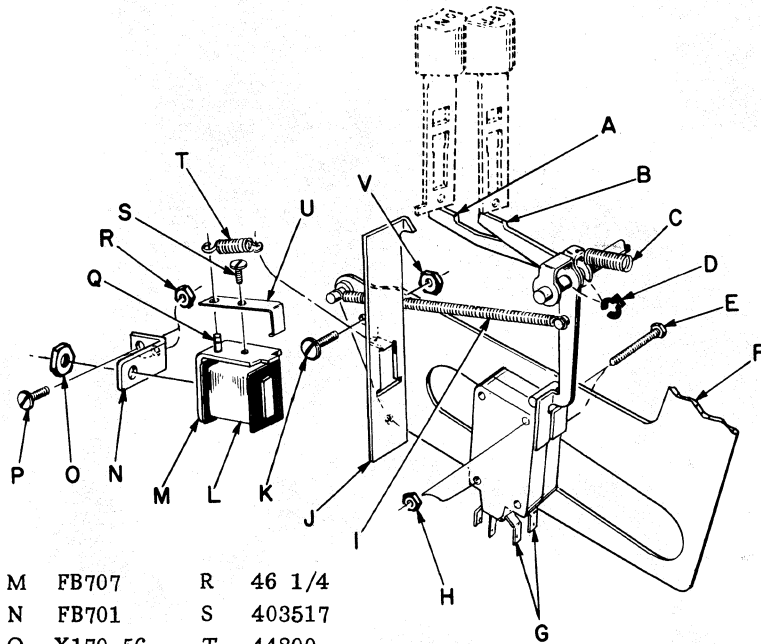
PART NUMBERS (PLATE II-3)

A	FB715	Q	FB777	AE	Included in X
B	46 1/4	R	49 3/4	AF	FX57-93
C	FB761-1	S	FX60-147	AG	FB894
D	21 No. 26	T	1X83-34	AH	FB895
E	FB714	U	1AEX56-2 light bulb re-	AI	FB895-1
F	FX57-19 shaft		ceptacle	AJ	X275-5 lockwasher
G	FB761-2	V	X133-103 clip	AK	60807
H	FB707	W	87801A	AL	1FB714-1
I	X170-36	X	1FB893 includes AE	AM	2820 1/2 washer
J	FX60-24	Y	2FB614-9	AN	X133-105 clip
K	FK144	Z	403517	AO	X228-332
L	46	AA	FB708	AP	FK124-4
M	X60-111	AB	1FB713	AQ	X170-56
N	FK143-2	AC	FX60-279 for 1/10" tab	AR	FB716-1
O	21 No. 7		403569 for 5/8" tab	AS	FK129
P	1FK143-1	AD	1FB715-1	AT	X106-2-14E light bulb

MOTOR ON KEY SWITCH AND SOLENOID (PLATE II-4)

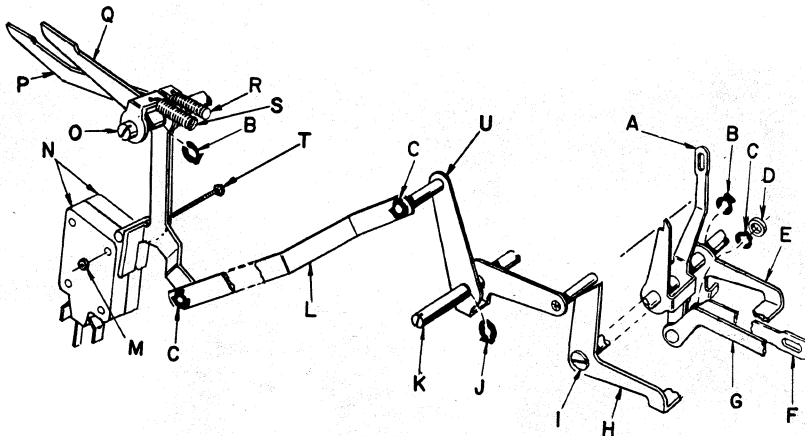
PART NUMBERS (PLATE II-4)

- A FB457-4
- B 1FB457-11
- C 10782
- D 21 No. 9
- E X60-103
- F 1FB458-3
- G 1X83-34
- H 49 3/4
- I 982 1/2 Sty. 17
- J 1FB702
- K FX60-17
- L 2FB614-13 solenoid and core used beginning with Serial F134702P
Use 2FB614-13, 1BX58-323 zener diode, AHE101 bracket, X225-686 screw, X275-135 washer, X275-5 lockwasher, and X170-56 nut prior to serial F134702P



- M FB707
- N FB701
- O X170-56
- P 73611
- Q 72574 post
- R 46 1/4
- S 403517
- T 44800
- U FB708
- V 46 1/8

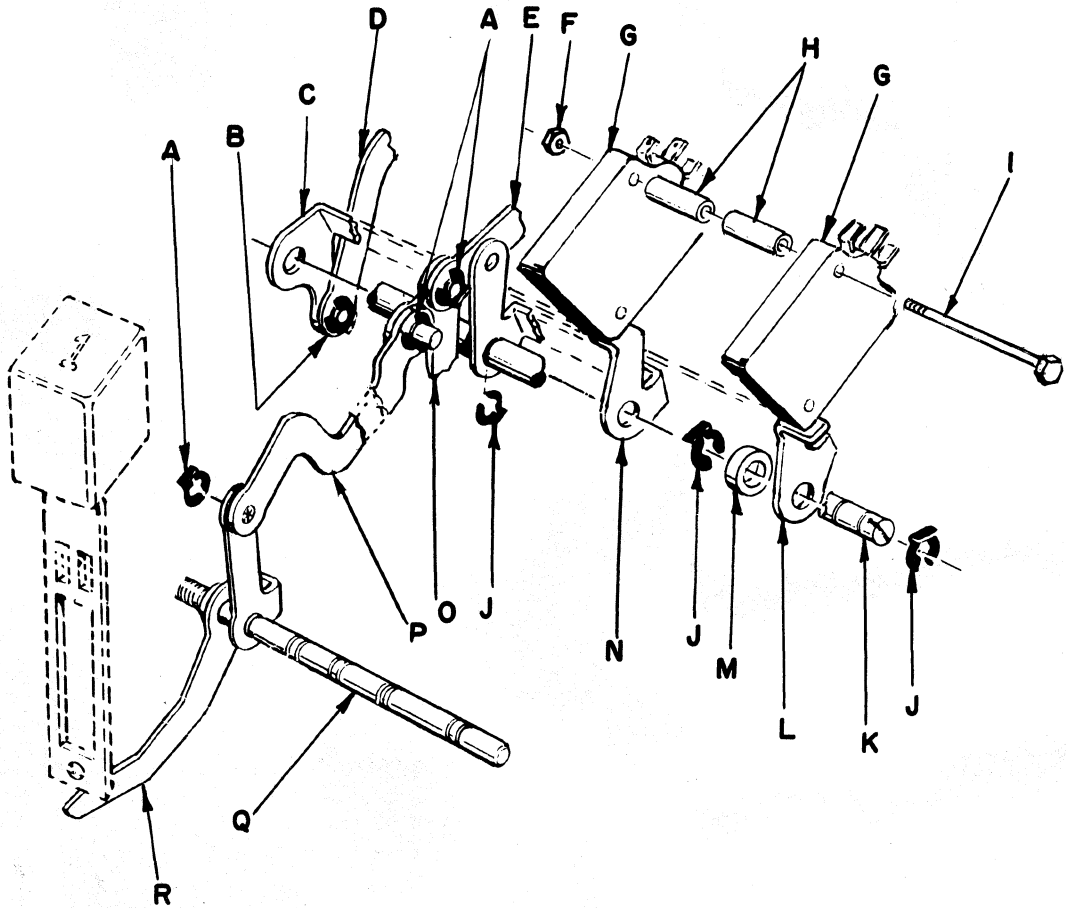
NEGATIVE AND NON-MULTIPLY LINKAGE (PLATE II-5)



PART NUMBERS (PLATE II-5)

- A 1FB214-3 includes G
- B 21 No. 9
- C 21 No. 7
- D 7919 1/2A
- E Part of H
- F FB218-1
- G Part of A
- H 1FB210-1 includes E
- I 404572 screw post
- J 21 No. 10
- K FB292-1
- L FB703
- M 49 3/4 nut
- N 1X83-34
- O FB289-6
- P FB457-1
- Q 1FB457-8
- R 10782 use 20 No. 86A anchor
- S 10788
- T X60-103
- U 1FB697

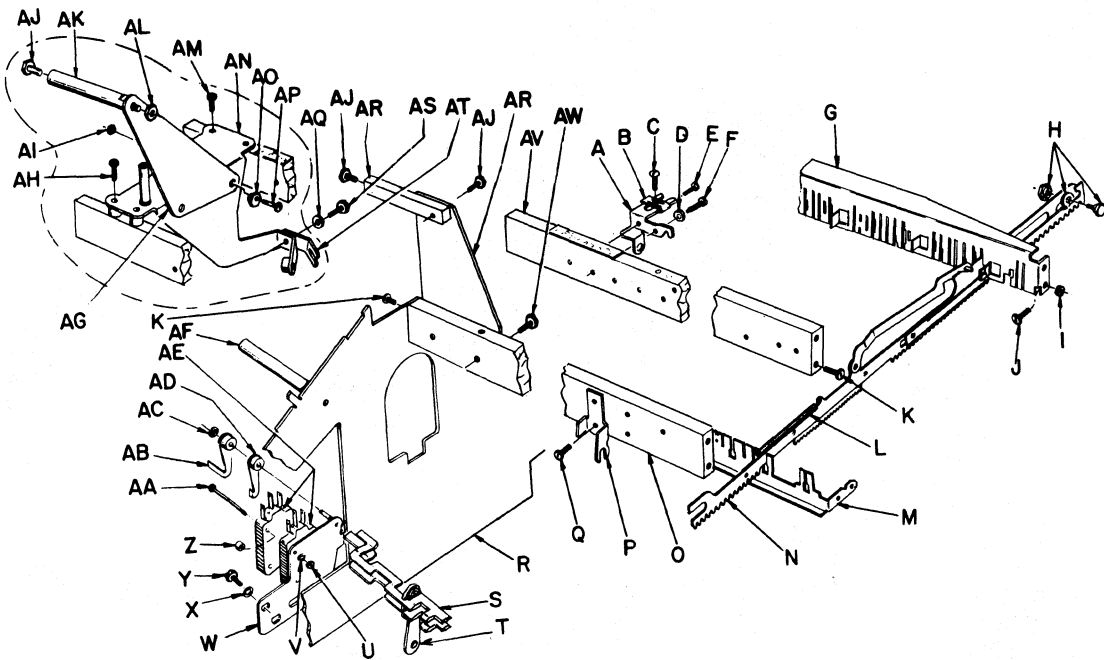
RELEASE NON CLEAR AND CARRIAGE DISABLING SWITCHES (PLATE II-6)



PART NUMBERS (PLATE II-6)

A	21 No. 8	J	21 No. 1
B	21 No. 7	K	FB428-4
C	1FB725-1	L	Part of C
D	FB730-1	M	89341
E	1FB181-13	N	FB429-12
F	X170-16	O	1A-404214
G	1X83-34	P	1-404213
H	FX10-279	Q	FB300-7
I	FX60-236	R	404212

GUIDE COMBS, SUPPORT BARS, BRACES (PLATE II-7)



PART NUMBERS (PLATE II-7)

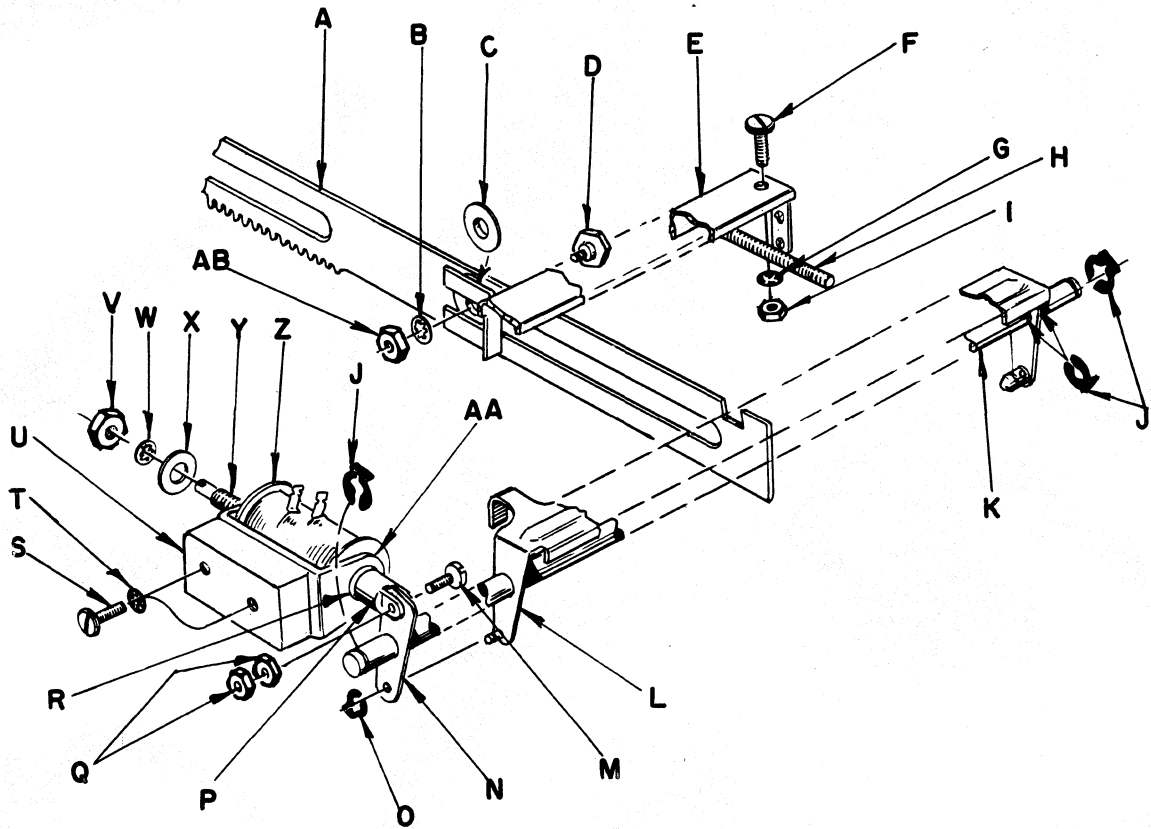
- | | | | | | |
|---|--|-----------------|---|--|--|
| A | FB198-1 | | N | 1FT110-57 includes H, L; rack for columns 1 thru 10 styles F2301, F2303, F2501, F2503 | |
| B | FX31-1 | } for 5/8" tab | | 1FT110-58 includes H, L; rack for column 11 styles F2303, F2503; use 1FT110-57 for styles F2301, F2501 | |
| C | 403590 | | | 31-406110A No. 7 includes L; rack for column 11B styles F2301, F2303, F2501, F2503 | |
| D | 46 1/4 | | | 1FT110-60 includes H, L; rack for column 12 styles F2301, F2501; use 11-406110A No. 7 (includes L) for styles F2303, F2503 | |
| E | 79305 | | | O | FB309-8 for 1/10" tab
FB309-14 for 5/8" tab |
| F | 404592 | | | P | FB41-2 |
| G | 1FB27-28 guide comb | | | Q | 75602 |
| H | FX57-88 concentric nut; use FX1-98 spacer, FX60-259 screw | } included in N | R | 1FB110-44 for 1/10" tab
1FB110-23 for 5/8" tab | |
| | FX57-44 eccentric nut; use 406116 spacer, FX60-132 screw | | | S | 1FB511-7 upper bail } included
1FB511-6 lower bail } in T |
| I | 46 1/4 | | | T | 2FB508 complete bail assembly includes S, use 60807 springs |
| J | 400501 | | U | 49 3/4 | |
| K | 404503 | | | | |
| L | FX80-54 for racks columns 1 thru 11 styles F2301, F2303, F2501, F2503; and column 12 styles F2301, F2501 | } included in N | | | |
| | 406801 No. 1 for racks column 11B, 12 styles F2303, F2503 | | | | |
| M | FB52-4 | | | | |

CONTINUED

PART NUMBERS (PLATE II-7) CONTINUED

V	X275-1	AG	FD182	}	for 5/8" tab	AR	FB897	}	for 5/8" tab
W	1FB718	AH	401519			AS	400501		
X	X275-5	AI	46 1/8			AT	FD47		
Y	709638	AJ	FX4			AU	FB896		
Z	FX10-307	AK	FW11-1			AV	FB309-9 for 1/10" tab		
AA	X60-103	AL	X170-66				FB209-15 for 5/8" tab		
AB	1FB719-1	AM	404503			AW	60575		
AC	X133-105 clip	AN	1FD22-3						
AD	1FB719-2	AO	404309						
AE	1X83-34	AP	403572						
AF	FB754	AQ	9028 1/2						

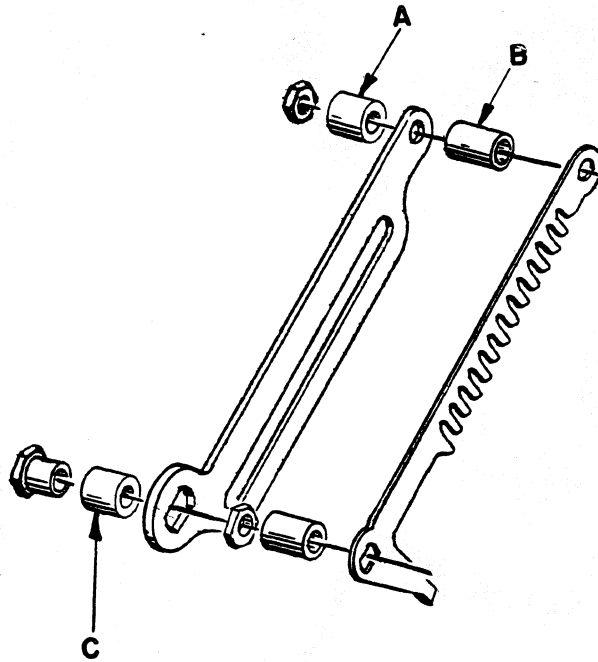
RACK-STOP SOLENOID (PLATE II-8)



PART NUMBERS (PLATE II-8)

A	FMT110-1	P	FB639 plunger
B	1097 5/16	Q	49 1/4
C	FX10-282	R	FB613-1 brass sleeve
D	FX60-162	S	X232-18 screw, use X275-125 flat washer
E	FMB29	T	X275-26 lockwasher
F	79505	U	FMB30
G	X275-23	V	X170-81
H	76811	W	1097 11/16
I	46	X	403129
J	21 No. 1	Y	FB611
K	FMB66 shaft	Z	1FB614-8
L	1FMB68	AA	FB612 bracket
M	FX60-248	AB	49
N	FMB31		
O	21 No. 8		

LOCK PLATE ASSEMBLY (PLATE II-9)



PARTS NUMBERS (PLATE II-9)

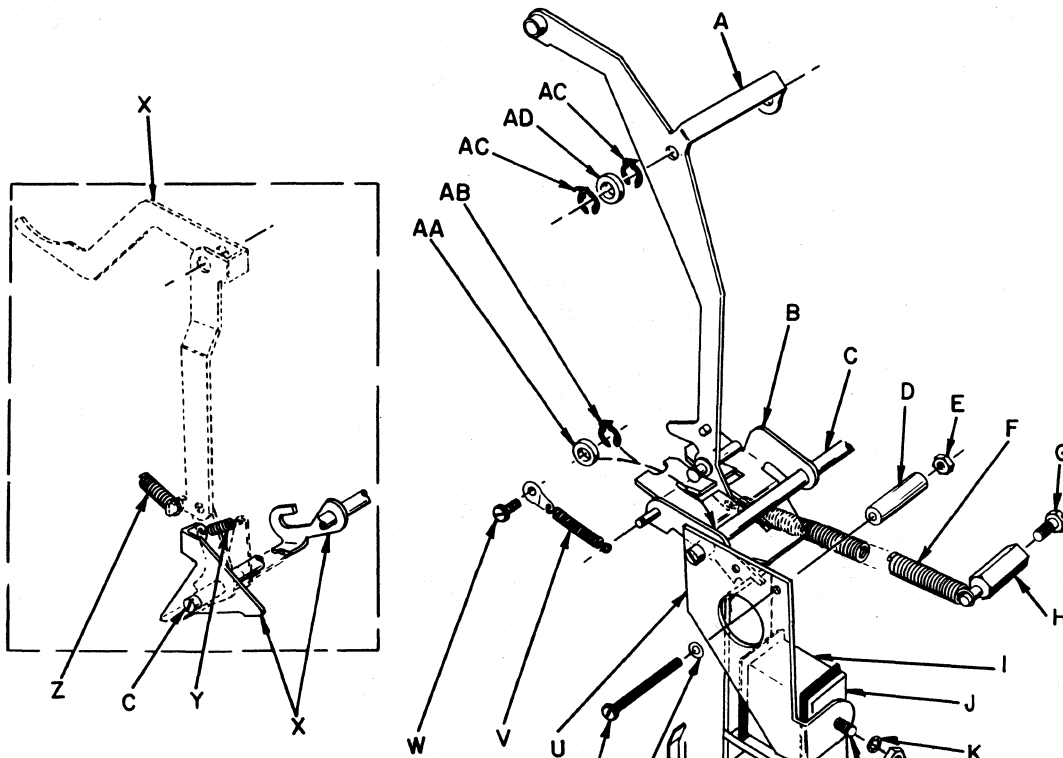
1FT3-38 complete lock plate assembly styles F2303, F2503
 1FT3-55 complete lock plate assembly styles F2301, F2501

- A FX10-172
- B FX10-171
- C FX10-174

COMPLETE ASSEMBLED PRINTING SECTIONS (PLATE II-10)

MACHINE STYLE	SYMBOLS
F2301, F2501	2FP110-80
F2303, F2503	2FP110-81

SYMBOL BLOCK SOLENOID AND LINKAGE (PLATE II-11)



PARTS CATALOG (PLATE II-11)

- | | |
|---|--|
| <p>A 1FB153-6 beginning with serial F135800P
Use 1FB153-6 and 1FB196-6 prior to serial F135800P
Use 1FB153-6, 1FB196-6, 1FB698-1, 1FD185-23, FX10-589, FX52-31, FX80-172, 20 No. 116, 9028 1/2, 72830, X232-852, X233-178, FX10-420, and 21 No. 8 prior to serial F107146P</p> <p>B 1FB698-1</p> <p>C FB710 post, use 46 1/4 nut</p> <p>D FX10-177</p> <p>E 46 1/4</p> <p>F FX80-172</p> <p>G X233-178</p> <p>H FX52-31</p> <p>I 2FB614-4 includes M</p> <p>J FB707</p> <p>K X275-5</p> <p>L X170-59</p> <p>M Included in I</p> <p>N 72574</p> <p>O 99812</p> <p>P 1FB787</p> | <p>Q 403517</p> <p>R FB708</p> <p>S 7919 1/2A</p> <p>T 519 fte. 213</p> <p>U FB706</p> <p>V 72830 use 20 No. 116 spring anchor</p> <p>W X232-852</p> <p>X Use 1FB698-1, 1FB153-6, 1FB196-6, 1FD185-23, FX10-589, FX52-31, FX80-172, 20 No. 116, 9028 1/2, 72830, X232-852, X233-178, FX10-420 and 21 No. 8 prior to serial F107146P</p> <p>Y 3486 1/2</p> <p>Z 10788</p> <p>AA 9028 1/2</p> <p>AB 21 No. 8</p> <p>AC 21 No. 10</p> <p>AD FX10-420 beginning with serial F107146P
FX10-173 prior to serial F107146P</p> |
|---|--|

COMPLETE CROSSFOOTER AND UPPER FRAME AND PINION ASSEMBLIES (PLATE III-1)

PART NUMBERS (PLATE III-1)

