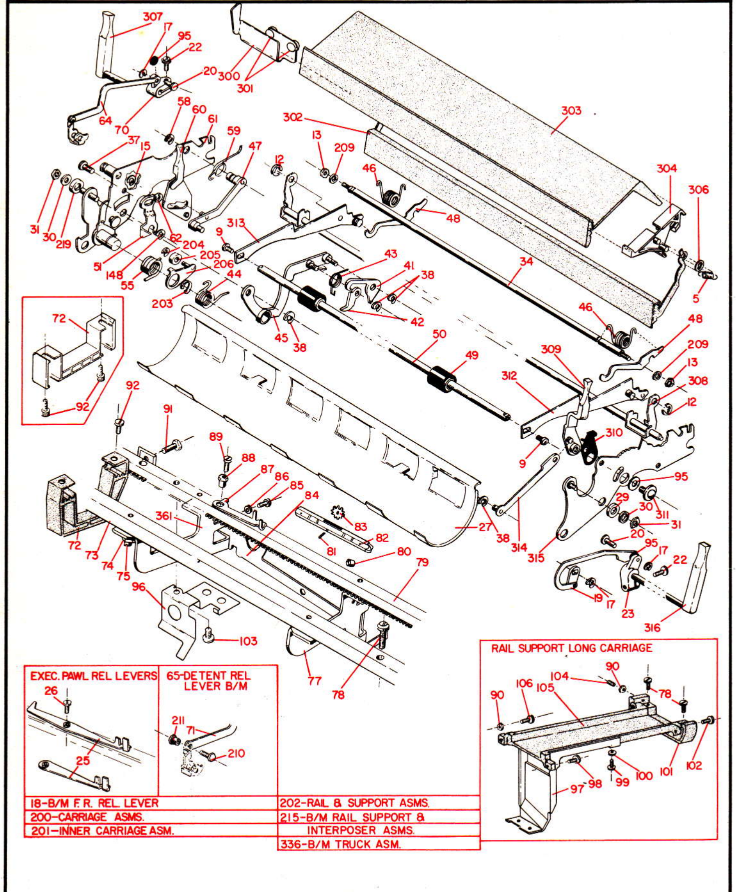
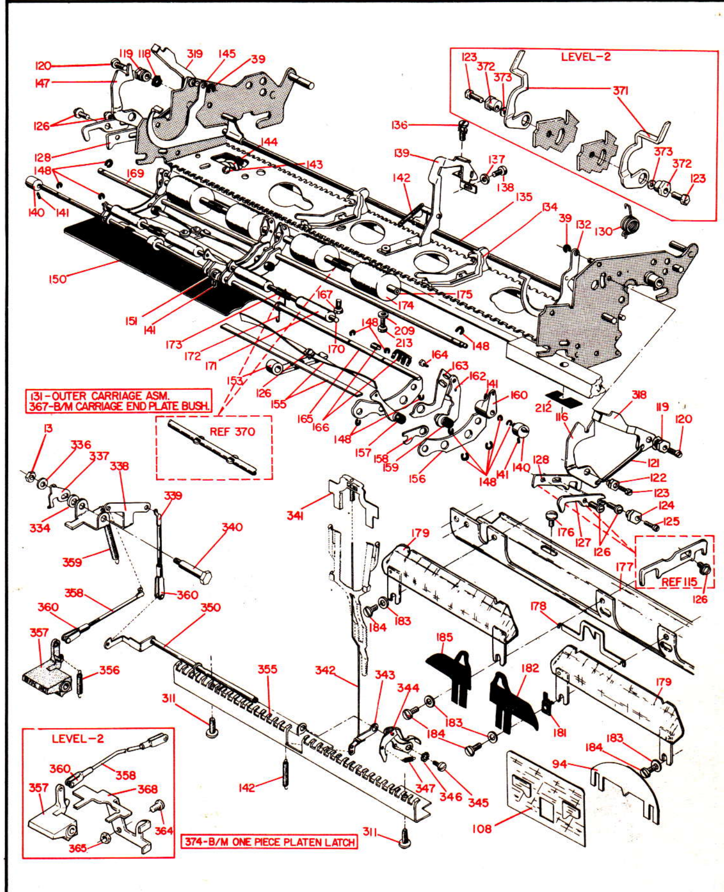
## CARRIAGE & RAILS
### MODEL D1 & D4