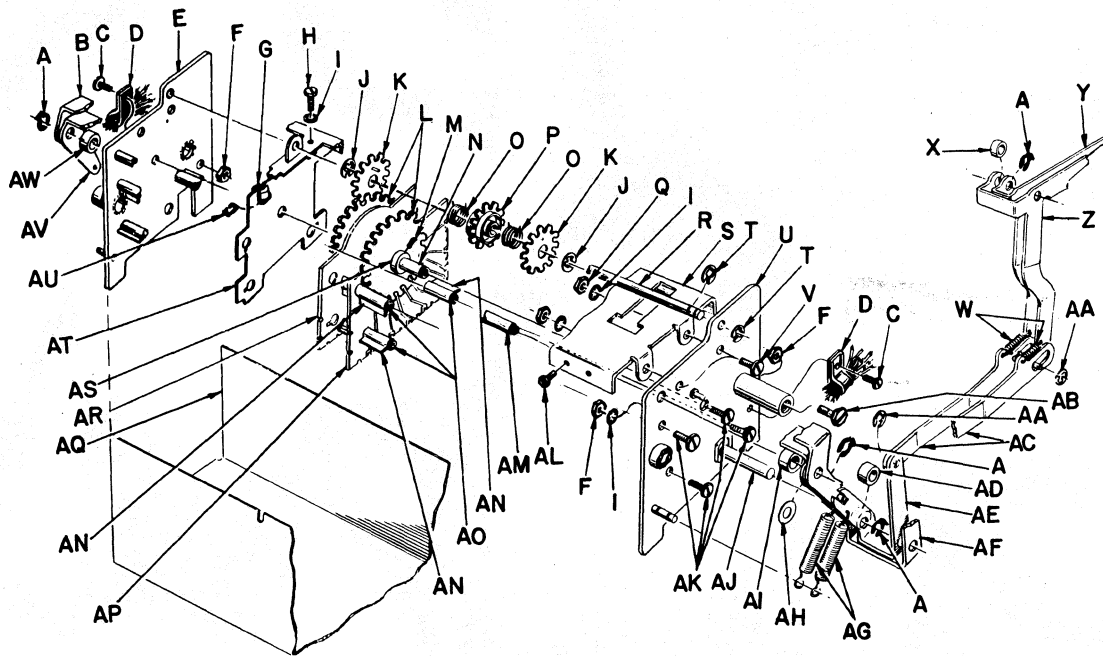
MACHINE STYLES	COMPLETE CROSSFOOTERS		CROSSFOOTER UPPER FRAME AND PINION ASSEMBLIES	
	CF "A"	CF "B"	CF "A"	CF "B"
F2303, F2503	2-409000 No. 36		2A-409001 No. 36	
F2301, F2501	2-409000 No. 44		2A-409001 No. 44	
F2301		2-409000 No. 1		2A-409001 No. 1
F2303		2-409000 No. 2		2A-409001 No. 2

CROSSFOOTER PINION ASSEMBLIES (PLATE III-2)

PART NUMBERS (PLATE III-2)

MACHINE STYLE	CF "A"		CF "B"	
	FRONT	REAR	FRONT	REAR
F2303, F2503	1FA7-40	91-409004		
F2301, F2501	1FA7-39	81-409004		
F2301			1-409004	11-409004
F2303			21-409004	31-409004

OPERAND STORAGE ASSEMBLY (PLATE III-3)

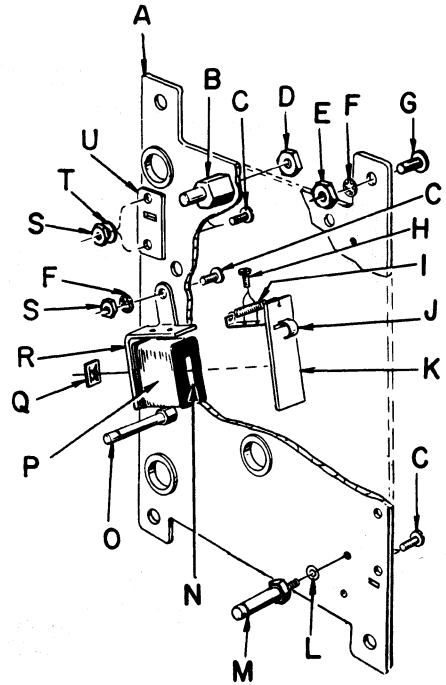
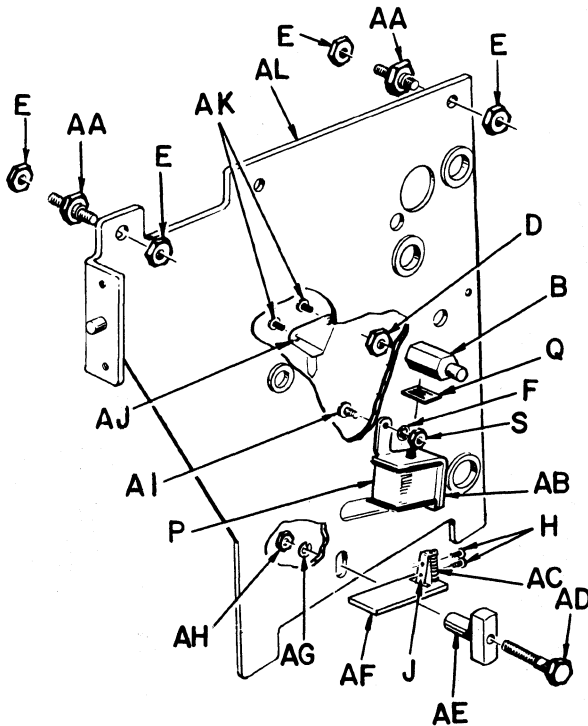


PART NUMBERS (PLATE III-3)

2FR110-32 complete rotary read-out for styles F2301, F2501
 2FR110-9 complete rotary read-out for styles F2303, F2503

A	21 No. 9	Q	46	AL	FX60-106
B	1FR101-2 bail	R	FR111	AM	FR100
C	60550	S	FR102-1	AN	FR106-1 grooved strip
D	FX66-8 cable clamp	T	21 No. 32	AO	FR105 shaft
E	1FR110-8 left end plate	U	1FR110-9 right end plate	AP	FR108-1
F	46 1/4	V	10057 5/8	AQ	FR103
G	FX30-98 slotted nut	W	72831	AR	FR108-8
H	403569	X	FX10-224	AS	FX15-20 set collar
I	X275-23	Y	1FB759	AT	FR107
J	FX5-11 clip .023" <i>COPPER</i>	Z	1FB760	AU	82107 1/4
	FX5-12 clip .019" <i>Cadmium</i>	AA	X133-105 clip	AV	1FR101-1 bail
	FX5-35 clip .021" <i>Black</i>	AB	FX60-102 mounting screw	AW	FX10-189
K	1FR116-2	AC	FB758		
L	1FR116-1 nylon gear	AD	FX10-225		
M	X255-21 set screw	AE	1FR122-2		
N	FR105-12	AF	1FR122-1		
O	FX80-64	AG	3883A		
P	1FR116-4 pinion	AH	FX1-54		
	2FR116-4 pinion gear	AI	FX10-188		
	assembly, includes J,	AJ	FR121		
	K, O, P	AK	74526 No. 2		

PRODUCT ACCUMULATOR - SIDE FRAMES (PLATE III-4)

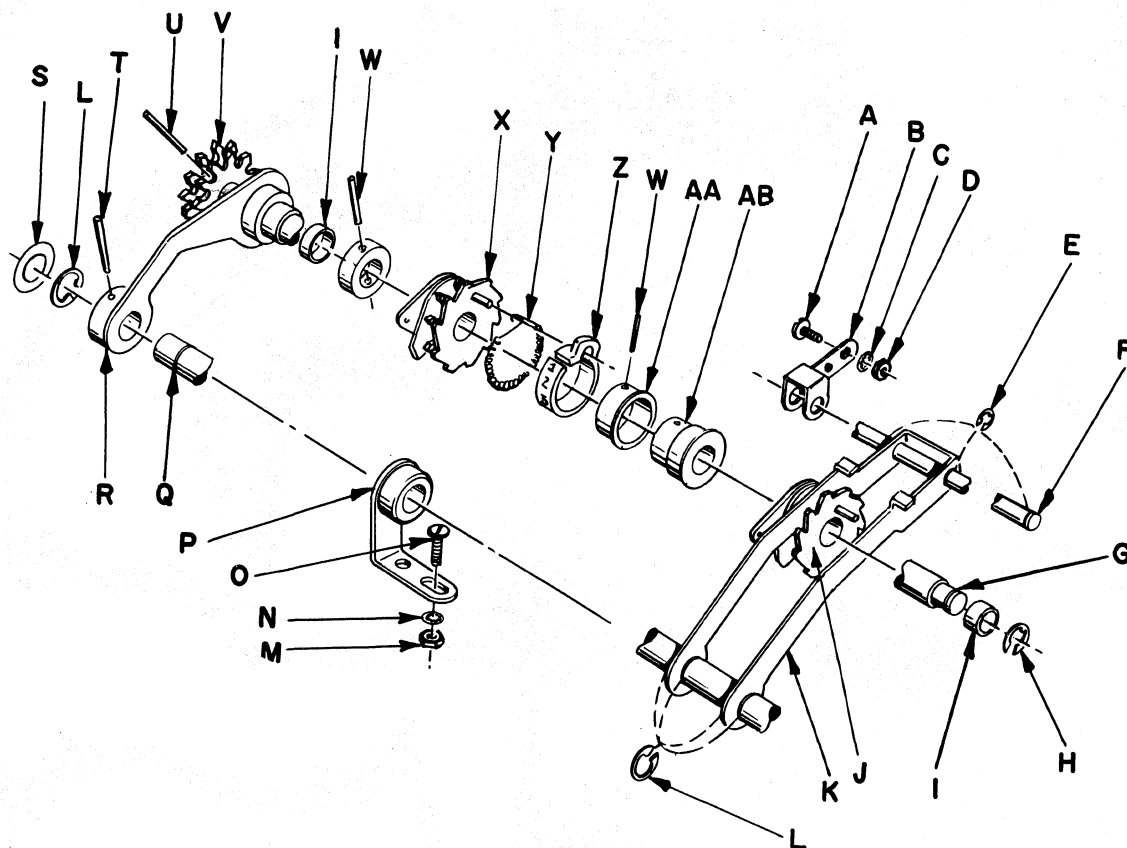


PART NUMBERS (PLATE III-4)

3FMA27 complete assembled
product accumulator

A	1FMA110-2	O	FX52-14	AI	FX57-10 screw
B	FX57-47	P	2FX73-1 coil and core		beginning with
C	FX60-150	Q	22 No. 8 speednut		serial F137329P
D	X170-76	P	FMA46 bracket		FX60-150 screw
E	X170-66	S	46 1/4		prior to serial
F	X275-29	T	X275-23		F137329P
G	FX60-277	U	FMA99	AJ	FMA63 pointer
H	75620	AA	FMB35	AK	89576 screw
I	87801A spring	AB	FMA45 bracket	AL	15060205 right
J	FMA40	AC	FX80-18 spring		end plate
K	1FMA16-1	AD	AEX60-31		beginning with
L	3220 1/2	AE	FX10-399		serial F137329P
M	FX52-13	AF	1FMA16-2		Use 15060205, FX57-10
N	Included in P	AG	X275-5		prior to serial F137329P

PRODUCT ACCUMULATOR - PINION ASSEMBLY (PLATE III-5)



PART NUMBERS (PLATE III-5)

2FMA27 complete pinion assembly, includes

B, E thru L, P thru R, T thru AB

A 79505

B FMA59

C X275-5

D 46

E X133-127

F FMA25 use X1-19 shim

G Included in complete pinion assembly

H X133-130

I FX10-34 roller

J Included in complete pinion assembly

K FMA47

L X133-132

M 46 1/4

N X275-23

O FX60-150

P 1FMA60

Q Included in complete pinion assembly

R Included in complete pinion assembly

S FX1-93 shim for left side

FX1-32 shim for right side

T 63 1/2

U 66 3/4

V Included in complete pinion assembly

W 52 1/4 pin

X Included in complete pinion assembly

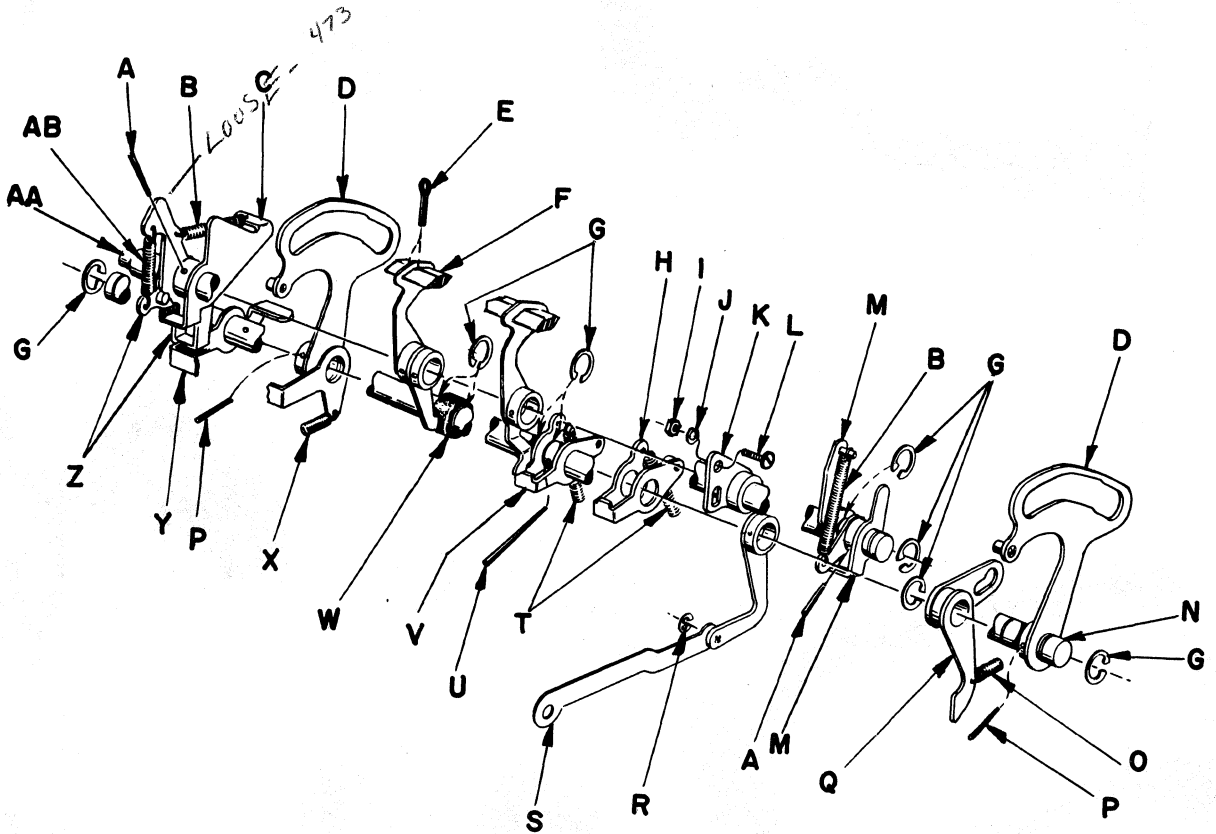
Y FX80-146 spring

Z FMA33 clutch bond

AA Included in complete pinion assembly

AB Included in complete pinion assembly

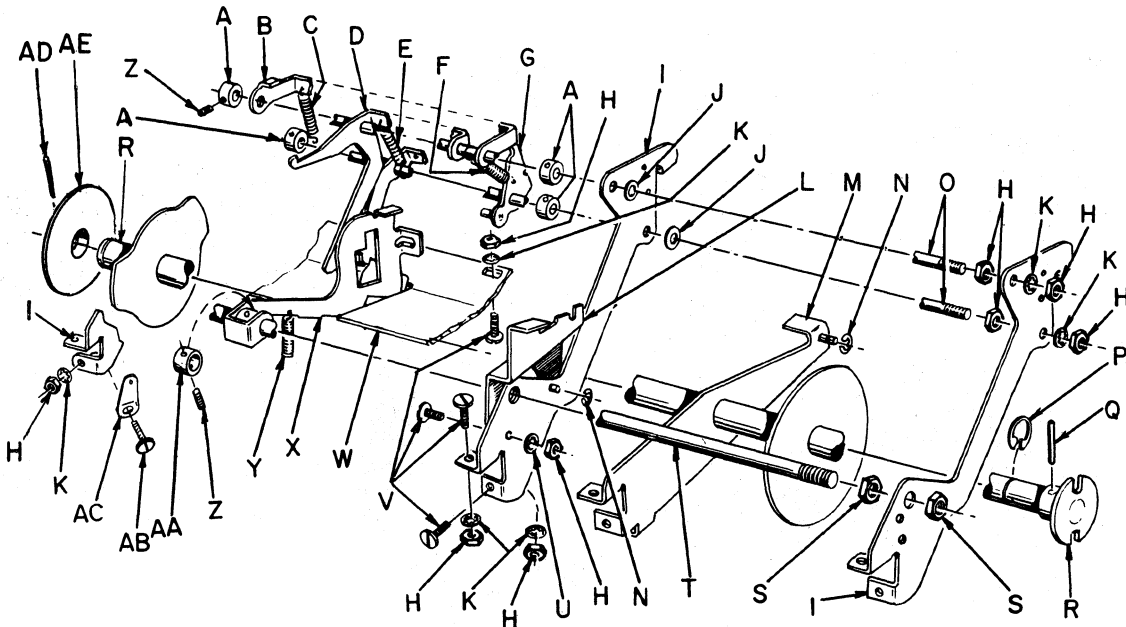
PRODUCT ACCUMULATOR - TOTAL BAIL AND TRANSFER SHAFT (PLATE III-6)



PART NUMBERS (PLATE III-6)

A	65 pin	M	1FMA10-1	U	FX36-27
B	FX80-128	N	1FMA58 transfer shaft, in-	V	1FMA55-2
C	FMA10-2		cludes D, P	W	FX10-244
D	Included in N		2FMA58 transfer shaft assem-	X	3683
E	FX36-32		bly includes G, H, N, O,	Y	FMA11 bail
F	FMA7		Q, T thru Y	Z	1FMA8 use FX10-33 spacers
G	X133-133	O	83883	AA	1FMA6 total bail shaft, in-
H	1FMA55-1	P	59 1/2 pin		cludes A, K
I	46 1/4	Q	1FMA54		2FMA6 total bail shaft assem-
J	X275-23	R	X133-127		bly includes B, C, E, F, G, M,
K	lockwasher	S	FMA56		AA, AB
L	1FMA62	T	71805	AB	FX80-19
	FX60-149				

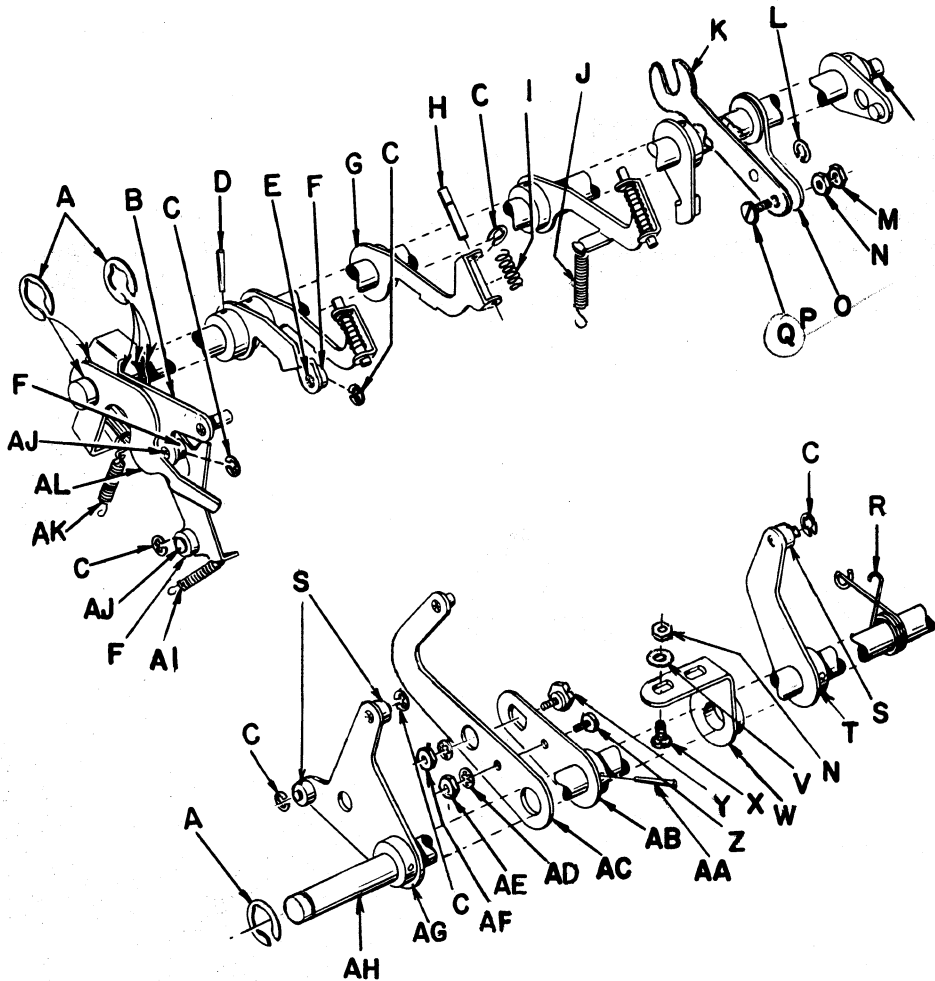
PRODUCT ACCUMULATOR - LATCH ASSEMBLY AND CAMSHAFT (PLATE III-7)



PART NUMBERS (PLATE III-7)

A	FX15-17	66 3/4 pin for 1/4 O. D. shaft	
B	FMA95 reset bail		
C	82803	R	1FMA85 camshaft, includes M, Q
D	FMA32 follower arm	S	X30-10 use 1097 3/32 lockwasher
E	FX80-100	T	FMA22
F	FX80-99	U	X275-23 lockwasher
G	1FMA31	V	FX60-150
H	46 1/4	W	FMA41 comb
I	FMA83	X	FMA82 wiper limit
J	913 3/8	Y	72814
K	X275-23	Z	X255-21
L	1FMA64	AA	FX15-18
M	1FMA87	AB	FX60-149
N	X133-105 clip	AC	20 No. 108 spring anchor
O	FMA29-1	AD	82501 pin
P	X133-132	AE	2FMA89 dial indicator assembly in R
Q	X190-736 pin for 5/16 O. D. shaft, included in R		

PRODUCT ACCUMULATOR - CARRY RESET AND CLAPPER RESET ASSEMBLIES (PLATE III-8)



PART NUMBERS (PLATE III-8)

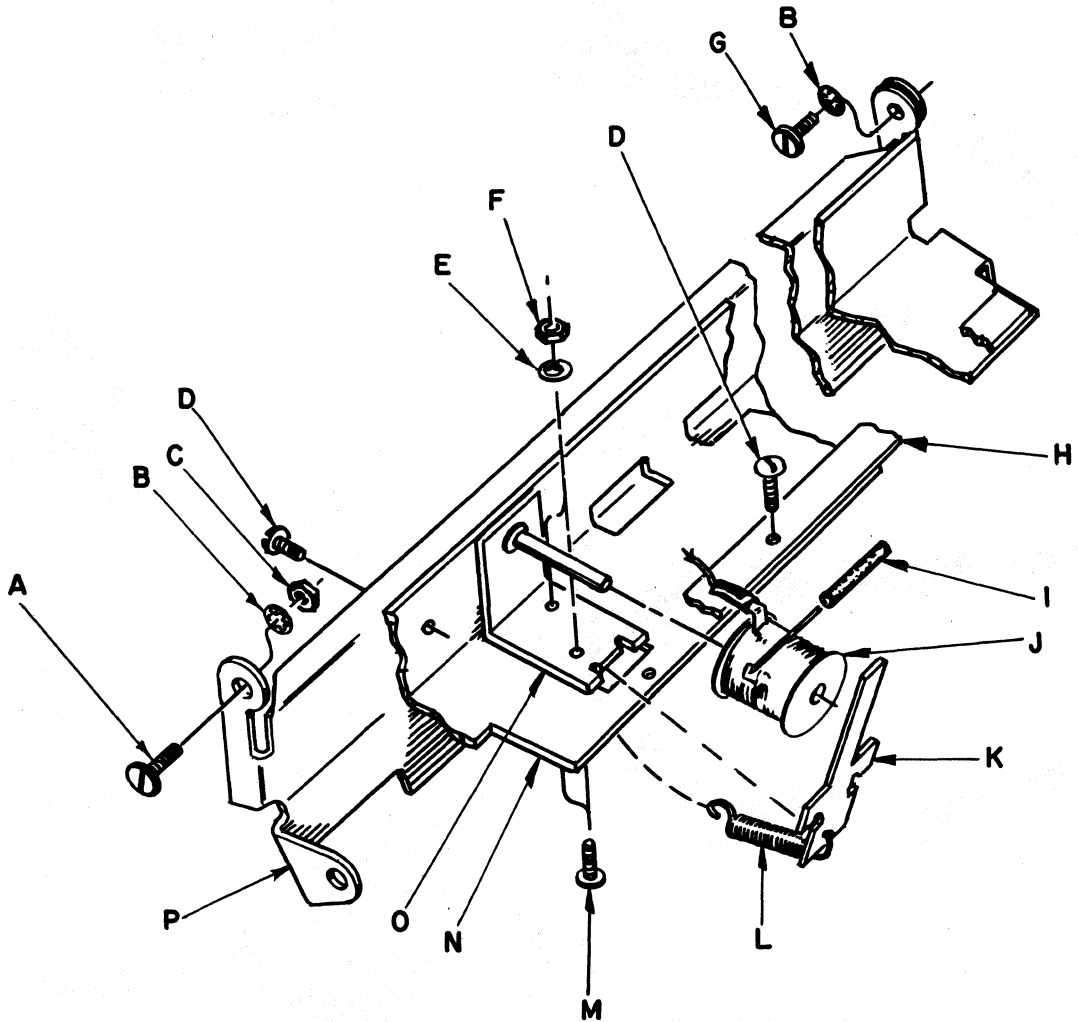
- | | | |
|--|---|---|
| 2FMA23 assembled carry reset shaft,
includes R thru T, X thru AH | H | FMA101 |
| 2FMA77-1 assembled clapper reset shaft,
includes A thru I, AJ thru AL | I | FX80-104 |
| A | J | 12088 spring |
| B | K | 1FMA103 brace |
| C | L | X133-105 clip |
| D | M | 1FMA77-1 clapper reset shaft, includes
D, G, P |
| E | N | 46 1/4 nut |
| F | O | 46 nut |
| G | P | 1FMA76 brace, included in M |
| | Q | FX60-320 screw |

CONTINUED

PART NUMBERS (PLATE III-8) CONTINUED

R	FX80-81 spring, included in AH	AA	51 pin, included in AH
S	Select roller:	AB	Included in AH
	FX10-245 (.311 dia.; stamped 3)	AC	1FMA74 arm, included in AH
	FX10-246 (.313 dia.; stamped 4)	AD	X275-4 lockwasher
	FX10-247 (.315 dia.; stamped 5)	AE	46 3/4 nut
	FX10-248 (.309 dia.; stamped 2)	AF	FX30-79 nut
	FX10-249 (.307 dia.; stamped 1)	AG	Included in AH
T	Included in AH	AH	1FMA23 carry reset shaft, includes R, T, W, AA, AC, AG
V	X275-23 lockwasher	AI	3683 spring
W	1FMA72 brace, included in AH	AJ	FX51-179 stud
X	FX60-149 screw	AK	FX80-107 spring, use FX85-8 spring anchor
Y	FX57-73 eccentric screw	AL	1FMA9 arm
Z	AEX60-27 screw		

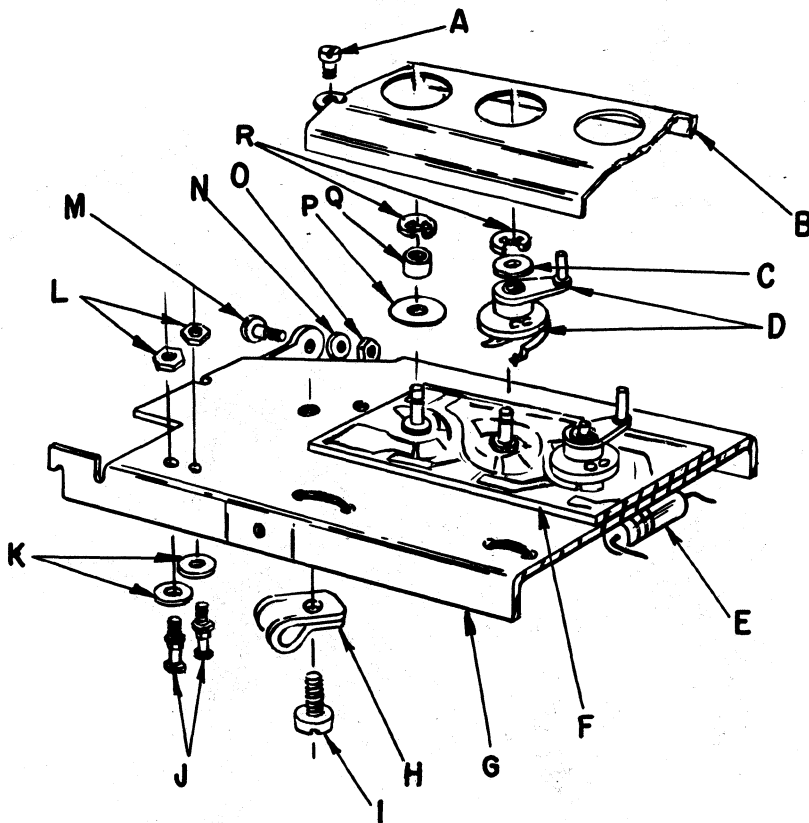
PRODUCT ACCUMULATOR - PINION SOLENOID ASSEMBLY (PLATE III-9)



PART NUMBERS (PLATE III-9)

A	403572	J	Solenoid coil included in O
B	X275-23	K	1FMA51
C	46 3/4	L	FX80-106
D	X225-231	M	X60-135
E	X275-5	N	FMA50 solenoid mounting bracket
F	46 1/4	O	2FMA52 includes J
G	72568	P	FMA90 spring anchor bracket
H	FMA49		
I	SIE-059-6		

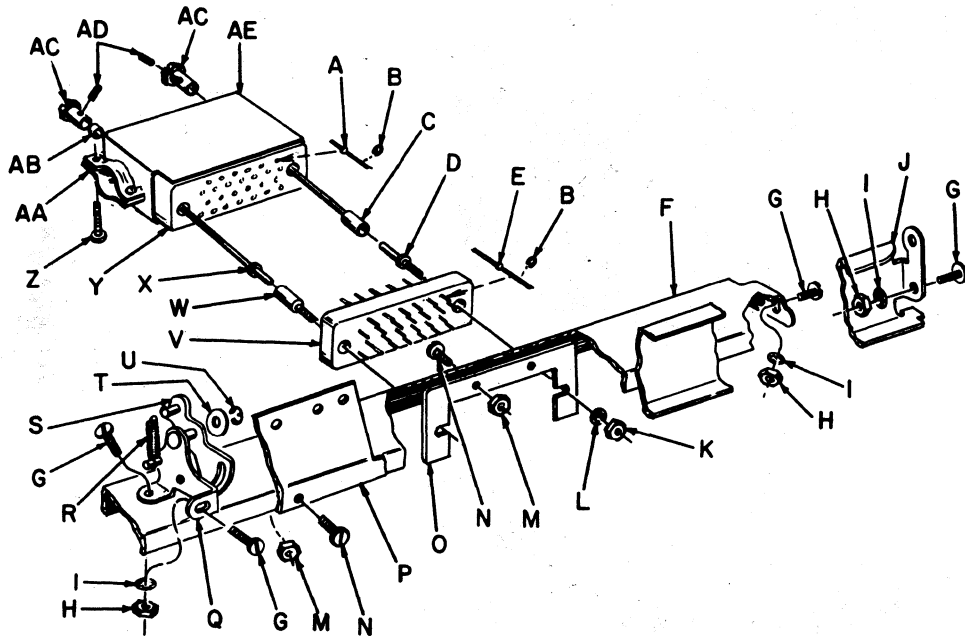
PRODUCT ACCUMULATOR - CARRY PRINTED CIRCUIT ASSEMBLY (PLATE III-10)



PART NUMBERS (PLATE III-10)

A	403539	I	FX60-245
B	FMA30-3	J	FX86-27 insulated post
C	69108	K	75210 washer
D	2FMA71	L	X170-26
E	X429-278 resistor, 2200 ohms, 2 watt, 5%	M	FX60-150
F	Included in G	N	X275-23
G	1FMA67 plate, includes F 2FMA67 complete assembled assembly, includes A thru G, P thru R	O	46 1/4
H	93 1/8 No. 4 clamp, use FX2-2 washer, not shown	P	FX211-1
		Q	62300
		R	X133-105 clip

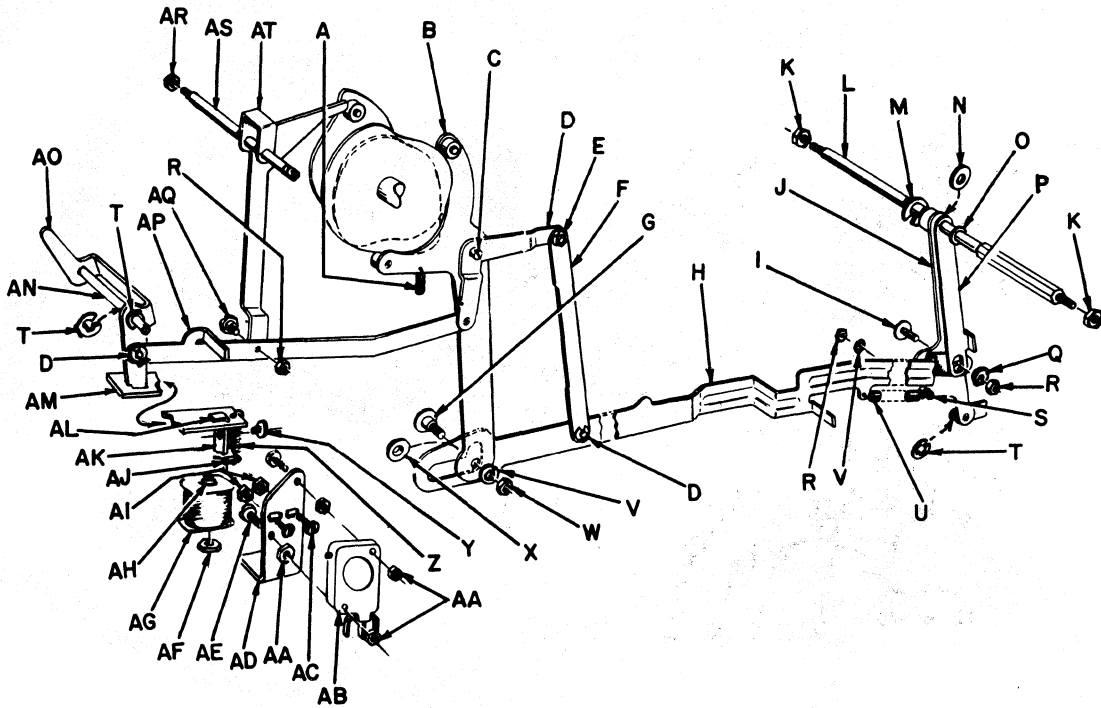
PRODUCT ACCUMULATOR - SPRING BAIL AND PIN CONNECTOR (PLATE III-11)



PART NUMBERS (PLATE III-11)

- | | | | |
|---|-------------------------------------|----|---|
| A | FX87-24 included in Y | S | 1FMA91 latch |
| B | FX5-18 clip, included in V, Y | | 2FMA91 assembled latch includes Q, R, T, U |
| C | FX40-38 included in AE | T | 428 washer, use FX1-7 shim as required |
| D | FX40-23 included in V | U | X133-127 included in S |
| E | FX87-23 included in V | V | 1FX42-1 includes B, D, E, K, L, W |
| F | FMA65 | W | FX40-24 included in V |
| G | FX60-150 | X | FX40-37 included in AE |
| H | 46 1/4 | Y | 1FX42-25 includes A, B |
| I | X275-23 | Z | FX60-269 included in AE |
| J | FMA42 | AA | FX66-20 clamp, included in AE |
| K | FX30-59 included in V | AB | FX1-85 included in AE |
| L | FX2-10 included in V | AC | FX30-63 included in AE |
| M | 49 1/4 | AD | FX64-10 included in AE |
| N | 69577 screw, use X275-20 lockwasher | AE | FX67-16 hood |
| O | FMA43 | | 1FX67-3 assembled hood includes C, X, Z, AA thru AD |
| P | FMA36 | | |
| Q | 1FMA93 bracket, included in S | | |
| R | 8384 included in S | | |

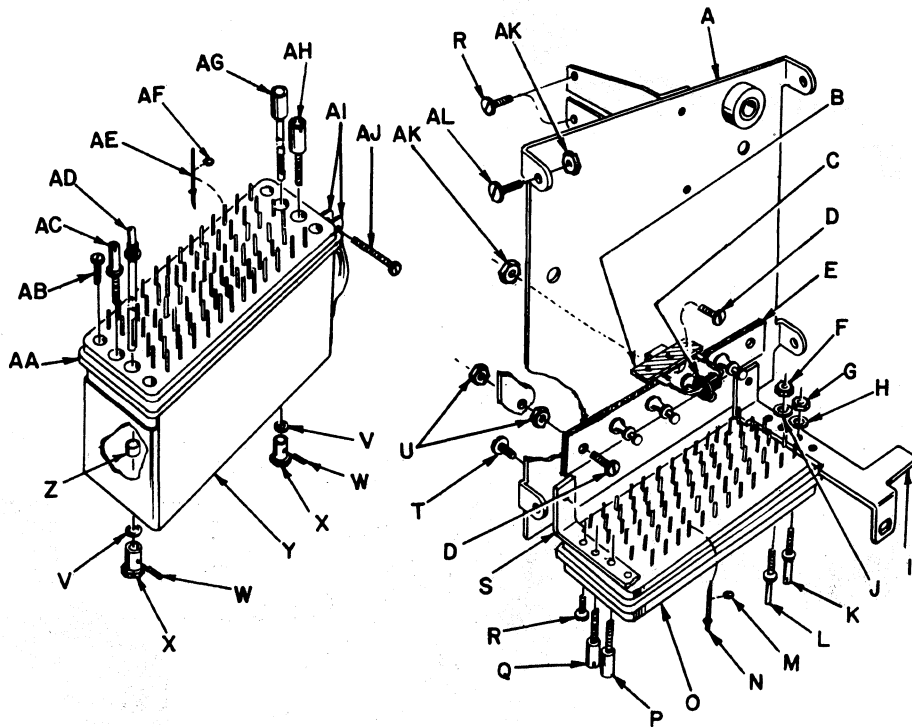
PRODUCT TRANSFER MECHANISM AND MESHING CONTROL SOLENOID (PLATE III-12)



PART NUMBERS (PLATE III-12)

A	10080	N	FX1-41	AG	1FB614-2 solenoid coil
B	1FB722-1 actuating arm, use FX15-49 set collar, X255-61 set screw	O	FX1-42		2FB614-2 assembled solenoid coil includes
C	FB287-3 use X275-6 washer, 47 nut	P	FMB17	AH	
D	1FB720 indexing arm, includes AP	Q	FX57-35	AH	FX77-6 core, included in AG
E	21 No. 8 clip	R	46	AI	46 1/4
F	FB745	S	FX52-22	AJ	72574 threaded spring post
G	FX60-85	T	21 No. 9	AK	FB707
H	1FB721	U	FX80-114	AL	FB708
I	FX60-105	V	X275-5	AM	1FB711
J	1FMB16	W	X170-61	AN	FB699
K	X170-66	X	FX10-343	AO	1FB712
L	FMB11-3 shaft, beginning with side insertion	Y	403517	AP	Included in D
	FMB11-1 shaft, prior to side insertion	Z	702806	AQ	FX57-34
M	X5-6	AA	49 3/4	AR	X30-16
		AB	1X83-34	AS	FB305-7
		AC	FX60-14	AT	FB746
		AD	FB704		
		AE	FX60-83		
		AF	X170-56		

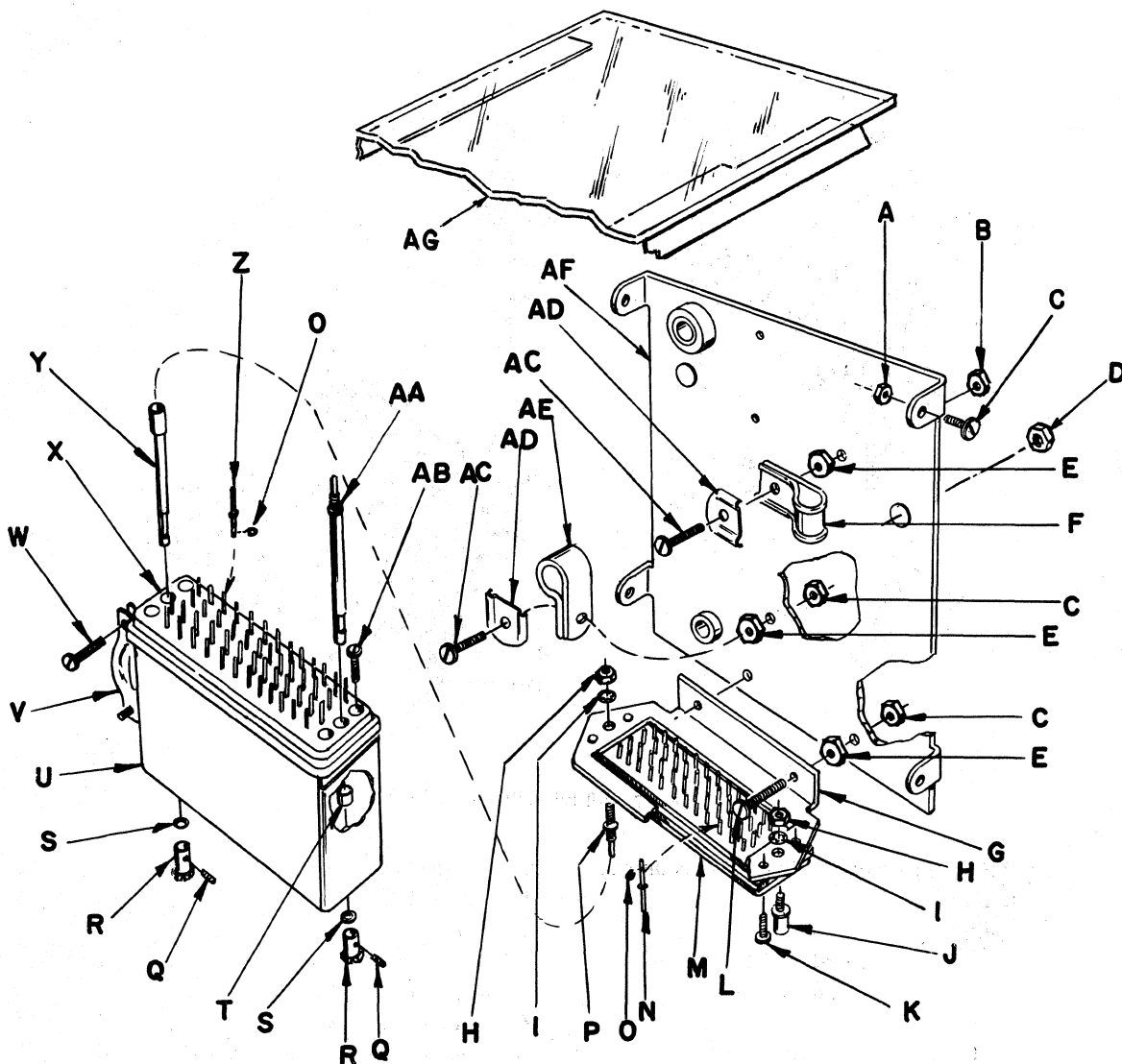
COMPONENTS UNIT - RIGHT FRAME AND PIN CONNECTOR (PLATE IV-1)



PART NUMBERS (PLATE IV-1)

2FMC110-1 complete components unit as- sembly		S	FMC35-2
A	1FMC110-2	T	73612
B	FX41-11 diode board	U	46 3/4
C	FX43-14 silicon diode	V	Included in AA
D	73611	W	Included in AA
E	1FX41-15	X	Included in AA
F	FX30-59 included in O	Y	AG67-1 hood, includes AB, AI, AJ
G	FX30-70 included in O	Z	Included in AA
H	FX2-18 included in O	AA	EX232 connector, includes V, W, X, Z, AC thru AH
I	FMC35-1	AB	Included in Y
J	FX2-10 included in O	AC	Included in AA
K	FX40-42 included in O	AD	Included in AA
L	FX40-23 included in O	AE	Included in AA
M	FX5-18 included in O	AF	Included in AA
N	FX87-24 included in O	AG	Included in AA
O	EX233 connector, includes F, G, H, J thru N, P, Q	AH	Included in AA
P	FX40-24 included in O	AI	Included in Y
Q	FX40-43 included in O	AJ	Included in Y
R	X228-413	AK	47 3/4
		AL	FX60-103

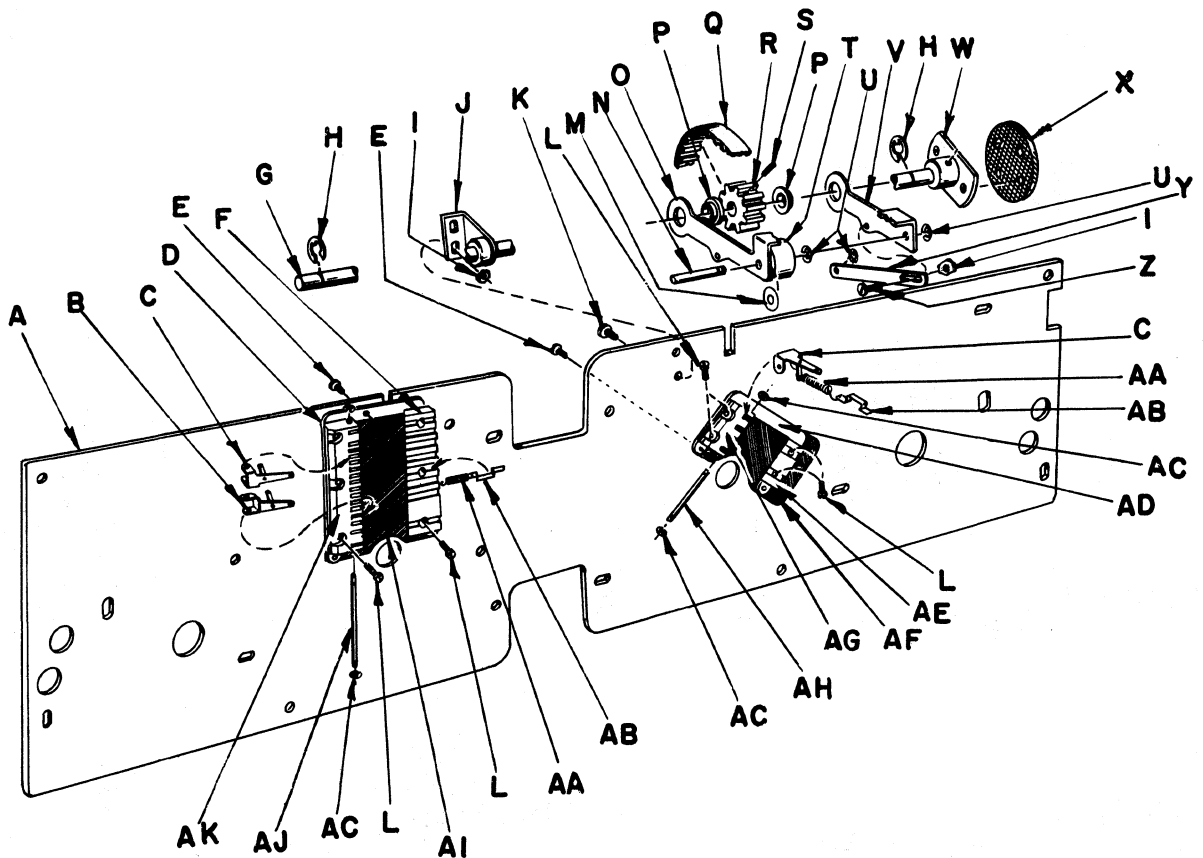
COMPONENTS UNIT - LEFT FRAME AND PIN CONNECTOR (PLATE IV-2)



PART NUMBERS (PLATE IV-2)

A	47 3/4 nut	M	1FX42-11 includes H, I,	W	FX60-269
B	46 3/4 nut		J, N, O, P	X	1FX42-74 includes O, Z
C	FX60-103 screw	N	FX87-24	Y	FX40-38
D	47 nut	O	FX5-18 clip	Z	FX87-23
E	45 1/4	P	FX40-23	AA	FX40-37
F	EX175-3	Q	FX64-10 set screw	AB	Included in U
G	FMC61	R	FX30-63	AC	FX60-5
H	FX30-59	S	FX1-85	AD	FX2-2
I	FX2-10	T	FX10-429	AE	93 1/8 No. 5
J	FX40-24	U	FX67-18 hood, includes	AF	1FMC110-1
K	X228-413		Q thru W, Y, AA, AB	AG	1FMC64 dust cover
L	12052	V	FX66-20		

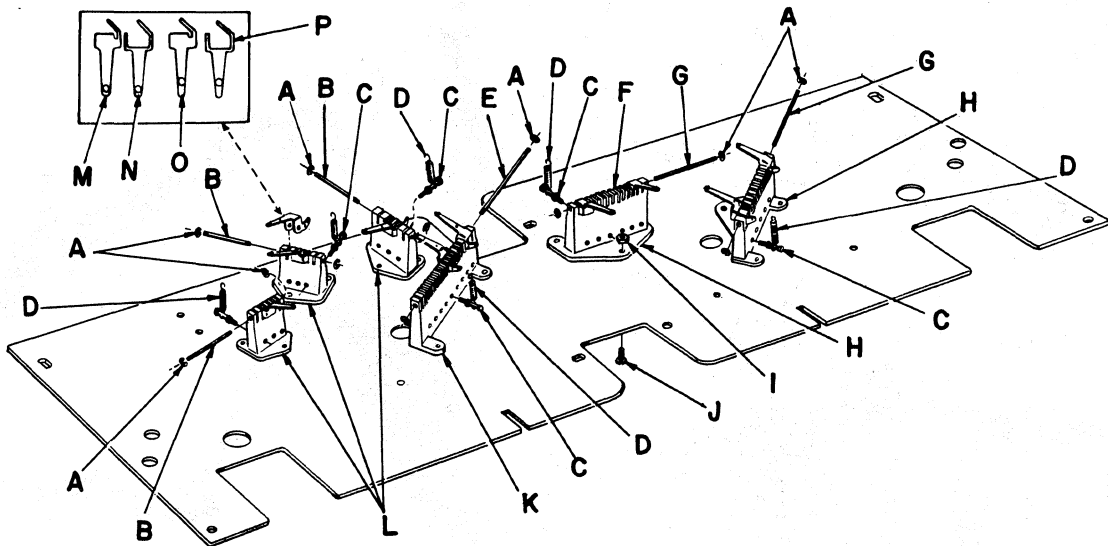
COMPONENTS UNIT - FRONT PLATE AND CLUTCH DRIVE SHAFT (PLATE IV-3)



PART NUMBERS (PLATE IV-3)

A	FMC109-1	O	FMC7	AG	FMC46-1 contact base
B	1FMC49-5	P	FX10-40	1FMC46-1 assembled contact base includes C, L, AA	
C	1FMC49-2	Q	FX28-1 belt	through AE, AG, AH	
D	FMC43-2	R	FX29-17	AH	FMC45-8
E	74502	S	X255-39	AI	FMC42-2
F	FMC44-2	T	FX10-587 roller, use 77133 washer	AJ	FMC45-6
G	1FMC5 drive shaft, includes W	U	X133-105 clip	AK	FMC46-2 contact base
H	X5-6	V	Part of O	1FMC46-2 assembled contact base includes B, C, D, F, L, AA, AB, AJ, AK	
I	46 1/4	W	Included in G		
J	1FMC18	X	FMD37		
K	73612	Y	FMC19		
L	FX60-202	Z	73612		
M	629	AA	FX80-89		
N	FMC14-1 pivot shaft used beginning with serial F118492	AB	FMC47		
	Use FMC14-1, 77133 and FX10-587 prior to serial F118492P	AC	X133-102		
		AD	FMC43-1		
		AE	FMC44-1		
		AF	FMC42-1		

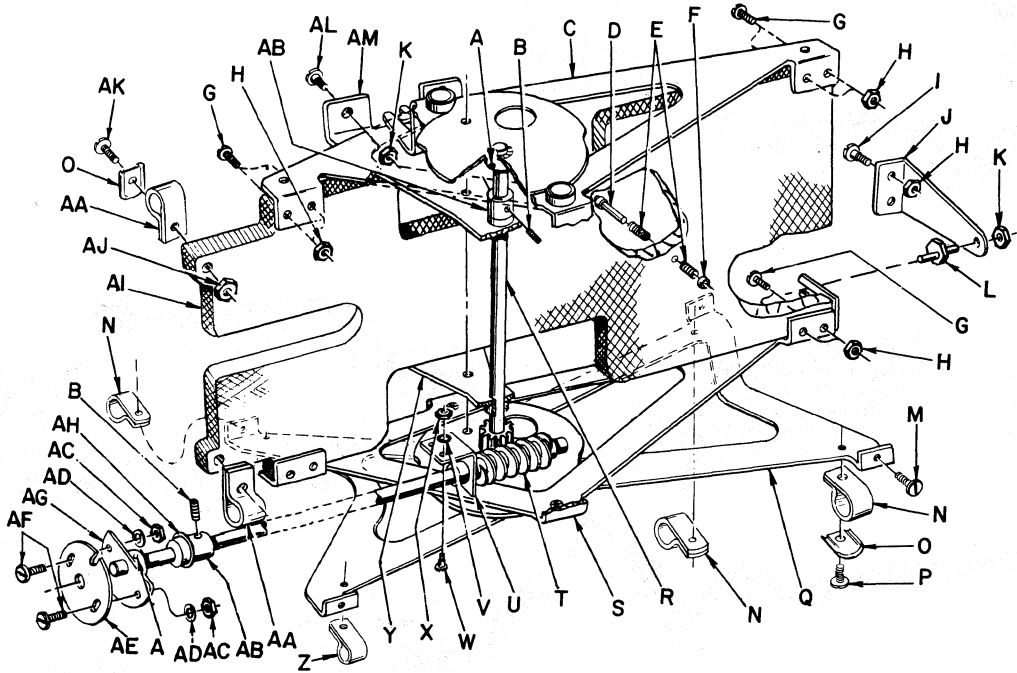
COMPONENTS UNIT - REAR PLATE AND WIPING CONTACTS (PLATE IV-4)



PART NUMBERS (PLATE IV-4)

A	X133-102	I	49
B	FMC45-1	J	74528
C	FX52-16	K	FMC46-13 contact base 1FMC46-7 assembled contact base, includes A, C, E, K, M, N, O, P
D	FX80-91	L	FMC46-11 contact base 1FMC46-5 assembled contact base, includes A, B, C, L, M, N
E	FMC45-2	M	1FMC49-7
F	FMC46-12 contact base 1FMC46-8 assembled contact base, includes A, C, F, G, M, N	N	1FMC49-6
G	FMC45-7	O	1FMC49-9
H	FMC46-12 contact base 1FMC46-6 assembled contact base, includes A, C, G, H, M, N	P	1FMC49-8

COMPONENTS UNIT - PLATEN ASSEMBLY AND CAMSHAFT (PLATE IV-5)



PART NUMBERS (PLATE IV-5)

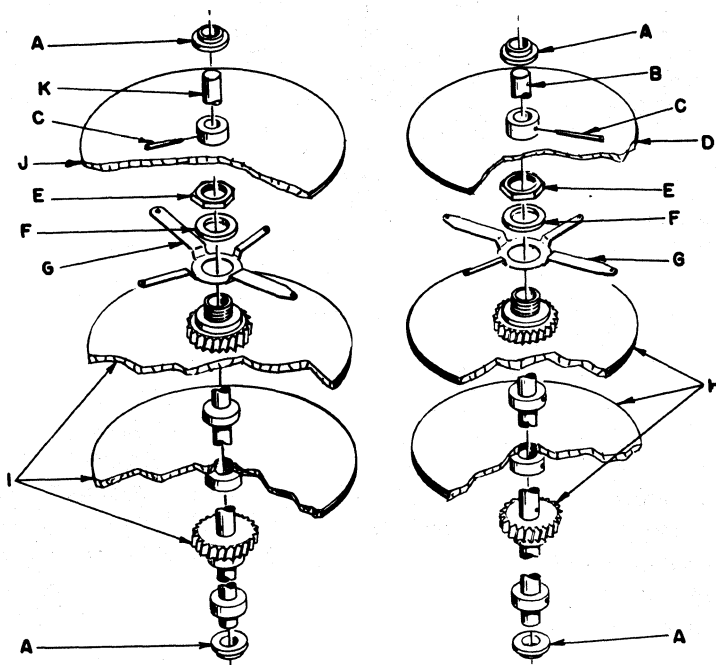
A	66 3/4 pin, included in R, T	Q	1FMC20
B	X255-50 set screw	R	1FMC4-1 camshaft with steel gear, includes A
C	1FMC2-1		Use 1FMC4-1, 1FMC6-1 to replace camshaft with brass gear
D	FX87-30 platen pin	S	1FMC2-2
E	FX80-24 silver plated spring for shifting disc sensing pins FX80-147 gold plated spring for function table sensing pins	T	1FMC6-1 worm gear shaft for camshaft with steel gear, includes A, AG Use 1FMC6-1, 1FMC4-1 to replace worm gear shaft for camshaft with brass gear
F	FX10-482 spring retainer ring	U	1FMC65 brace
G	79587	V	X275-23
H	46 1/4	W	72568
I	83660 No. 2	X	46
J	FMC16	Y	1FMC1-2
K	47 3/4	Z	93 1/8 No. 3
L	FX57-30	AA	EX175-14 included in AI
M	X228-408		
N	93 1/8 No. 5		
O	FX2-2 included in AI		
P	73611		

CONTINUED

PART NUMBERS (PLATE IV-5) Continued

AB	FX15-19 collar	AI	2FMC60 complete assembled platen, includes D, E, F, O, AA, AJ, AK; and fifty pin connector, bracket and wire harness
AC	409314	AJ	X170-46 included in AI
AD	X275-5	AK	X228-585 included in AI
AE	FMC12	AL	FX60-103
AF	FX60-24	AM	1FMC1-1
AG	Included in T		
AH	3415 1/4 shim		

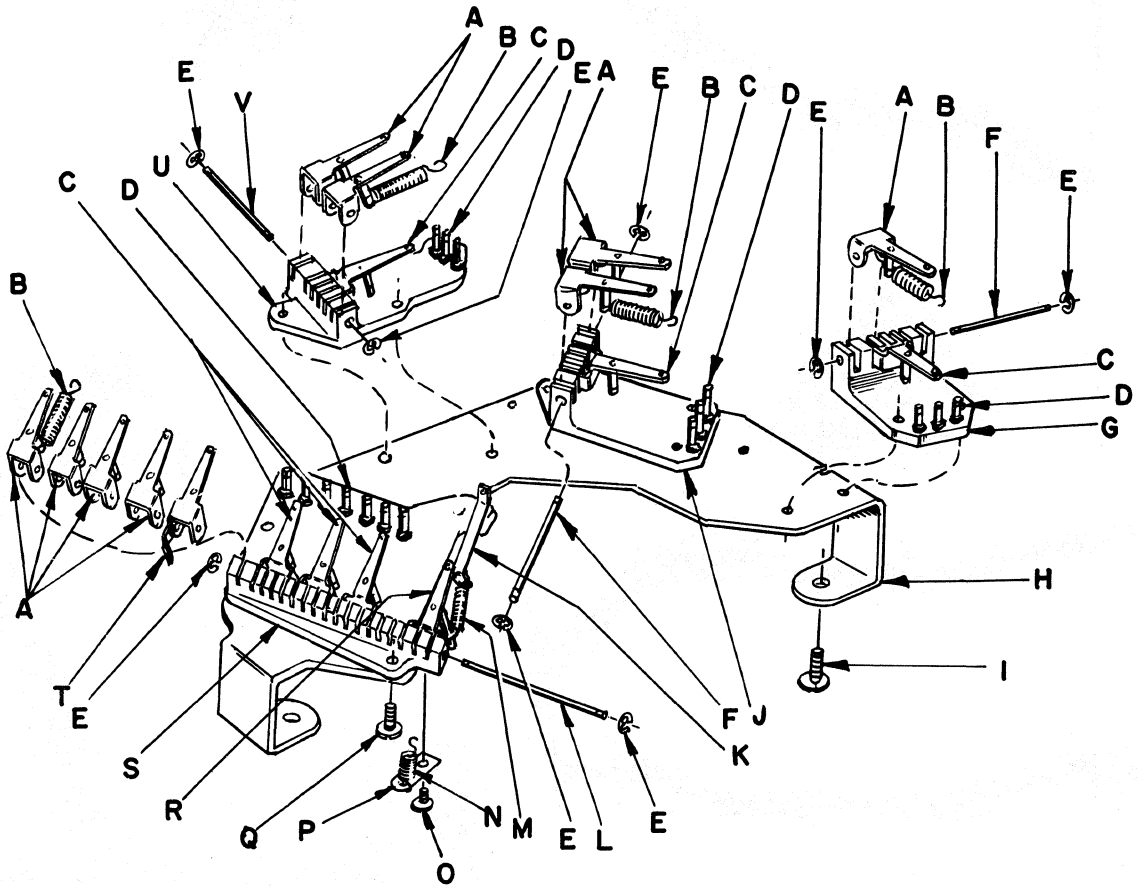
COMPONENTS UNIT - FUNCTION TABLE AND SHIFTER DISCS (PLATE IV-6)



PART NUMBERS (PLATE IV-6)

A	FX10-660 nylon bushing	G	1FMC54 included in B, K
B	1FMC50-1 function table disc shaft, includes C, D, H	H	Included in B
	2FMC50-1 assembled function table disc shaft, includes C, D, E, F, G, H	I	Included in K
C	52Z (.096) included in B, K 52Z (.099)	J	Included in K
D	Included in B	K	1FMC50-2 shifter disc shaft 1FMC50-3 shifter disc shaft for decimal shift of 0, 3, 6 and 8
E	FX30-47 included in B, K		} includes C, I, and J
F	FX1-65 included in B, K		

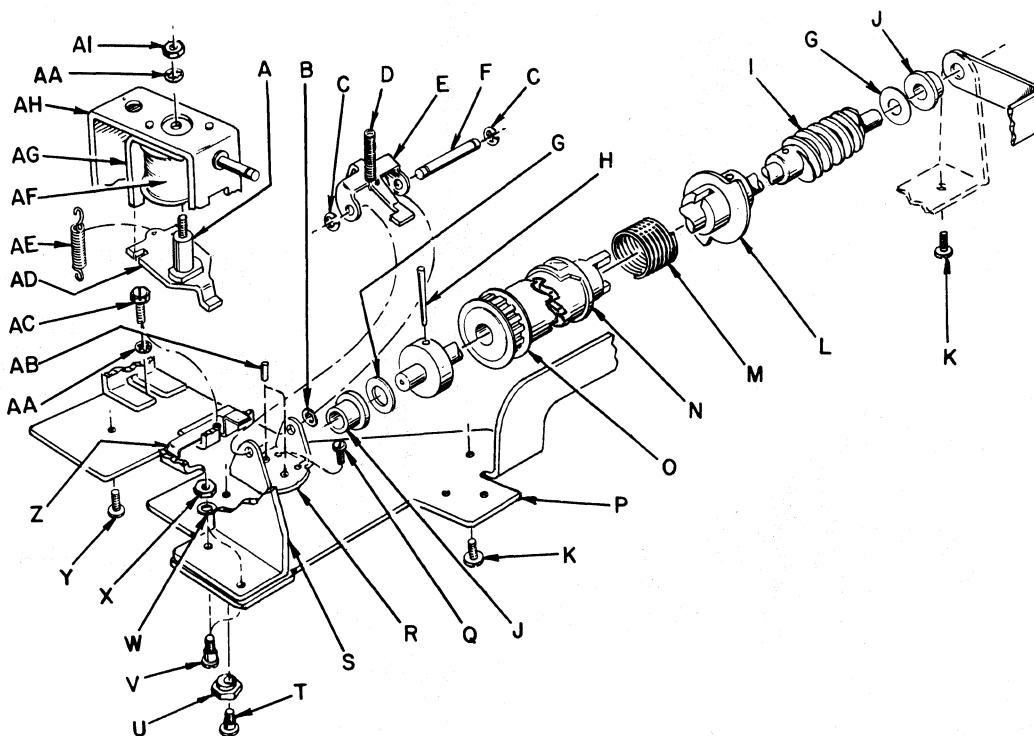
COMPONENTS UNIT - DIGIT SELECTOR ASSEMBLY (PLATE IV-7)



PART NUMBERS (PLATE IV-7)

A	1FMC49-1	J	FMC46-4 base	R	1FMC49-4
B	FX80-88	K	1FMC46-10 assembled base and contacts, includes A, C, D, E, F, J	S	FMC46-9 base
C	1FMC49-3	L	FMC48 spring anchor; use FX55-45 rivet	T	1FMC46-9 assembled base and contacts, includes A, C, D, E, K thru P, R, S, T
D	FX52-16	M	FMC45-5	U	1FMC49-7
E	X133-102	N	FX80-90	V	FMC46-3 base
F	FMC45-4	O	FX80-98		1FMC46-3 assembled base and contacts, includes A, C, D, E, U, V
G	FMC46-4 base 1FMC46-4 assembled base and contacts, includes A, C, D, E, F, G	P	74502		
H	FMC59	Q	FMC58		
I	73612		76559		

COMPONENTS UNIT - CLUTCH ASSEMBLY (PLATE IV-8)



PART NUMBERS (PLATE IV-8)

Complete Assembled Clutches

- 3FMC26-1 for RHFT
- 3FMC26-2 for LHFT
- 3FMC26-3 for RHS
- 3FMC26-4 for LHS

- A FX77-9
- B FX1-6
- C 21 No. 32
- D FX80-161
- E FMC32-1 release arm for LHFT, RHFT clutches
- FMC32-2 release arm for LHS, RHS clutches

- F FMC31
 - G 8823 1/2 (.006)
 - 811 1/2 (.011)
 - FX1-103 (.004)
- } shims

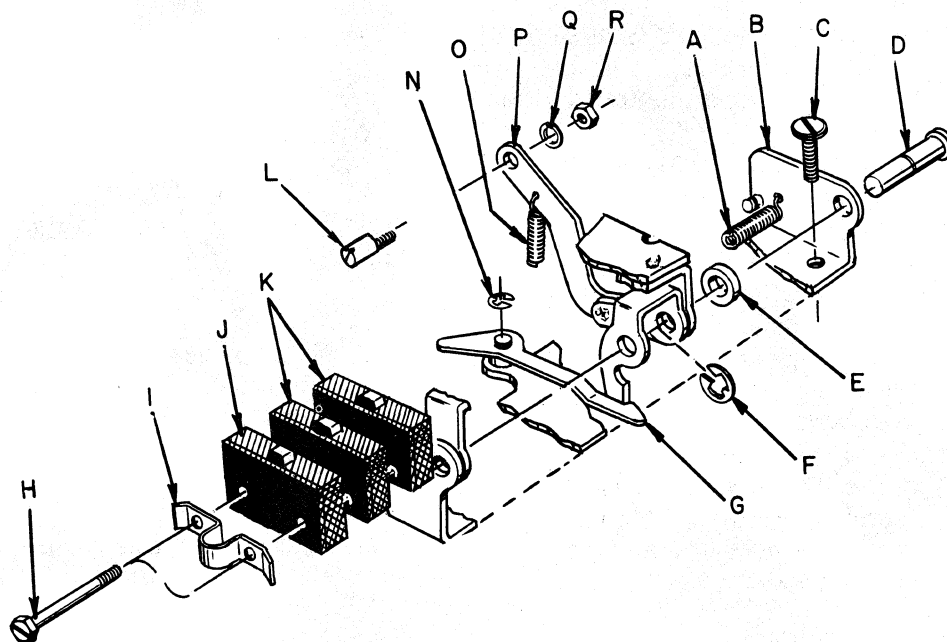
- H 51 included in L
- I Included in L
- J FX10-618 bushing
- K 73612

- L 1FMC26-1 for RHFT
 - 1FMC26-2 for LHFT
 - 1FMC26-3 for RHS
 - 1FMC26-4 for LHS
- } clutch shafts, includes H, I
- 2FMC26-1 for RHFT
 - 2FMC26-2 for LHFT
 - 2FMC26-3 for RHS
 - 2FMC26-4 for LHS
- } Complete assembled clutch shafts, includes H, I, M, N, O
- M FX80-86 included in L
 - N 15060692 eight tooth member for LHFT, RHFT clutches
 - Use 15060692, 15060767 for LHFT with twelve tooth members
 - Use 15060692, 15060742 for RHFT with twelve tooth members
 - 15060700 eight tooth member for LHS, RHS clutches
 - Use 15060700, 15060759 for LHS with twelve tooth members
 - Use 15060700, 15060734 for RHS with twelve tooth members

PART NUMBERS (PLATE IV-8) CONTINUED

O	15060734 eight tooth members for RHS clutch Use 15060734, 15060700 for RHS with twelve tooth members 15060742 eight tooth member for RHFT clutch Use 15060742, 15060692 for RHFT with twelve tooth members 15060759 eight tooth member for LHS clutch Use 15060759, 15060700 for LHS with twelve tooth members 15060767 eight tooth member for LHFT clutch Use 15060767, 15060692 for LHFT with twelve tooth members	S	1FMC22-2 bracket for LHFT, LHS 1FMC22-1 bracket for RHFT, RHS	
		T	FX60-142	
		U	200488	
		V	FX60-143	
		W	X275-26	
		X	X170-56	
		Y	FX60-194	
		Z	FMC36-2 retainer for LHFT FMC36-1 retainer for LHS FMC30 retainer for RHFT, RHS	
		AA	X275-4	
		AB	511 Fte. 709 dowel pin	
		AC	709638	
		AD	1FMC29	
		AE	10085	
		AF	1FX76-12 solenoid	
		AG	Included in AH	
P	1FMC21-3 bottom plate for RHFT 1FMC21-4 bottom plate for RHS 1FMC21-5 bottom plate for LHFT 1FMC21-6 bottom plate for LHS	AH	1FMC37-1 bracket for LHFT, LHS 1FMC37-2 bracket for RHFT, RHS	} includes AG
Q	FX60-140	AI	46 3/4	
R	FMC23-1 bracket for LHFT, LHS FMC23-2 bracket for RHFT, RHS			

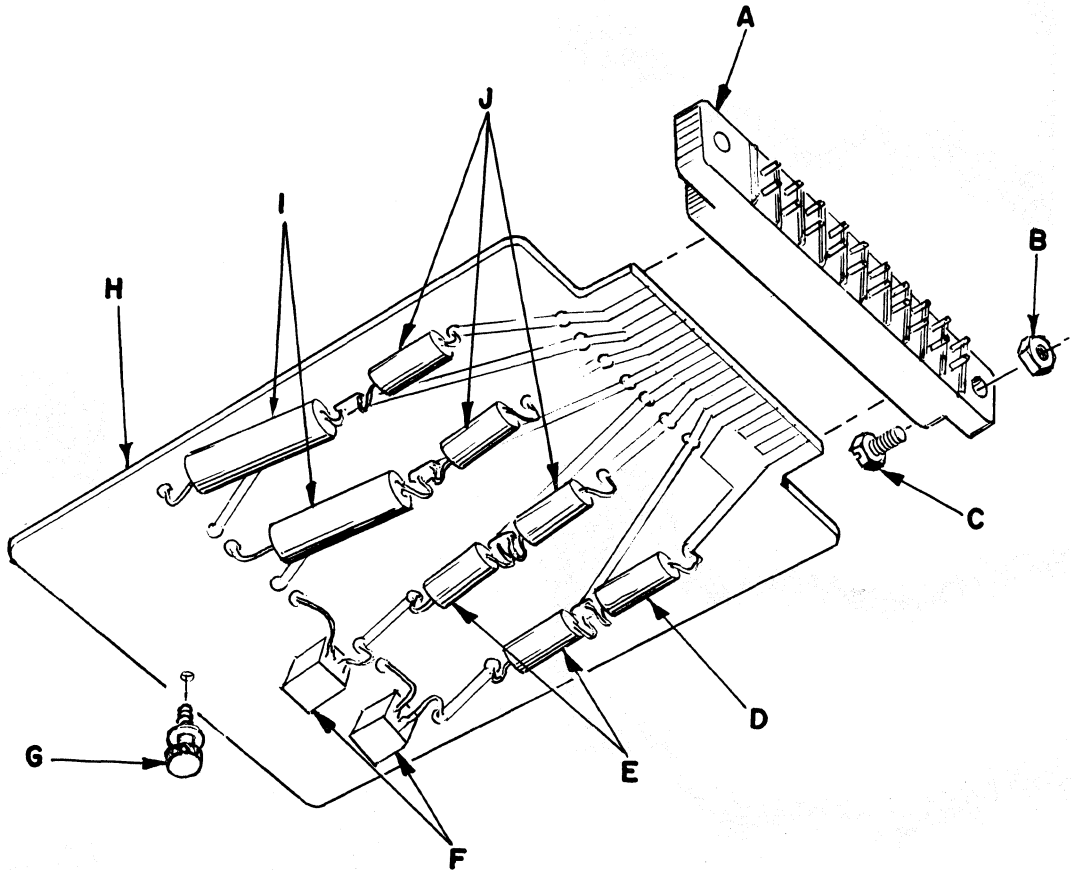
COMPONENTS UNIT - CLUTCH SWITCHES (PLATE IV-9)



PART NUMBERS (PLATE IV-9)

- | | | | |
|---|--|---|--|
| A | FX80-80 | I | FX66-21 for Licon switches
FX66-13 for Burroughs switches |
| B | 1FMC34-5 for left function table clutch,
beginning with side insertion
1FMC34-1 prior to side insertion
1FMC34-7 for right function table clutch,
beginning with side insertion
1FMC34-3 prior to side insertion
1FMC34-6 for left shifter disk clutch,
beginning with side insertion
1FMC34-2 prior to side insertion
1FMC34-8 for right shifter disk clutch,
beginning with side insertion
1FMC34-4 prior to side insertion | J | <u>1FX83-73 Licon switch</u>
1FX83-16 Burroughs switch |
| C | FX60-141 | K | <u>1FX83-73 Licon switch</u>
1FX83-19 Burroughs switch |
| D | FX40-13 | L | 15060338 eccentric screw replaces
both the roller and screw used previously |
| E | FX10-239 | N | X133-105 clip |
| F | 21 No. 26 | O | 7787 spring for RHFT and RHS
FX80-79 spring for LHFT and LHS |
| G | 1FMC33-3 for left function table clutch
1FMC33-1 for right function table clutch
1FMC33-4 for left shifter disk clutch
1FMC33-2 for right shifter disc clutch | P | 1FMC39-1 for left function table clutch;
and for right function table clutch with
Burroughs switches
1FMC39-3 for right function table clutch
with Licon switches
1FMC39-2 for left shifter disc clutch; and
for right shifter disc clutch with Burroughs
switches
1FMC39-4 for right shifter disc clutch with
Licon switches |
| H | FX60-254 for Licon switches
FX60-139 for Burroughs switches | Q | X275-4 |
| | | R | 46 1/4 |

COMPONENTS UNIT - DIODE AND RESISTOR CIRCUIT BOARD (PLATE IV-10)



PART NUMBERS (PLATE IV-10)

- | | | | |
|---|---------------------|---|--|
| A | FX42-48 | H | FMC57 circuit board
1FMC57 assembled circuit
board, includes D, E, F, H,
I, J |
| B | 46 | I | See component chart |
| C | 76567 No. 2 | J | See component chart |
| D | See component chart | | |
| E | See component chart | | |
| F | See Component chart | | |
| G | 203635 | | |

IV - 25

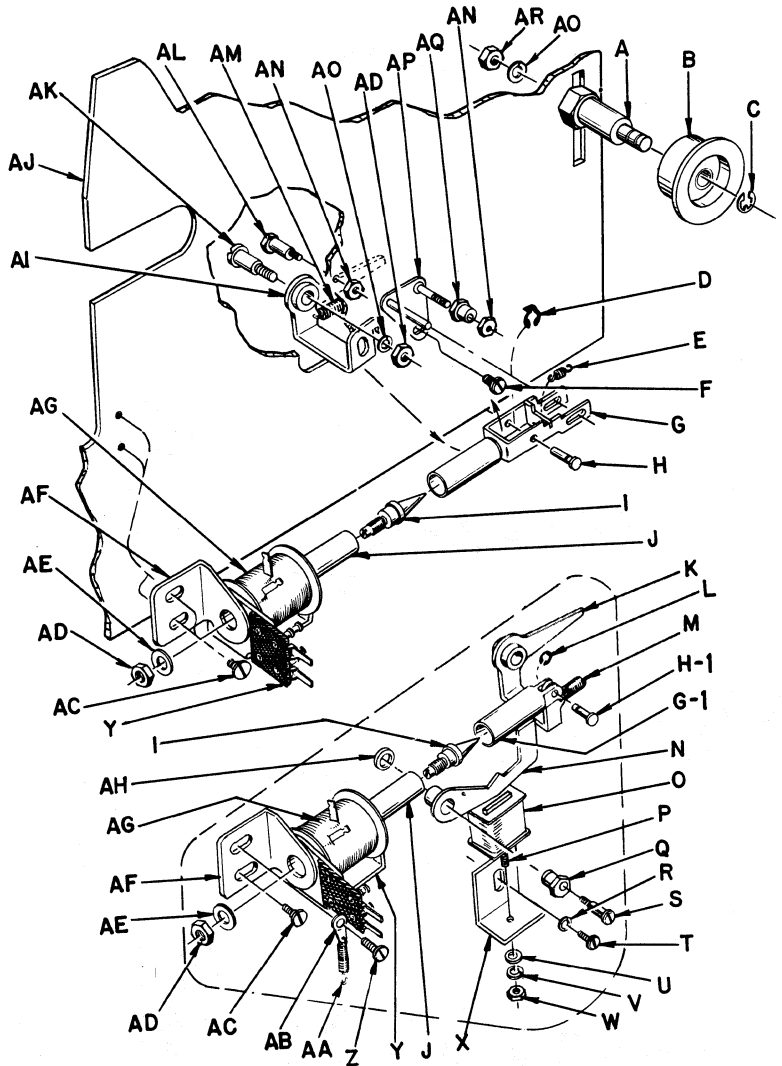
DRIVE UNIT - PRODUCT ACCUMULATOR SOLENOID (PLATE V-1)

PART NUMBERS (PLATE V-1)

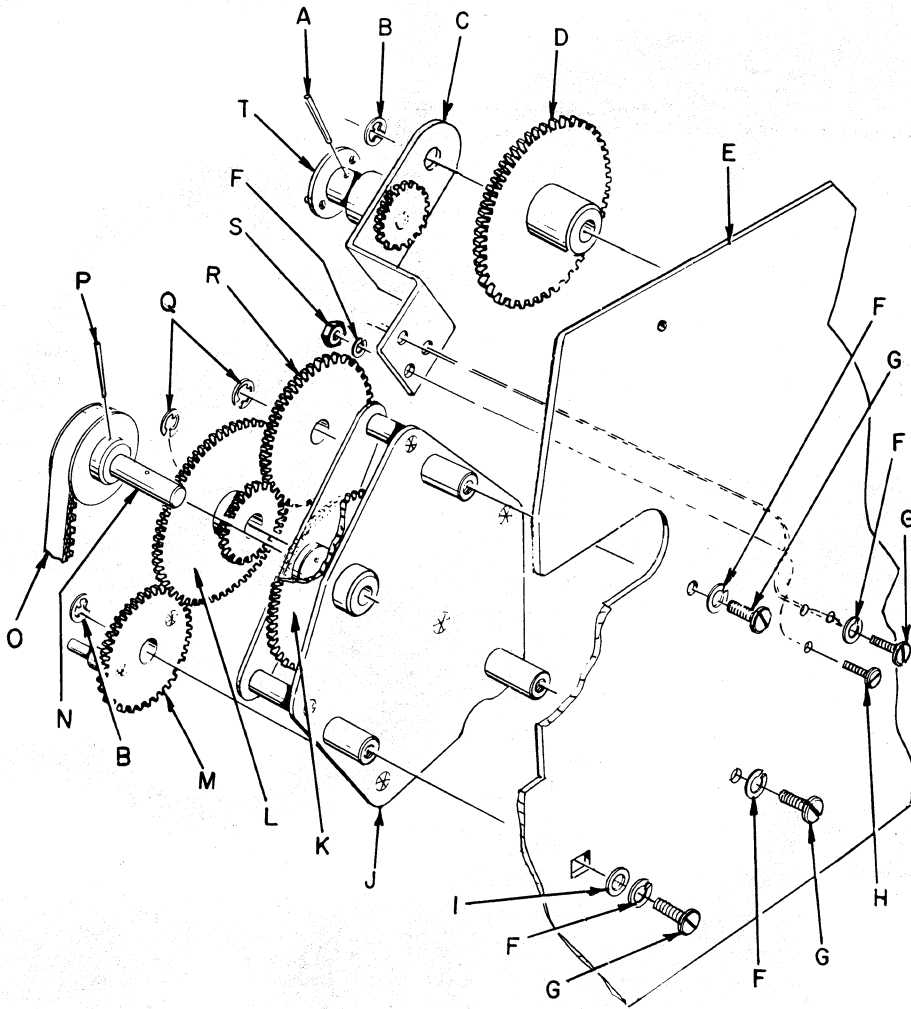
- A FMB33
- B FMB34
- C 21 No. 10
- D 21 No. 7
- E FX80-163
- F 402509
- G 1FMB26
- G-1 1FMB27-1
- H FX36-48
- H-1 FX36-43
- I FB611
- J FB613-1 sleeve
- K 1FMB25
- L X133-105
- M 44810
- N 1FMD53-1 used with
bracket Y with
terminal board
1FMD53 used with
bracket Y without
terminal board
- O 1FB614-11
- P FX77-6
- Q FX57-97
- R X275-6
- S X232-39
- T X232-25
- U FX10-331
- V X275-26
- W X170-56
- X FB704-1
- Y 1FB684-3 bracket
- Z 73611
- AA FX80-63
- AB 20 No. 116
- AC 76580
- AD X170-81
- AE 404272
- AF FMB24
- AG 1FB614-8

- AH AEX1-24
- AH-1 AEX43-3 diode
- AI 1FMB25-1 release arm
- AJ 1FMD110-3 beginning
with serial F106359P
1FMD110-2 prior to
serial F106359P
- AK FX60-187

- AL FX57-57 use X275-4
lockwasher
- AM 8381
- AN 46
- AO X275-7
- AP 1FMD54-1 plate
- AQ FX57-98
- AR 45



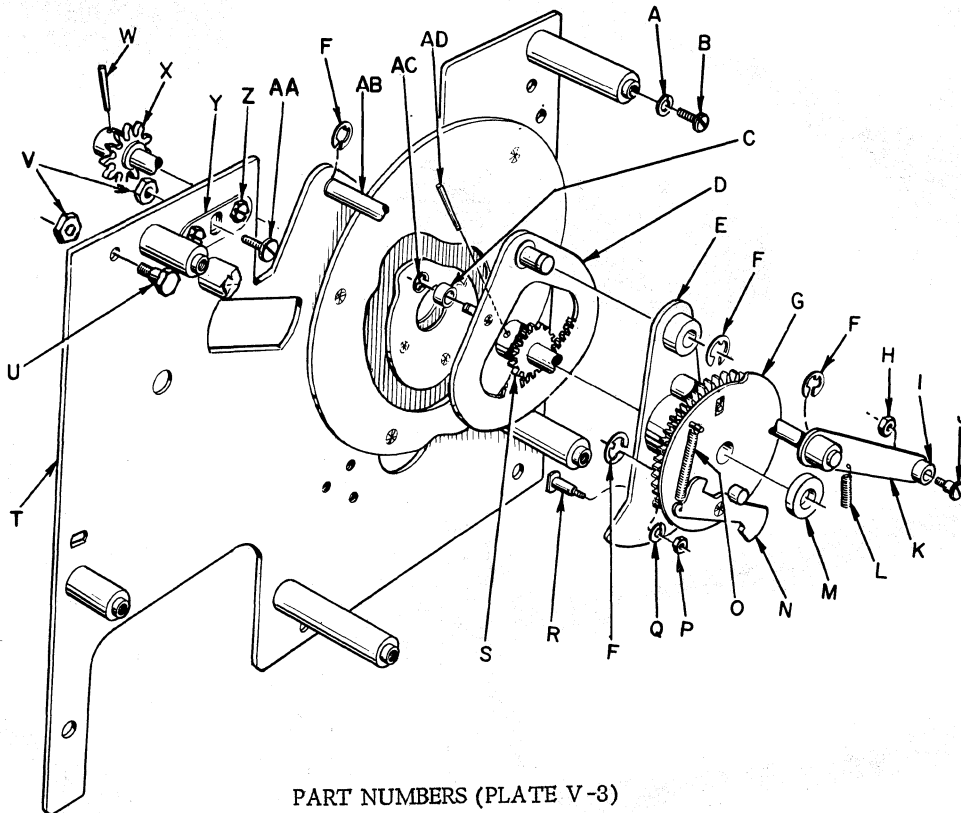
DRIVE UNIT - OUTER SIDEFRAE AND GEAR TRAIN (PLATE V-2)



PART NUMBERS (PLATE V-2)

- | | | | |
|---|--|---|--|
| A | FX35-6 pin included in T,
beginning with serial
F110369P | J | 2FMD20 gear train frame
3FMD20 assembled gear
train, includes B, K, L, M, N, P, Q, R |
| | Use 1FMD35 prior to serial
F110369P | K | Included in J, N |
| B | X5-6 included in J | L | FMD21-1 included in J |
| C | 1FMD36 | M | 1FMD22 included in J |
| D | 1FMD33-1 | N | 1FMD24 included in J; includes K, P |
| E | 1FMD110-2 | O | FX28-14 |
| F | X275-6 | P | 51 included in J, N |
| G | X232-25 | Q | X133-130 included in J |
| H | 79544 | R | FMD21-2 included in J |
| I | 404160 | S | 47 1/4 |
| | | T | 1FMD35 includes A |

DRIVE UNIT - INNER SIDEFAME AND CAM ASSEMBLY (PLATE V-3)



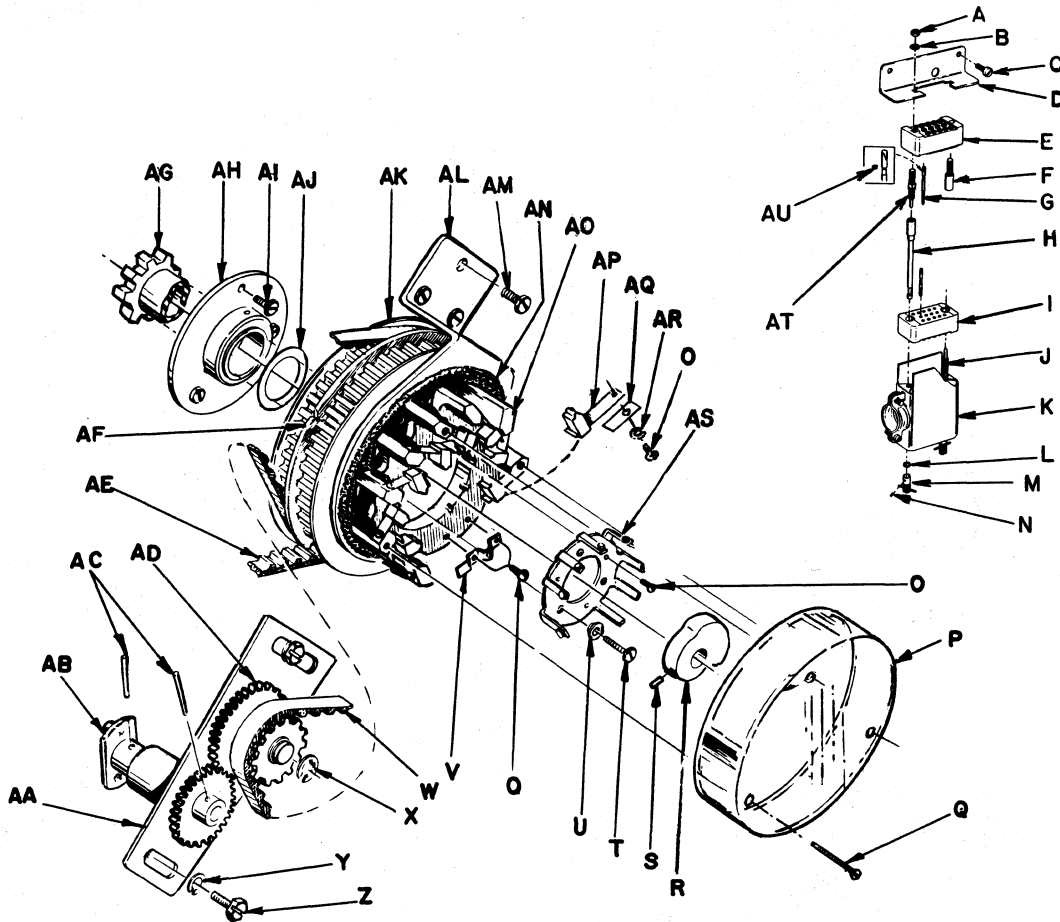
PART NUMBERS (PLATE V-3)

15060320 complete drive unit
 3FMD110-1 complete drive
 unit and timing cam assembly

Use 1FMD47-1 and 2FMD46-1 prior to
 serial F118492P

- | | | | |
|---|---|----|---|
| A | X275-6 | O | 89800A |
| B | X232-5 | P | 47 1/4 |
| C | FX10-300 | Q | X275-6 |
| D | 1FMD48 | R | FX60-188 |
| E | Included in G | S | Included in Z |
| F | X5-6 | T | 2FMD110-1 inner frame |
| G | 2FMD46-1 used beginning with serial
F118492P, Use 2FMD46-1 and 1FMD47-1
prior to Serial F118492 | U | FX60-190 |
| H | 49 1/4 | V | X170-66 nut |
| I | PX448 | W | 66 3/4 pin included in X |
| J | 407500 | X | 1FMD43 pinion drive shaft, includes
S, W, AD |
| K | 1FMD50 | Y | FMB32 adjusting plate |
| L | 77879 spring | Z | 709638 screw |
| M | FX10-299 | AA | FX60-192 screw |
| N | 1FMD47-1 clutch dog, used beginning
with serial F118492P | AB | FMD49 shaft |
| | | AC | 21 No. 26 clip |
| | | AD | 51 pin, included in X |

DRIVE UNIT - PULSE GENERATOR, BRACKET AND PULLEY (PLATE V-4)



PART NUMBERS (PLATE V-4)

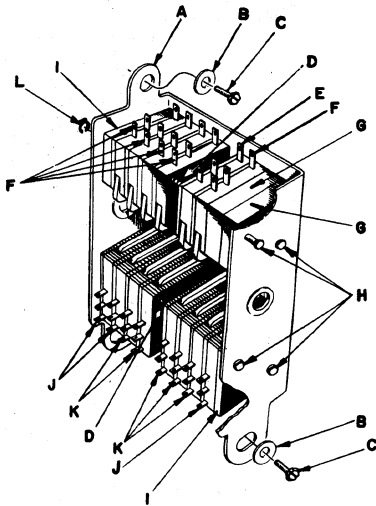
A	Included in E	U	FX10-70
B	Included in E	V	FX66-5
C	702500 1/2 screw	W	FX28-15
D	FMD55 bracket	X	FX5-2
E	1FX42-90 pin connector, includes A, B, F, G, AT, AU	Y	10025 1/16 No. 3
F	Included in E	X	81534 No. 2
G	Included in E	AA	1FMD28
H	Included in K	AB	1FMD26 includes AC
I	1FX42-91 receptacle	AC	52
J	Included in K	AD	1FMD27
K	1FX67-20 hood, includes H, J, L, M, N	AE	FX28-16
L	Included in K	AF	FMD52
M	Included in K	AG	1FMD30 spline gear
N	Included in K	AH	1FMD29 bearing assembly
O	X225-130	AI	X228-719 screw
P	FMB6	AJ	FX10-301 bronze washer, not used in current construction
Q	X226-150	AK	1FX29-28 double pulley
R	FMB9	AL	1FMB19 bracket
S	X255-89	AM	7357 1/4 screw
T	X232-885		

CONTINUED

PART NUMBERS (PLATE V-4) CONTINUED

AN	FMB39 gasket	AQ	FX80-205 back up leaf
AO	FMB7 generator body	AR	X275-1 lockwasher
	1FMB7 generator assembly includes O, P, Q, T, U, V, AL, AP, AQ, AR, AS	AS	1FMB8 stationary contact assembly
AP	2FMB10 generator contact	AT	Included in E
		AU	Included in E

COMPUTER DRIVE UNIT TIMING CAM SWITCHES (PLATE V-5)



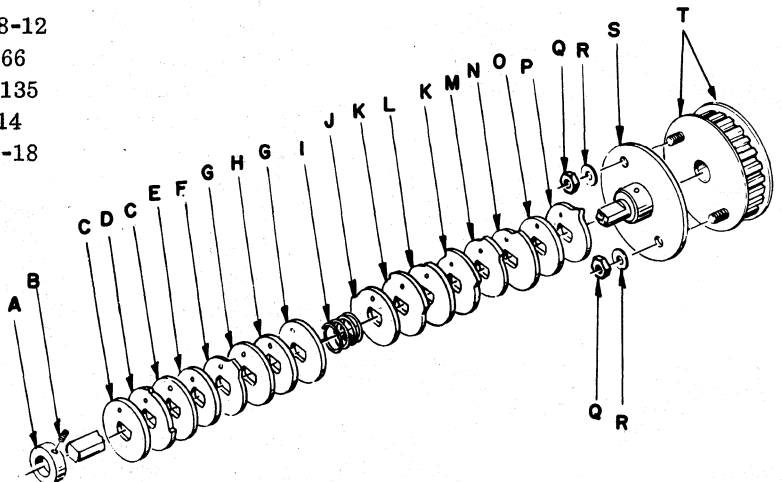
PART NUMBERS (PLATE V-5)

A	1FMD12 frame	H	FMD13 switch shaft
B	X275-135	I	FMD17 spacer
C	X233-53	J	1FX83-16
D	FX80-68	K	1FX83-19
E	1FX83-14	L	21 No. 7
F	1FX83-12		
G	FD164 dummy switches, use FX79-23 fish paper for alignment of switches and cams		
	2FMD14 Complete Assembled Timing Cam Assembly, includes cams and shaft assembly		

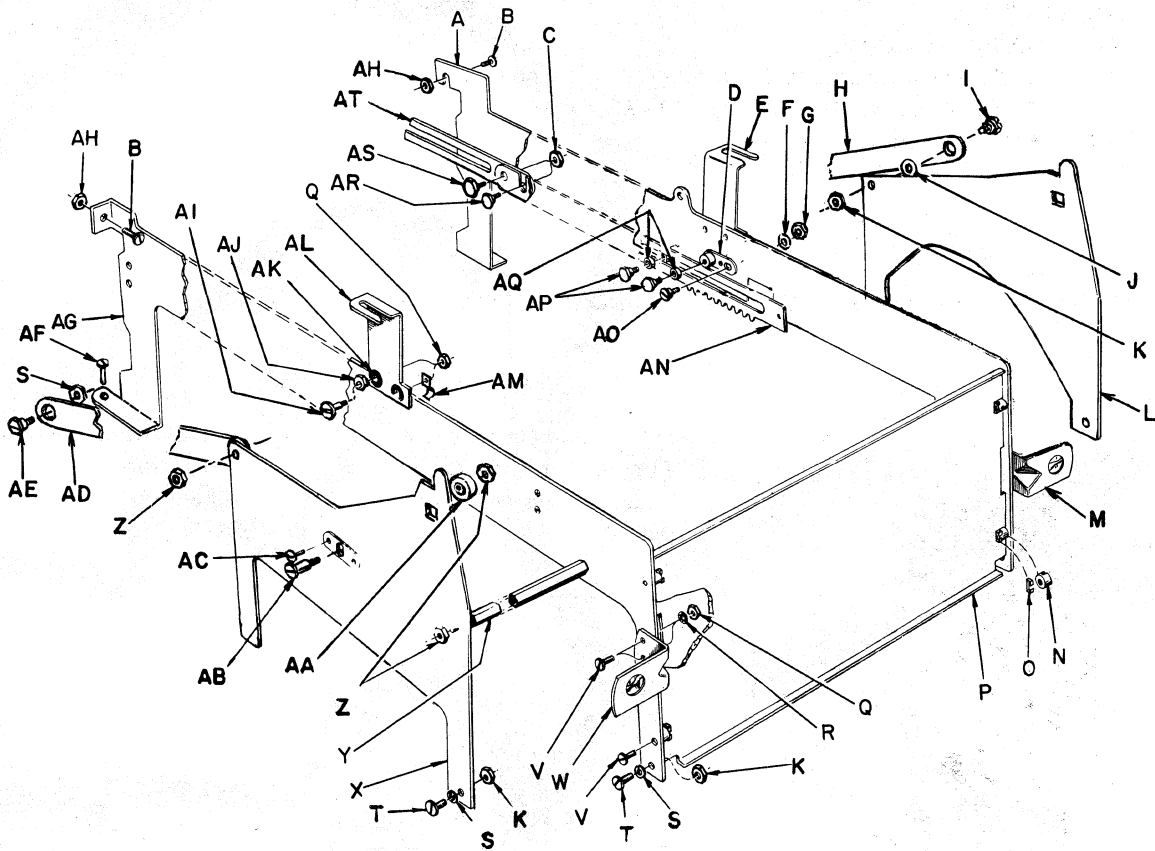
COMPUTER DRIVE UNIT TIMING CAMS AND SHAFT ASSEMBLY (PLATE V-6)

PART NUMBERS (PLATE V-6)

A	AEX15-2	P	FMD18-12
B	403582A	Q	X170-66
C	FMD18 blank cam	R	X275-135
D	FMD18-1	S	1FMD14
E	FMD18-2	T	1FX29-18
F	FMD18-3		
G	FMD18-4		
H	FMD18-5		
I	FX80-69		
J	FMD18-6		
K	FMD18-7		
L	FMD18-8		
M	FMD18-9		
N	FMD18-10		
O	FMD18-11		



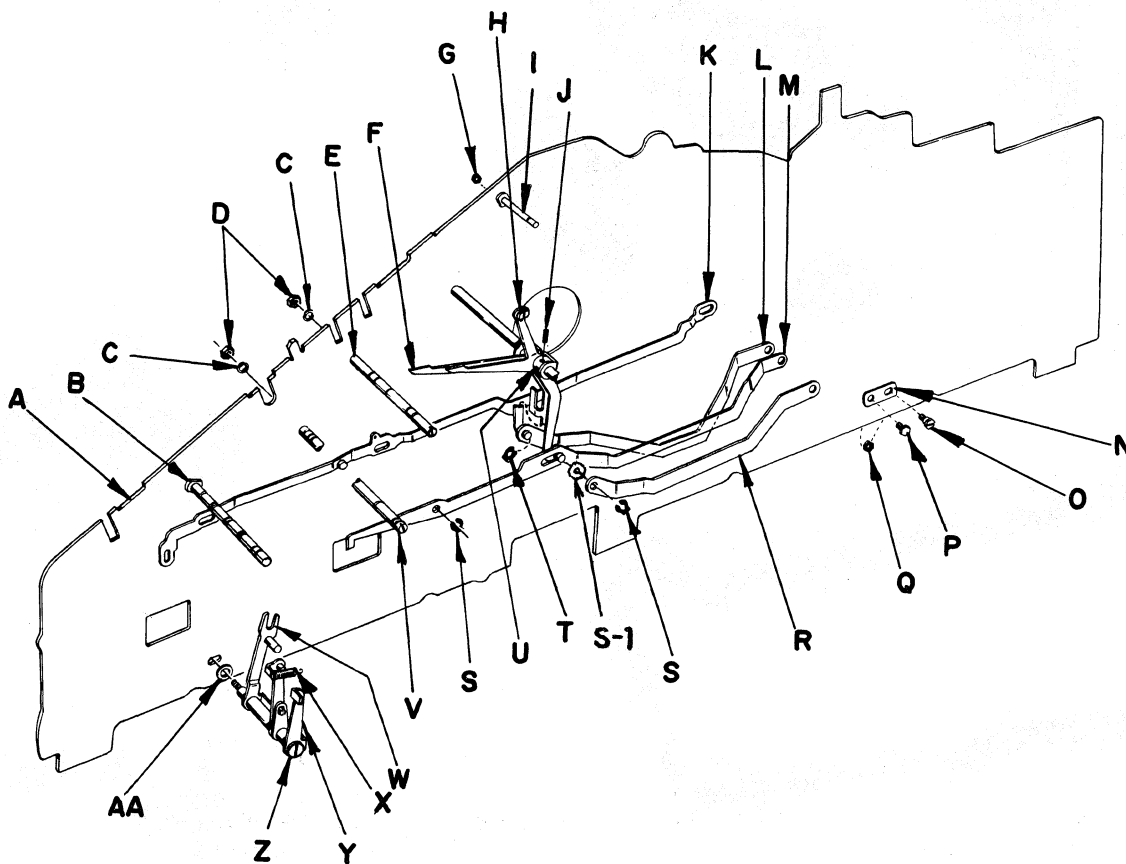
EXTENSION SIDEFAMES AND DRIVE RACK (PLATE V-7)



PART NUMBERS (PLATE V-7)

A	1FMB110-2	Q	46	AJ	99347 Style 13 eccentric screw
B	FX60-206	R	X275-26 lockwasher	AK	FX329 rubber grommet
C	FX30-23	S	83208 lockwasher	AL	FMB22-2 case bracket
D	1FMB15-1 adjustable limit Use 1FMB15-1, FX10-281, FX60-163, FX57-10, X275-4 prior to adjust- able limit	T	FX90 screw	AM	FX66-13 clamp
E	FMB22-1 case bracket	V	79505	AN	FMD2-1 auxiliary drive rack with slot up Use FMD2-1, 1FD175-1 to replace a rack with slot down
F	X275-4 lockwasher	W	1FMB23-2	AO	FX57-10 eccentric screw
G	46 3/4 nut	X	FMB110-5 auxiliary side- frame for side insertion FMB110-3 auxiliary side- frame prior to side insertion	AP	FX60-163 screw
H	FB930-2 brace	Y	FMB11-2	AQ	FX10-611 roller
I	81534 No. 2 eccentric screw	Z	X170-66	AR	FX57-26 eccentric screw
J	FX10-573 spacer	AA	FX10-312	AS	FX60-52 screw
K	45 nut	AB	FX60-191	AT	1FD175-2 link, beginning with serial F135804P 1FD175-1 link, prior to serial F135804P, with slot up Use 1FD175-1, FMD2-1 to replace a rack with slot down
L	1FMB110-6 auxiliary sideframe	AC	709638		
M	1FMB23-1	AD	FB930-1 brace		
N	82300	AE	FX57-116 screw		
O	82107 1/4	AF	2859 3/8B screw		
P	FMB210 back plate	AG	1FMB110-1 sideframe		
		AH	X30-39 nut		
		AI	X232-867 screw		

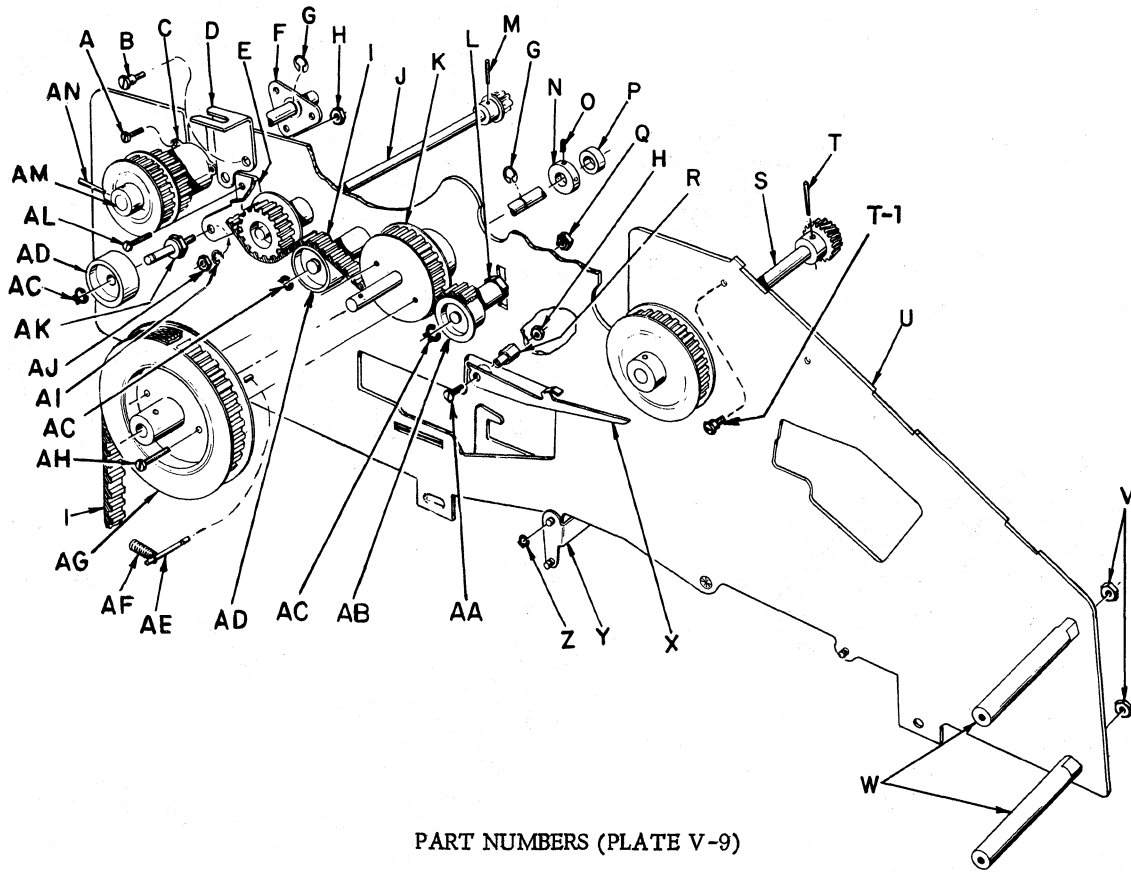
RIGHT SIDE FRAME AND LINKAGES (PLATE V-8)



PART NUMBERS (PLATE V-8)

A	1FB110-24	M	FB71-10
B	FB300-7	N	FB226-2
C	X275-5	O	FX60-102
D	46	P	FX60-126
E	FB289-6	Q	84347
F	1FB65-3	R	FB251-1
G	46 1/8	S	21 No. 8
H	1FB63-2	S-1	404157 spacer
I	FX45-32 screw stud beginning with serial F105141P	T	21 No. 2
J	75618 set screw	U	1-74326 includes J
K	1FB161-2	V	FB298-13
L	FB227-3	W	1FB122-4
		X	82809
		Y	FB735
		Z	FX60-99
		AA	7825

AUXILIARY LEFT SIDEFRAAME AND PULLEYS (PLATE V-9)

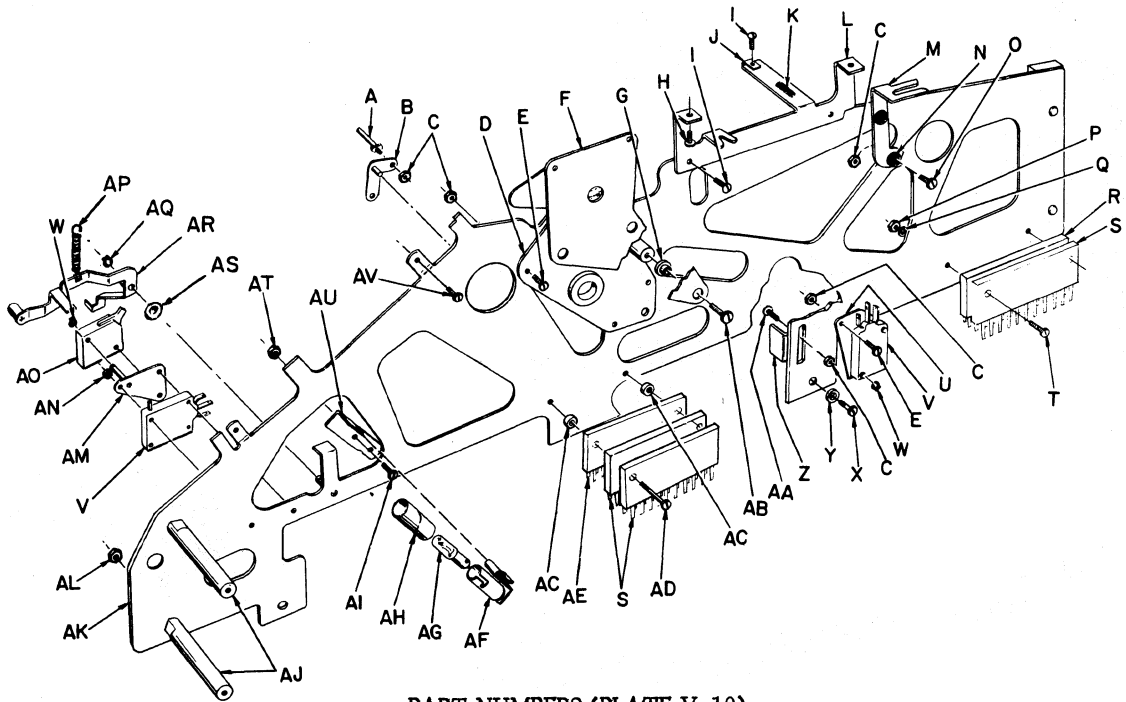


PART NUMBERS (PLATE V-9)

- | | | | | | |
|---|---|-----|--|----|---|
| A | 255 1/4 | M | 52Z (.096) included
in J | AF | 402807 spring |
| B | X232-867 screw, use
99347 Style 13
eccentric collar
and FX329 rubber
grommet | | 52Z (.099) | AG | 1FB813 pulley assembly,
includes K, AH |
| C | 1FB560 bearing | N | AEX15-2 | AH | X228-522 included in AG |
| D | FB804-3 bracket
for side insertion
FB804-1 bracket
prior to side
insertion | O | 403582A | AI | X275-7 washer |
| E | 1FB563 | P | FX10-203 | AJ | 45 1/8 nut |
| F | FB562 | Q | FX30-93 nut | AK | FX223 idler post |
| G | FX5-2 | R | X45-39 | AL | 1050 1/16 screw |
| H | 46 | S | 1FD142-1 includes T | AM | 1FB809 for 5/8" tab,
includes AN |
| I | FX28-20 belt | T | 51 included in S | AN | X190-752 pin
included in AM |
| J | 15025380 beginning
with chain drive
Use FX20-23 bearing
2FX29-39 prior to
chain drive | T-1 | X60-153 screw | | |
| K | Included in AG. | U | 15060627 sideframe | | |
| L | FX45-64 post | V | X30-10 | | |
| | | W | FB805-1 | | |
| | | X | 1FB127-1 | | |
| | | Y | 1FB566 | | |
| | | Z | 21 No. 8 | | |
| | | AA | 1362 1/2 screw | | |
| | | AB | 1FX29-123 idler pulley | | |
| | | AC | 21 No. 10 clip | | |
| | | AD | FX188 idler pulley | | |
| | | AE | FX52-23 stud, use
X275-4 washer, 46 nut | | |

13391339

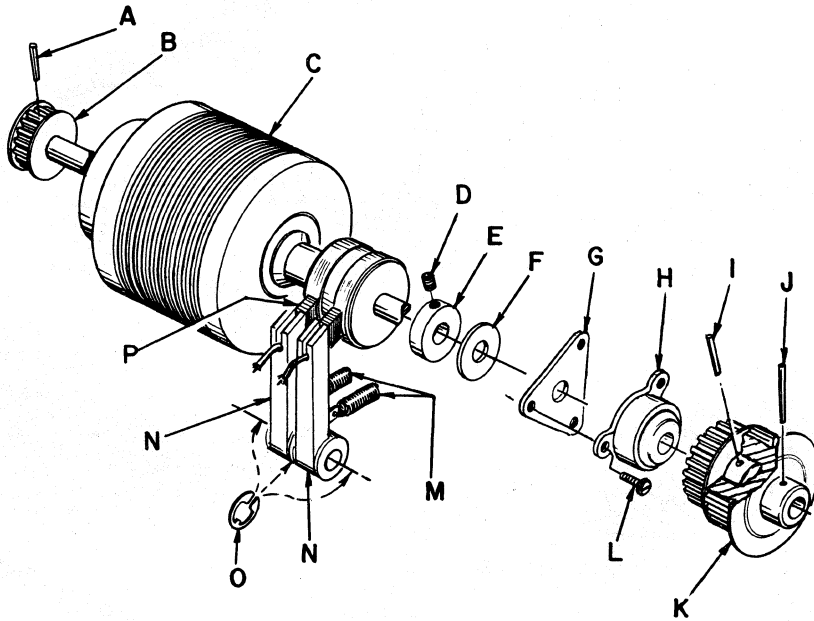
AUXILIARY RIGHT SIDEFAME (PLATE V-10)



PART NUMBERS (PLATE V-10)

A	FB700	U	1FB717 switch bracket	AJ	FB805-2
B	1FB86-2	V	1X83-34	AK	1FB250-11
C	46	W	21 No. 12	AL	X30-10
D	1FB747-1	X	FX90	AM	1FB723
E	73611	Y	FX10-331	AN	49 3/4
F	1FB590-6 right bracket 1FB590-8 left bracket	Z	FB808	AO	1FX83-17
G	FX10-414 spacer	AA	FX60-258	AP	10788 spring, use 20 No. 86A anchor
H	74523	AB	83508 No. 2	AQ	21 No. 9 clip
I	403590	AC	X10-121	AR	1FB502-1 switch actuator
J	22 No. 5	AD	FX60-302 used for mach- ines with three termi- nal boards	AS	FX1-78 spring washer
K	FX312 felt, included in L		FX60-203 used for mach- ines with two terminal boards	AT	46 1/4 nut
L	1FC100-3 includes K	AE	1FX41-46 used for mach- ines with zener diode	AU	FB803 bracket
M	FB804-2		1AEA252-4 used for machines without zener diode	AV	FX60-205 screw
N	FX329 rubber grommet	AF	1AEX56-2 includes AH		
O	FX328	AG	X106-2-14E		
P	47	AH	Included in AF		
Q	X275-6	AI	403575		
R	1FX41-43				
S	1AEA252-4				
T	FX60-203 screw for 1/10" tab 77513 screw for 5/8" tab				

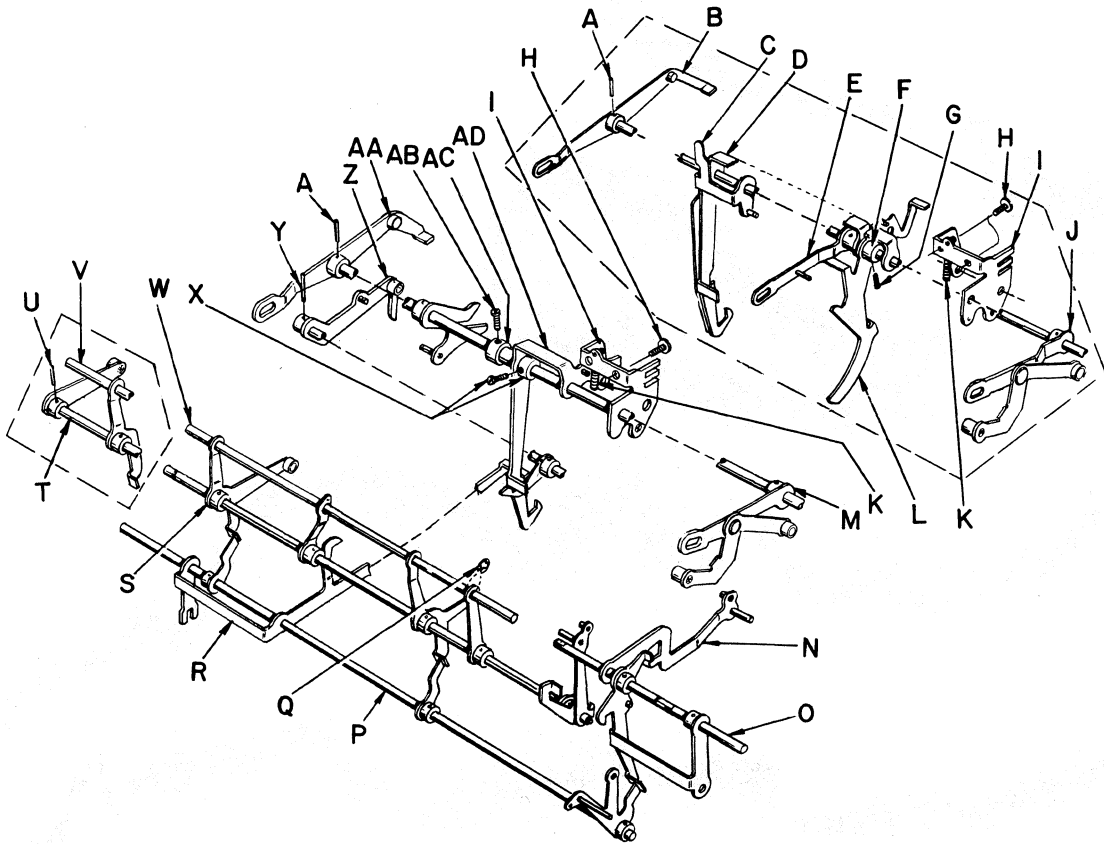
MAGNETIC CLUTCH (PLATE V-11)



PART NUMBERS (PLATE V-11)

A	X36-15 included in C	D	403582A included in C
B	Belt pulley included in C	E	AEX15-2 included in C
	15021710 chain sprocket, use X255-50 set screw	F	FX87 included in C
C	15025414 complete magnetic clutch includes A, B, D, thru K; used beginning with chain drive	G	FB562 included in C
	3FG-252-1 complete magnetic clutch, used prior to chain drive	H	1FB560 included in C
		I	52Z (.096) included in C 52Z (.099)
		J	X190-752 included in C
		K	Included in C
		L	255 1/4
		M	709807
		N	1-40908 brush holders
		O	X5-6
		P	1FX282 carbon brush

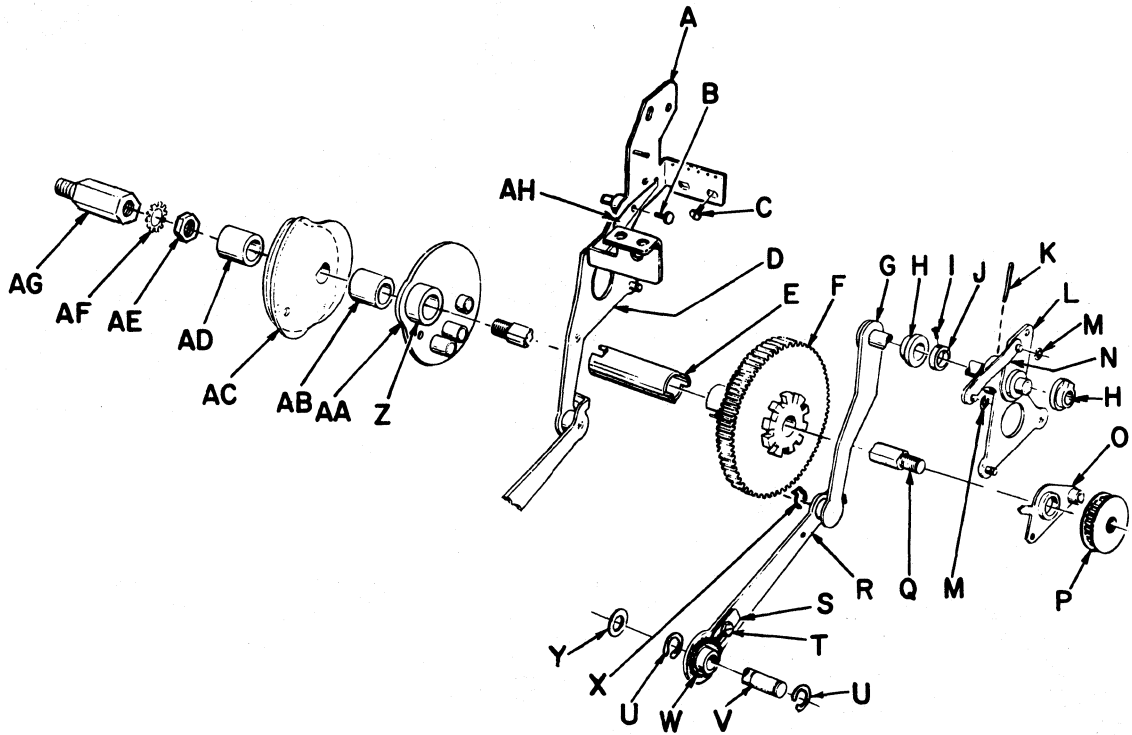
SHAFT ASSEMBLIES (PLATE V-12)



PART NUMBERS (PLATE V-12)

- | | | | | | |
|---|--|---|--|----|--|
| A | 82501Z (.068) replacement pin, included in J, M | L | 407153A included in J | | includes U, for 5/8" tab |
| B | Included in J | M | 1FP12-4 ribbon lift shaft, includes A, I, X, AA thru AD, for 1/10" tab | U | 66 3/4 pin, included in T |
| C | 1-401183A included in J | N | 1-404252 arm | V | 402002 for 5/8" tab |
| D | 1-401159 included in J | O | 1FK6-16 restoring shaft assembly | W | FK2-4 for 1/10" tab |
| E | Included in J | P | 1FD4-4 for 1/10" tab | X | 71321 collar } included |
| F | 1X15-2 set collar, includes G; included in J | Q | 21 No. 9 | | 75618 set } in |
| G | X255-159 included in F | R | 1FD14-3 release bail | | screw } M |
| H | 10750 3/8 | S | 1FK7-16 restoring shaft for 1/10" tab beginning with serial F110157P | Y | 8050 3/8Z replacement pin, included in Z |
| I | 1-401180B included in J, M | | Use 1FK7-16, FX57-112, X133-104 prior to serial F110157P | Z | 1FB25-5 includes Y |
| J | 1FP12-5 ribbon lift shaft, includes A thru F, I, L; for 5/8" tab | | | AA | Included in M |
| K | 69809 spring | | | AB | 550 3/4 set screw, included in M |
| | | | | AC | FX15-3 collar, included in M |
| | | | | AD | 1FD56-3 included in M |
| | | T | 1FK7-5 restoring shaft, | | |

RIGHT AND LEFT DRIVE ARMS AND MAIN CAMSHAFT (PLATE V-13)



PART NUMBERS (PLATE V-13)

2FD1-14 complete main camshaft assembly for 1/10" tab, includes F, P	M	X133-105 clip	
2FD1-6 complete main camshaft assembly for 5/8" tab, includes E, F, P	N	FD176 link	
A	O	1FD10-5 degree indicator	
B	P	1FX29-22 pulley	
C	Q	1FD1-13 camshaft for } includes 1/10" tab } pinned cams 1FD1-6 camshaft for } only 5/8" tab }	
D	R	1FD8-14 link, beginning with serial F135804P	
E	S	Use 1FD8-14, 2FD96-4, FD212-2, FD213, FX60-370, 1FD175-2 link prior to serial F135804P	
F	T	FD213 locking slide	
G	U	FX60-370 screw, beginning with serial F135804P	
H	V	Use FX60-370, 1FD8-14, 2FD96-4, FD212-2, FD213, 1FD175-2 link prior to serial F135804P	
I		2FD96-4 left drive arm assembly, begin- ning with serial F135804P	
J		Use 2FD96-4, 1FD8-14, FD212-2, FD213, FX60-370, 1FD175-2 link prior to serial F135804P	
K		H	FD99-1 bearing
L		I	73502 1/2 included in G
		J	200308 1/2 included in G
		K	FX35-5 pin
		L	1FD131

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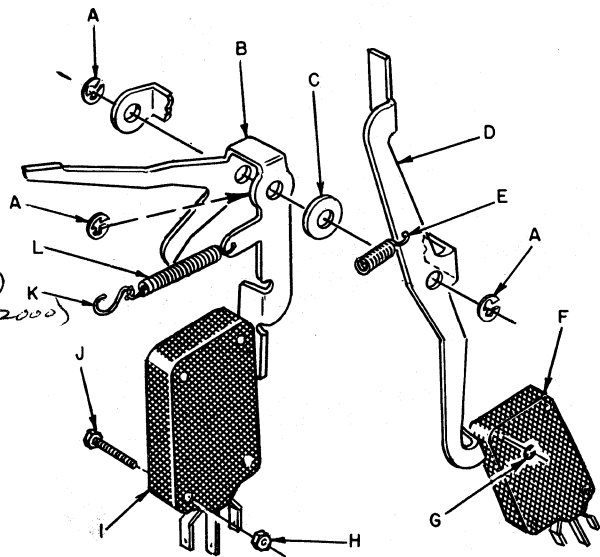
PART NUMBERS (PLATE V-13) CONTINUED

W	FD212-2 eccentric bushing, beginning with serial F135804P Use FD212-2, 2FD96-4, 1FD8-14, FD213, FX60-370, 1FD175-2 link prior to serial F135804P	AB	FX10-178
X	21 No. 1 clip	AC	2FD180
Y	FX1-4 shim(s)	AD	FX10-371
Z	FX10-589 spacer	AE	79350
AA	1FD185-23 cam without hub, use 1FD185-23, FX10-589 to replace a cam with hub	AF	FX2-17 lockwasher
		AG	FX45-30 extension
		AH	FB624-1

MANUAL CLEAR AND SENSIMATIC DRIVE TRIP SWITCHES (PLATE V-14)

PART NUMBERS (PLATE V-14)

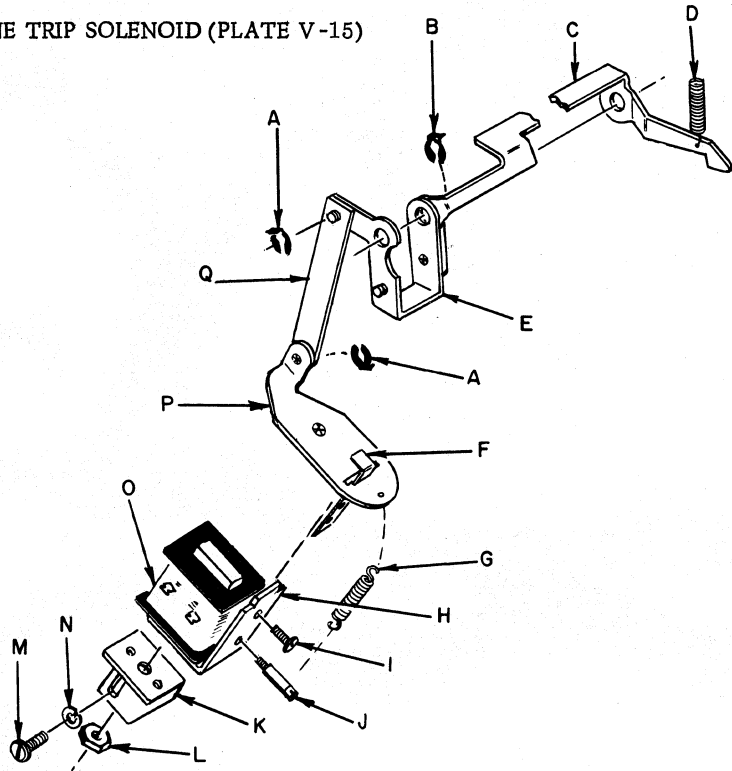
A	X133-108
B	FB457-9
C	7825
D	FB907
E	10782 spring
F	1X83-34 - <i>CL 105 (F)</i>
G	X133-102 clip <i>RIN 475 (2000)</i>
H	49 3/4
I	1X83-33
J	X60-107
K	20 No. 86A
L	FX80-14



MACHINE TRIP SOLENOID (PLATE V-15)

PART NUMBERS (PLATE V-15)

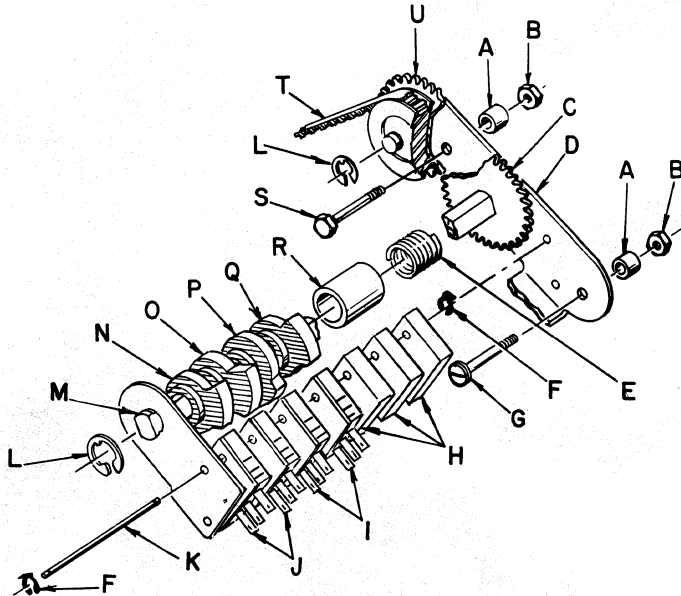
- A 21 No. 8
- B 21 No. 9
- C FB724-1
- D 409803 use 20 No. 86A
spring anchor for 5/8"
tab
- E 1FB816-1 for 1/10" tab
1FB816 for 5/8" tab
- F FB708
- G 702806 for 1/10" tab
- H FB707
- I 403517
- J 72574
- K FB817
- L X170-56
- M X228-488
- N X275-4
- O 2FB614-9
- P 1FB818
- Q FB819-1 for 1/10" tab
FB819 for 5/8" tab



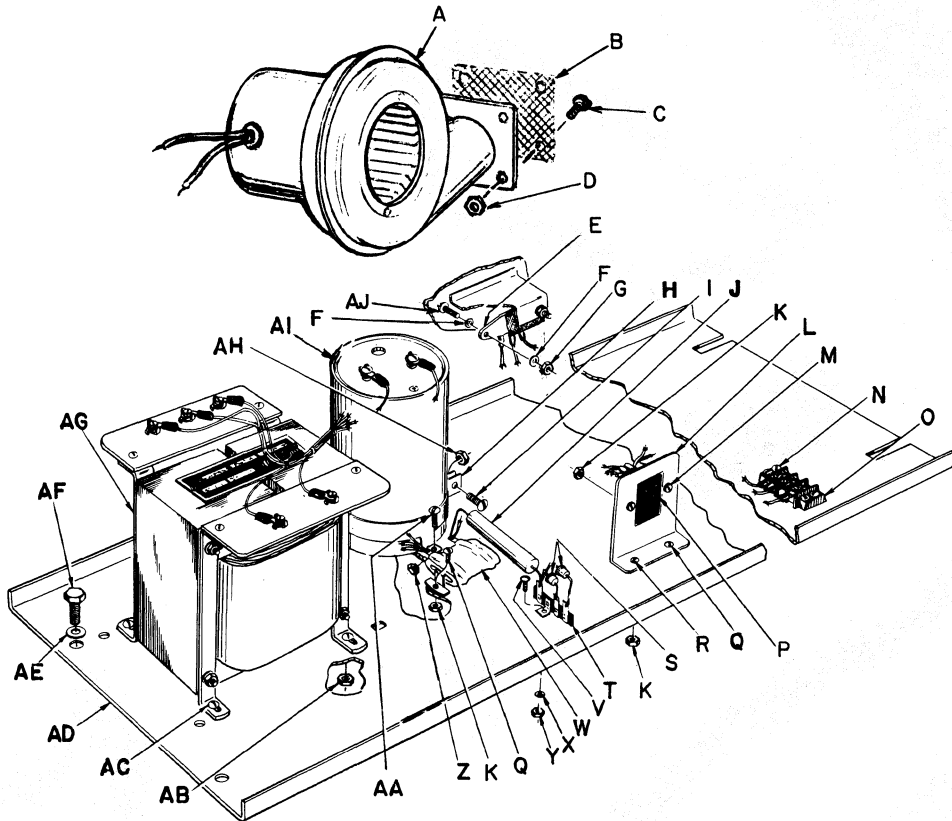
SENSIMATIC COMPUTER TIMING CAMS (PLATE V-16)

PART NUMBERS (PLATE V-16)

- A FX10-330
- B 47
- C FD184-2
- D 1FD188-1 bracket, begin-
ning with serial F114364P
Use 1FD188-1, 1FX29-50
prior to serial F114364P
- E 83835
- F 21 No. 7
- G 79545
- H FD164
- I 1FX83-12
- J 1FX83-14
- K FD187
- L X5-6
- M FD186
- N FD185-1
- O FD185-2
- P FD185-3
- Q FD185-5
- R 88301A
- S FX60-193
- T FX28-17 belt
- U 1FX29-50 pulley, begin-
ning with serial F114364P
Use 1FX29-50, 1FD188-1
prior to serial F114364P



POWER PANEL AND BLOWER (PLATE V-17)



PART NUMBERS (PLATE V- 17)

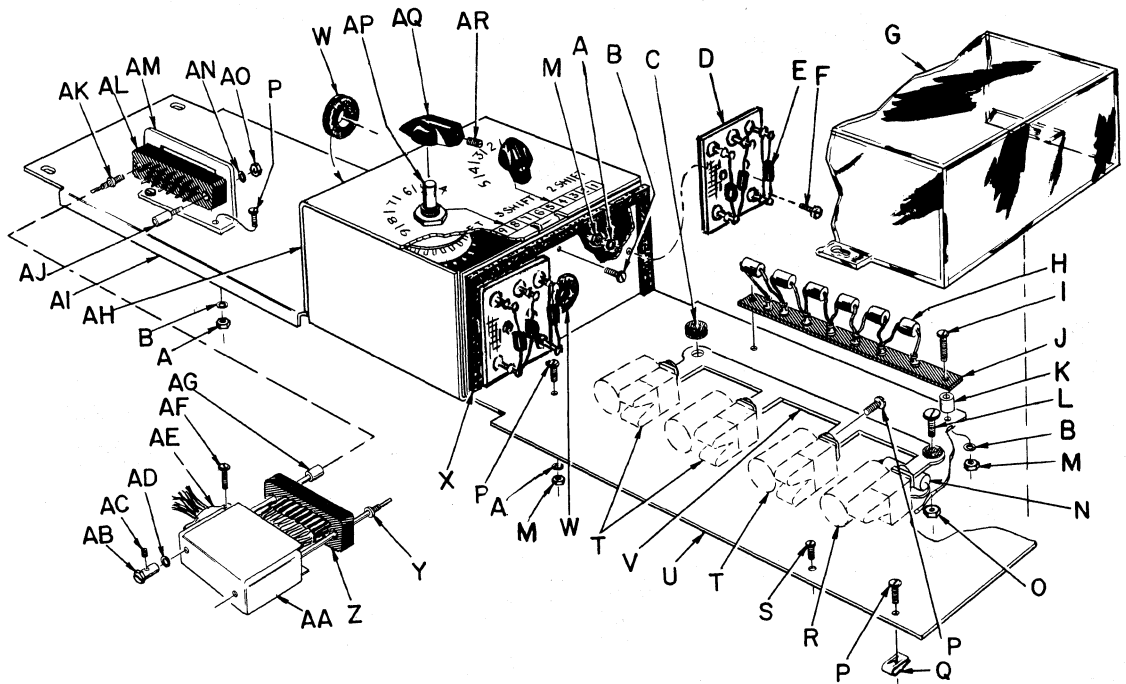
- | | |
|--|---|
| <p>A 1FY268-1 blower motor mounted on upper portion of rear door
Use 1FY268-1, 1FY167-22, FY269, FY271 (2 reg.), X170-82 (4 reg.), X232-56 (4 reg.) to replace motor mounted on lower portion of rear door</p> <p>B FY269 screen</p> <p>C X232-56 screw</p> <p>D X170-82 nut</p> <p>E 21-25A No. 1 connector, use 401905 insulating paper</p> <p>F 9028 1/2 washer</p> <p>G 46 nut</p> <p>H 1FMP3 assembled clamp, includes G, AI</p> <p>I Included in H</p> <p>J See component chart</p> | <p>K X170-56 nut, use X275-5 lockwasher</p> <p>L FMP2 bracket</p> <p>M X225-666 screw</p> <p>N X225-686 screw, use X275-5 lockwasher, X170-56 nut</p> <p>O 1X41-1 terminal block</p> <p>P 1FX42-50 receptacle</p> <p>Q X225-676 screw</p> <p>R X232-14 screw, use FX2-2 washer, EX175-12 cable clamp</p> <p>S See component chart</p> <p>T 1FX41-33 terminal board</p> <p>V X225-686 screw</p> <p>W See component chart</p> <p>Z X170-66 nut</p> <p>AA X225-839</p> |
|--|---|

CONTINUED

PART NUMBERS (PLATE V-17) CONTINUED

AB	X170-66 nut, X275-6 lockwasher for 115 volt 50/60 cycle A.C.	AD	FMP1
	X170-204 nut, X275-6 lockwasher for 150, 220, 230, 240, 250 volt 50/60 cycle A.C.	AE	X275-9
AC	X225-839 screw for 115 volt 50/60 cycle A.C.	AF	X225-1521
	X225-1441 screw for 150, 220, 230, 240, 250 volt 50/60 cycle A.C.	AG	1FX46-16 transformer for 115 volt 50/60 cycle A.C.
			1FX46-17 transformer for 150, 220, 230, 240, 250 volt 50/60 cycle A.C.
		AH	Included in H
		AI	See component chart
		AJ	404592

MULTIPLE FACTOR RELAY AND SWITCH ASSEMBLY (PLATE V-18)

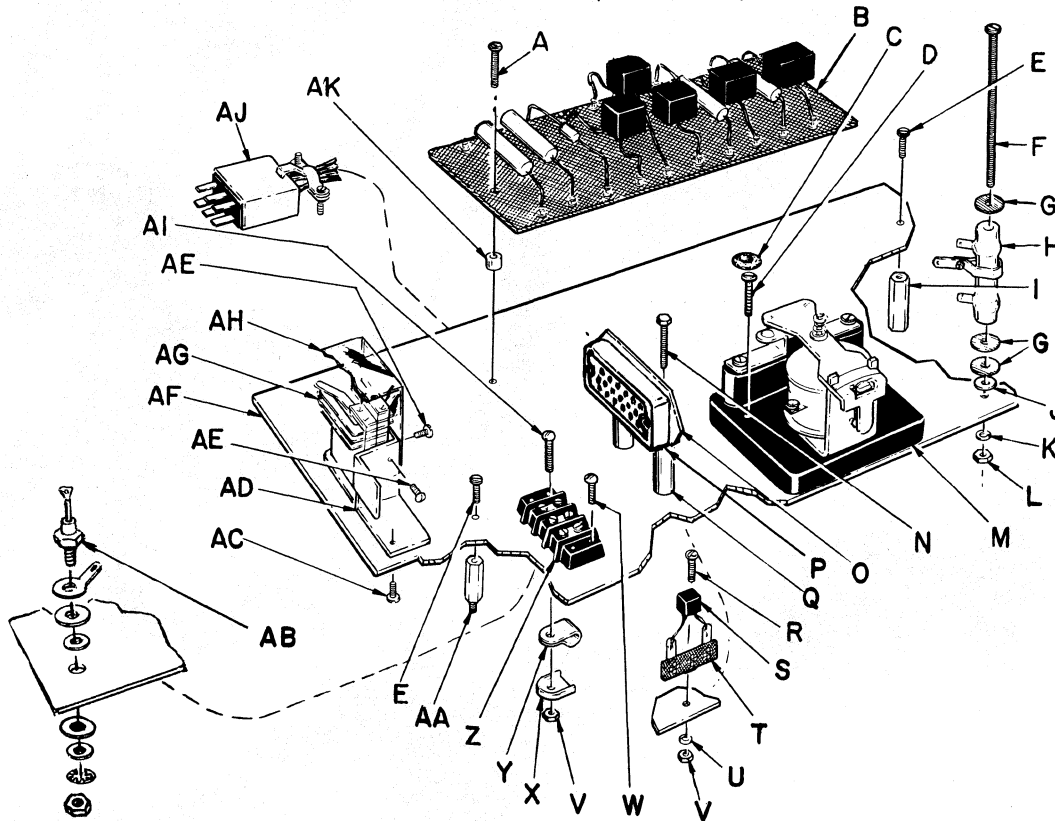


PART NUMBERS (PLATE V-18)

2FMRI-1 complete multiple factor assembly

A	X275-6 lockwasher	Q	FX31-1	AD	FX1-85 included in AA
B	X232-812 screw	R	1FX47-33	AE	FX66-20 clamp, included in AA
C	FX329	S	705503 1/2	AF	FX60-269 included in AA
D	15060189 terminal board	T	1FX47-57	AG	FX40-38 included in AA
E	See component chart	U	1FMR1-1 relay plate includes X	AH	FMR10 switch cover plate
F	X232-832 screw	V	FMR2	AI	FMR9
G	1FMR3 cover	W	FX95-25	AJ	FX40-24 included in AL
H	See component chart	X	FX95-36 included in U	AK	FX40-23 included in AL
I	X232-18 screw	Y	FX40-37 included in AA	AL	1FX42-1 includes AJ, AK, AN, AO
J	1FX41-48 terminal board	Z	1FX42-25	AM	FMR11
K	X10-267 spacer	AA	FX67-16 hood 1FX67-3 assembled hood, includes Y, AB thru AG	AN	FX2-10 included in AL
L	FX328 screw	AB	FX30-63 included in AA	AO	FX30-59 included in AL
M	X170-56	AC	FX64-10 set screw, included in AA	AP	1FX83-53 switch
N	See component chart			AQ	EX272 includes AR
O	45 1/4			AR	FX64-15 included in AQ
P	X232-1				

POWER RELAY UNIT (PLATE V-19)



PART NUMBERS (PLATE V-19)

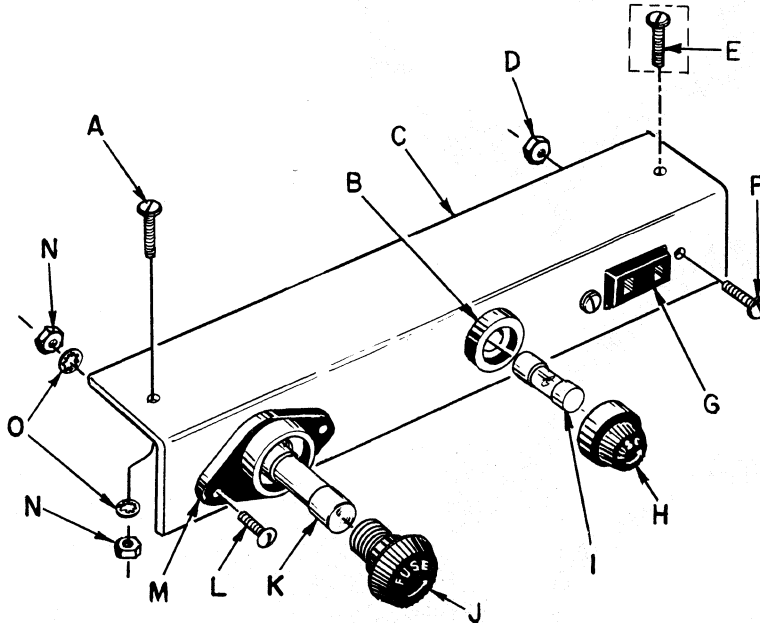
A	4450 5/8A screw, use X275-5 washer, 46 nut	M	See component chart	AB	1BX58-323 zener diode beginning with serial F134702P, includes mounting hardware
B	1FMR5-1 complete diode and resistor board for side insertion. See component chart for individual components	N	FX240 screw, use X275-26 washer, 403360 nut	O	1BX58-323, 2FB614-13 on key solenoid, AHE101 mounting bracket, X225-686 screw, X275-135 washer X275-5 lockwasher and X170-56 nut prior to serial F134702P
C	FX95-7 grommet	O	FMC61 bracket	P	1AEX42-13 female pin connector, use 1FX42-74 male pin connector and 1FX67-5 hood
D	403504 screw	P	1AEX42-13 female pin connector, use 1FX42-74 male pin connector and 1FX67-5 hood	Q	FX10-93 support post
E	X232-1058 screw	Q	FX10-93 support post	R	X232-14 screw
F	X60-64 screw	R	X232-14 screw	S	See component chart
G	FX10-86 mica washer	S	See component chart	T	FX41-11 terminal board
H	Component chart	T	FX41-11 terminal board	U	X275-5 washer
I	FX45-15 support post	U	X275-5 washer	V	X170-56 nut
J	79325 spacer	V	X170-56 nut	W	X225-686 screw
K	1097 11/16 lockwasher	W	X225-686 screw	X	FX2-2
L	45 nut	X	FX2-2	Y	93 1/8 No. 3 cable clamp
		Y	93 1/8 No. 3 cable clamp	Z	1X41-1 terminal board
		Z	1X41-1 terminal board	AA	FY227 support post
		AA	FY227 support post		

CONTINUED

PART NUMBERS (PLATE V-19) CONTINUED

- AI X225-696 screw
- AJ 1FX42-51 pin connector
- AK 407332

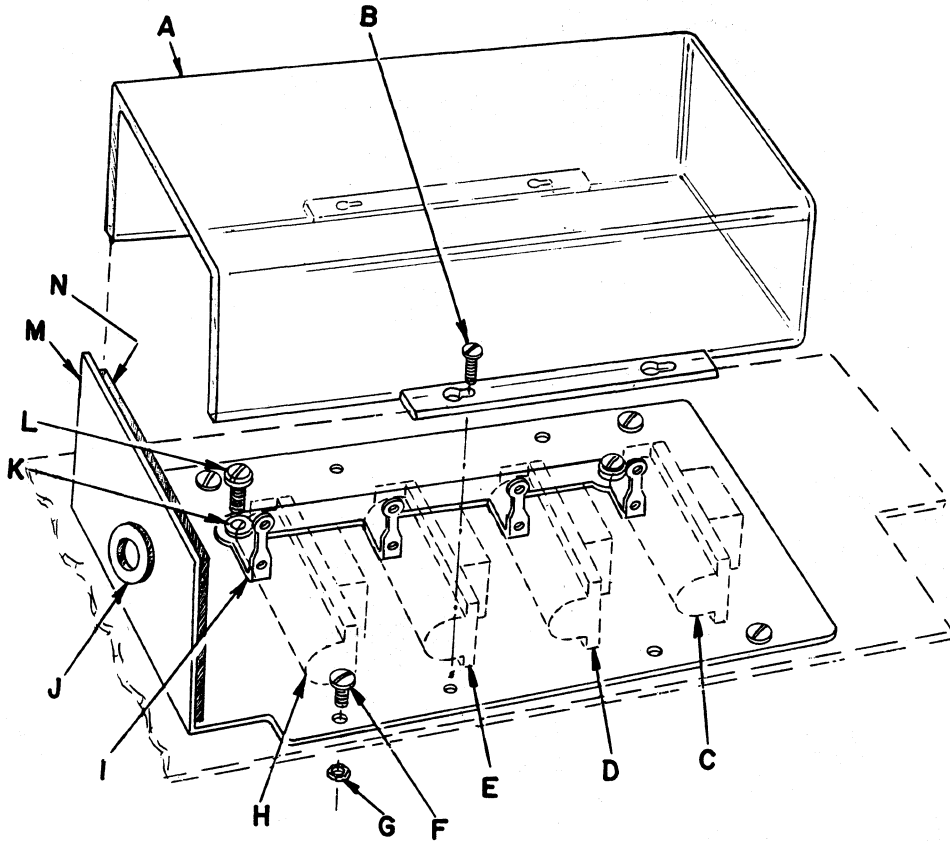
POWER RELAY UNIT - FUSE PLATE (PLATE V-20)



PART NUMBERS (PLATE V-20)

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> A X232-14 B 1X84-10-2E fuse holder, includes H C FMR4 fuse plate for 115V to 150V, 50/60 cycle A.C.
FMR4-1 fuse plate for 220V, 50/60 cycle A.C. D 46 3/4 nut E 7357 1/4 screw, 5/8" tab only F 73611 screw G 1FX71-6 outlet H Included in B I X82-10-7E fuse, 1 amp. J Included in M | <ul style="list-style-type: none"> K FX82-16-21 fuse, 4 amp. for 115V to 150V, 50/60 cycle A.C.
FX82-16-15 fuse, 2 amp. for 220V to 250V, 50/60 cycle A.C.
X82-11-26E fuse, 4 amp. for 115V to 150V, 50/60 cycle A.C.
FX82-3 fuse, 2 amp. for 220V to 250V, 50/60 cycle A.C. L X225-676 screw M 1AHE71 fuse holder, includes J N X170-56 nut O X275-5 lockwasher | <p>} beginning with serial F104858P</p> <p>} prior to serial F104858P</p> |
|--|---|---|

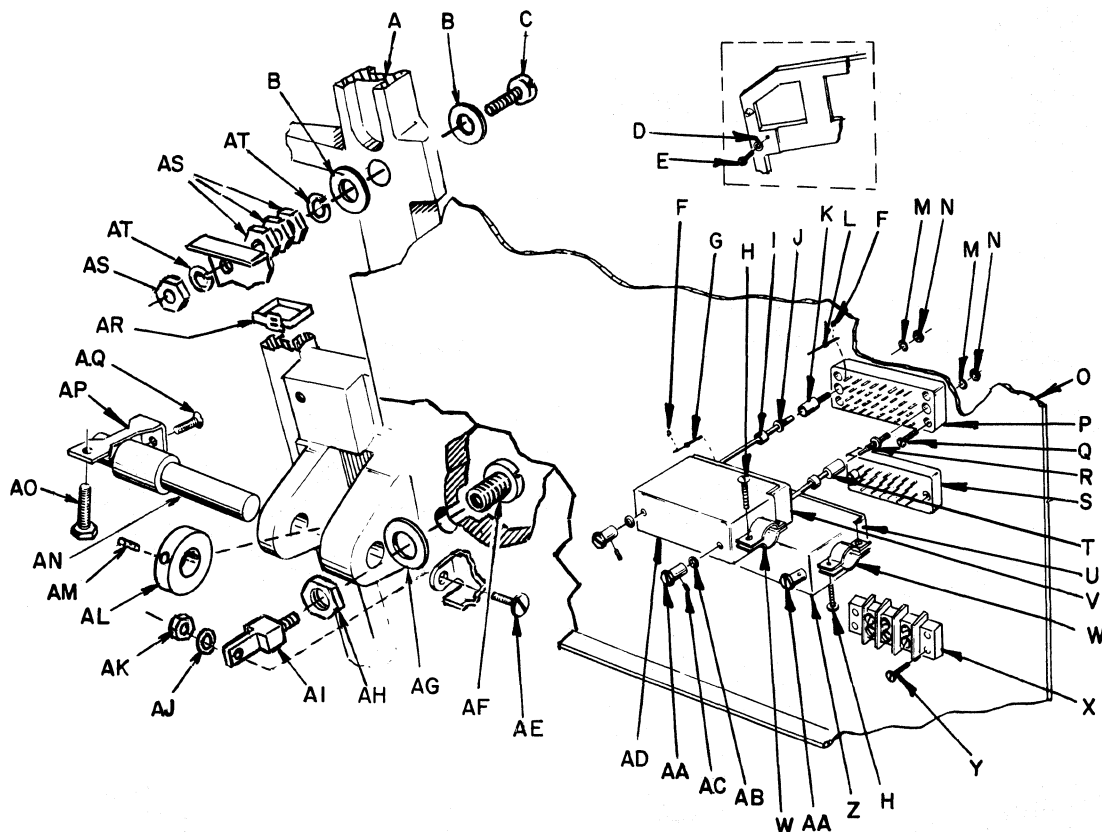
MULTIPLE RELAYS (PLATE V-21)



PART NUMBERS (PLATE V-21)

A	1FMR3	I	FMR2 relay bracket
B	705503 1/2	J	FX95-25 grommet
C	See component chart	K	FX329 grommet
D	See component chart	L	FX328 screw, use 45 1/4 nut
E	See component chart	M	1FMR1 includes N
F	12051 3/8	N	FX95-36 gasket, included in M
G	46 3/4		
H	See component chart		

BASE, MOTOR PLATE, AND OPERAND STORAGE ASSEMBLY CONNECTORS (PLATE V-22)



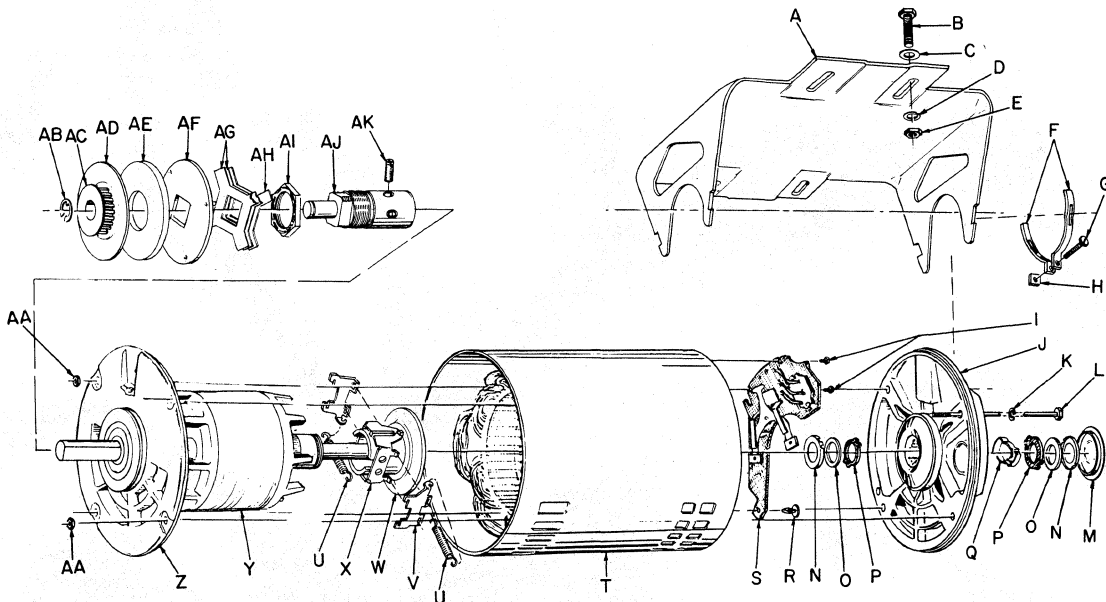
PART NUMBERS (PLATE V-22)

- | | |
|---|---|
| <p>A FB165-13 base casting</p> <p>B BX1-14 washer</p> <p>C X228-1058 screw for machines without shock mounted motor plate
Use X228-1058 (2 req.), FX60-373 (2 req.), BX1-14 (4 req.), X170-81 (8 req.), X170-229 (2 req.), X275-7 (4 req.), X275-185 (2 req.) for machines with shock mounted motor plate</p> <p>D X275-180 washer</p> <p>E FX158 screw</p> <p>F FX5-18 clip</p> <p>G FX87-24 female pin</p> <p>H FX60-269 screw</p> <p>I FX10-249 spacer</p> <p>J FX40-37 locking shaft, male</p> <p>K FX40-24 locking post, female</p> <p>L FX87-23 male pin</p> <p>M FX2-10 lockwasher</p> <p>N FX30-59 nut</p> <p>O FM30-2 motor plate</p> <p>P 1FX42-2 male connector, included F, K, L, M, N, R</p> | <p>Q X228-413 screw</p> <p>R FX40-23 locking post, male</p> <p>S 1FX42-1 male connector, includes F, K, L, M, N, R</p> <p>T FX40-38 locking shaft, female</p> <p>U 1FX42-25 female connector, includes F, G</p> <p>V 1FX42-27 female connector, includes F, G</p> <p>W FX66-20 clamp</p> <p>X 1X41-1 terminal board</p> <p>Y X225-686 screw</p> <p>Z FX67-16 hood
1FX67-3 assembled hood, includes H, I, J, T, W, AA, AB, AC</p> <p>AA FX30-63 cap</p> <p>AB FX1-85 washer</p> <p>AC FX64-10 set screw</p> <p>AD FX67-17 hood
1FX67-4 assembled hood, includes H, I, J, T, W, AA, AB, AC</p> <p>AE 20954 1/2 B screw</p> <p>AF FX60-373 screw</p> |
|---|---|

PART NUMBERS (PLATE V-22) CONTINUED

- | | |
|------------------------|----------------------|
| AG X275-185 washer | AO FX206 screw |
| AH X170-229 nut | AP FY1-2 left strap |
| AI FB812 post | FY1-3 right strap |
| AJ X275-9 lockwasher | AQ X229-1048 screw |
| AK 393 nut | AR 1FX74-2 strap |
| AL FX15-13 set collar | AS X170-81 nut |
| AM 703509 set screw | AT X275-7 lockwasher |
| AN FB551-1 pivot shaft | |

MOTOR AND OVERLOAD CLUTCH (PLATE V-23)



PART NUMBERS (PLATE V-23)

- 1FM67-7 complete 115 volt 60 cycle A. C. motor, also used for 150, 220, 230, 240, 250 volts; includes A, F thru Z, AA
- 1FM67-9 complete 115 volt 50 cycle A. C. motor, also used for 120, 150, 220, 230, 240, 250 volts; includes A, F thru Z, AA
- 1FM67-12 complete 115 volt D. C. motor; includes A, F thru Z, AA

- 1FD66-5 complete assembled overload clutch for 60 cycle A. C. and 115 volt D. C.; includes AB thru AJ
- 1FD66-6 complete assembled overload clutch for 50 cycle A. C. includes AB thru AJ
- A Included in complete motor
- B FX158
- C X275-180
- D X275-10
- E X170-159

- F
 - G
 - H
 - I
 - J
 - K
 - L
 - M
 - N
 - O
 - P
 - Q
 - R
 - S
- } included in complete motor

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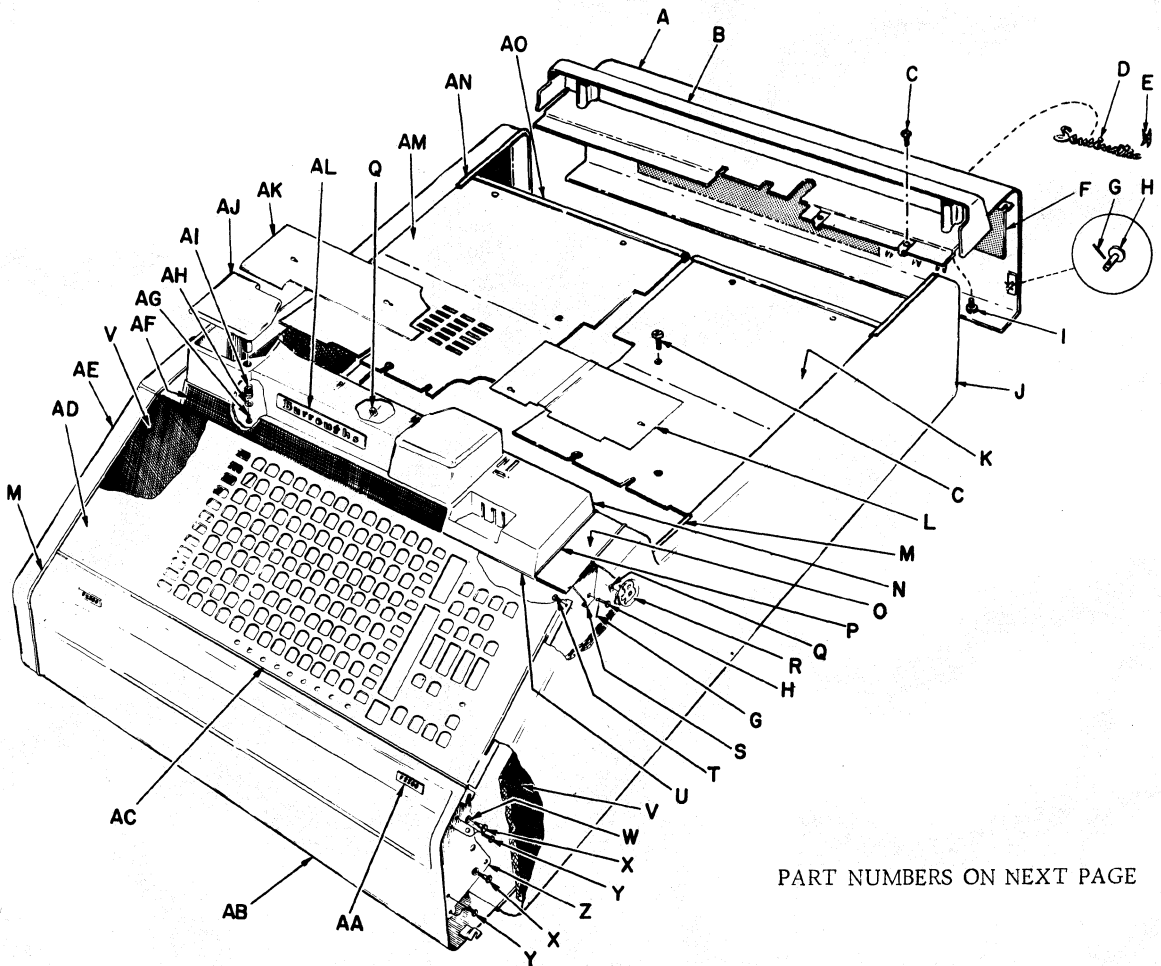
PART NUMBERS (PLATE V-23) CONTINUED

T }
 U }
 V } included in complete
 W } motor
 X }
 Y }
 Z }
 AA }
 AB X5-6
 AC FX1-13 thrust washer for
 D. C. and 60 cycle A. C.
 FX10-326 thrust washer
 for 50 cycle A. C.

AD 1FD140-4 clutch member
 for clutch with oilite
 bearing used on D. C.
 and 60 cycle A. C.
 machines
 Use 1FD66-5 complete
 clutch on prior
 machines
 1FD140-5 clutch member
 for clutch with oilite
 bearing, used on 50
 cycle A. C. machines
 Use 1FD66-6 complete
 clutch on prior machines

AE FD138-1
 AF 1FD141
 AG FD139-2 leaf spring
 AH FD139-3 leaf spring
 AI FX30-33
 AJ FD66-7 clutch arbor for
 clutch with oilite
 bearing
 Use 1FD66-5 or 1FD66-6
 on prior machines
 AK FX60-173

CASE DETAILS (PLATE V-24)



PART NUMBERS ON NEXT PAGE

PART NUMBERS (PLATE V-24)

A	1FB168-34 for side insertion 1FB168-24 for 1/10" tab 1FB168-17 for 5/8" tab	}	{	rear case	W	FX329 rubber grommet	
				panels, in-	X	FX328 screw	
				cludes D,	Y	73611 screw	
				E, F, G, H	Z	FB587-4 right bracket	
B	FB929 panel rail cover,					FB587-5 left bracket	
C	FX60-341 screw				AA	1FX93-55 series plate-F2300	} Attached with FX31-8 speed nut
D	FX93-12 included in A					1FX93-56 series plate-F2500	
E	X31-4 speed nut included in A						
F	FB823-1 for side insertion FB823 prior to side inser- tion	}	{	insulation		FX93-122 series decal-F2300	
				included		FX93-123 series decal-F2500	
				in A			
G	FX333 pin, included in A				AB	1FB169-15 front case panels, includes AC	
H	FX332 pin type screw, included in A				AC	FX95-46 rubber beading, included in AB	
I	X232-1 screw				AD	FK114-2 for F2303, F2503	} keyboard cover plate
J	1FB167-14 right side panel, includes M, Q, R, V, AN					FK114-47 for F2301, F2501	
K	1FB170-9 right top cover, includes AO				AE	1FB167-13 left side panel, includes M, Q, R, V, AN	
L	FB168-19 cover				AF	FX319 metal strip, included in N	
M	FX95-45 rubber beading, included in J, AE				AG	71517A screw, included in N	
N	1FB170-2 ribbon turret cover, includes Q, U, AF thru AJ, AL				AH	3227 1/2 washer, included in N	
O	1FB800-1 left bracket 1FB800-2 right bracket	}	{	includes G,	AI	FX330 spring, included in N	
				H, P, S	AJ	FB578 left cover FB578-1 right cover	
P	FX95-40 rubber beading, included in O				AK	FB168-18 for 5/8" tab	
Q	X185-3 speed nut, included in J, AE					FB168-23 for 1/10" tab and side insertion	
R	FX93-54 Medallion, included in J, AE				AL	FX93-59 included in N	
S	Included in O				AM	1FB170-10 left top cover, includes AO	
T	82530 screw				AN	FX95-87 rubber beading, included in J, AE	
U	FX316 rubber beading, included in N				AO	FX95-91 rubber beading, included in K, AM	
V	FB16-15 insulation, included in J, AE						

CAPACITORS, DIODES, RELAYS, RESISTORS (PLATE V-25)

<u>LOGIC REFERENCE</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
CAPACITORS		
C201	1FX89-38	Electrolytic 1700 μ f 150 WVDC
C202	1AEX89-1	Paper 1 μ f 450 V
DIODES		
CR201, CR202, CR204	FX43-14	Silicon diode marked BY107
CR203, CR205, CR222, CR223, CR227, CR228, CR229, CR244, CR245	AEX43-3	Selenium diode marked NPS27 or NPS40 or SPA27
CR206	1BX58-323	Zener diode 50V used beginning with serial F134702P includes mounting hardware,
CR210 thru CR218, CR246 CR251 thru CR256	FX43-13	Silicon diode marked IN2071 or PE406-10
CR220, CR224	1FB906	Diode assembly includes AEX43-1 diode and (2) AEX86-8 ring lugs
CR250, A6C, E6K	FX58-11	Selenium diode marked FX58-11
N4R6, V4W6	FX43-18	Arc suppressor marked SP7M8R6 or 8A6PS2
RELAYS		
K201	1FX47-36	Pre-Multiply
K202	1FX47-35	Start
K203, K206	1FX47-33	Shifter Interlock or Multiple Factor Storage
K204	1FX47-34	Negative Multiply
K205	1FX47-30	For 115V/120V, 50/60 cycle AC
	1FX47-31	For 150V, 50/60 cycle AC
	1FX47-32	For 220V/230V/240V/250V, 50/60 cycle AC
K207, K208, K209	1FX47-57	Multiple Factor
K245	1FX47-54	For side insertion machines
	1FX47-48	For 1/10" tab machines prior to side insertion
RESISTORS		
R201 thru R220	X429-278	2200 ohm 2W 5%
R221	X431-97	750 ohm 30W 5%
R222, R226, R233	X429-332	6800 ohm 2W 5%
R223	X431-121	1400 ohm 10W 5%
R224, R227	X429-296	3300 ohm 2W 5%
R225	X431-17	5 ohm 10W 10%
R228	FX185	Variable resistor 3000 ohm 25W
R231	X429-350	10k ohm 2W 5%
R235 thru R237	X429-383	22k ohm 1/2W 10%
2B3	X429-242	1000 ohm 2W 5%
2H3, 2N3, 2V3	X429-251	1200 ohm 2W 5%
4B5, 4H5	X429-210	510 ohm 2W 5%