MECH. CODE 02



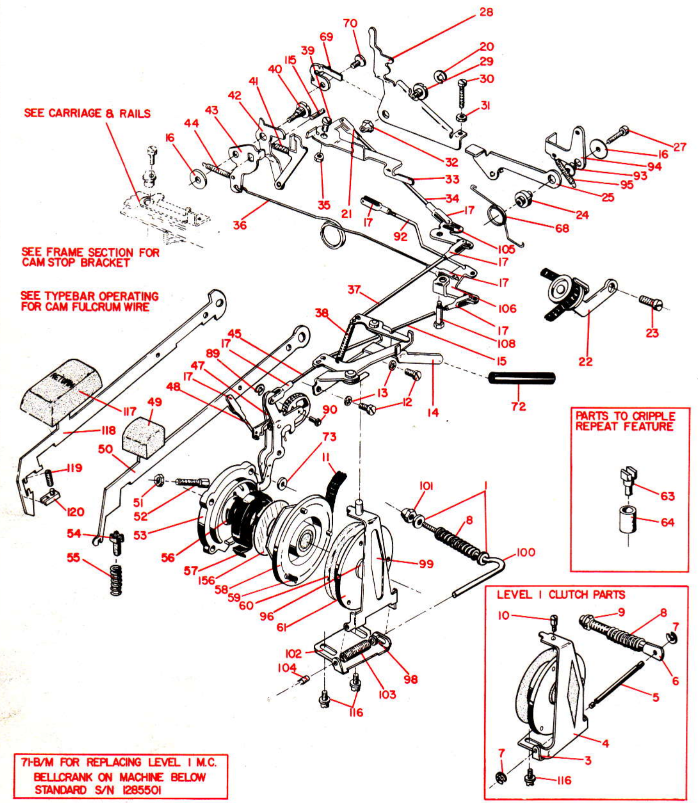

## CARRIAGE & RAILS
### MODEL D1 & D4

MECH. CODE 02



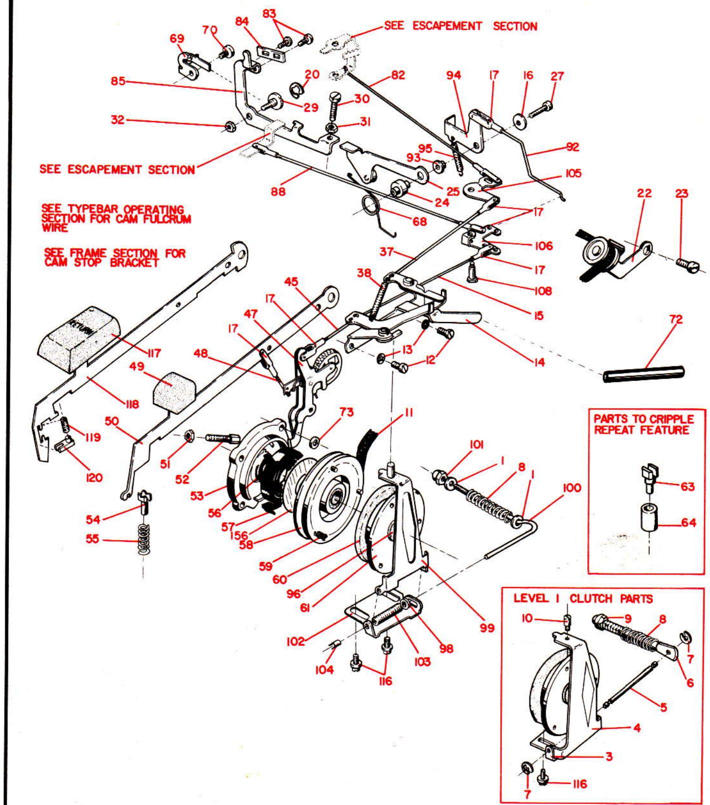
MECH. CODE 03

# CARRIAGE RETURN
## MODEL C1 & D1



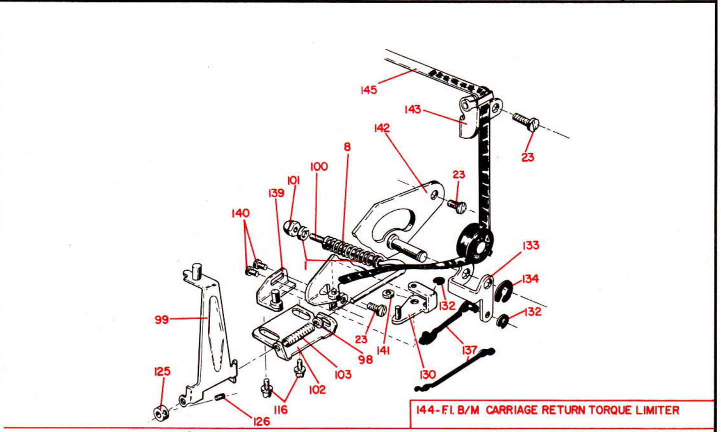

MECH. CODE 03

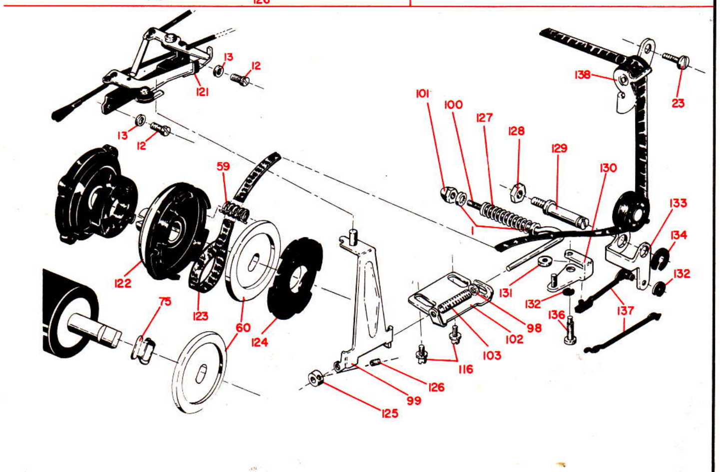
# CARRIAGE RETURN
## MODEL C4 & D4



## CARRIAGE RETURN TORQUE LIMITER

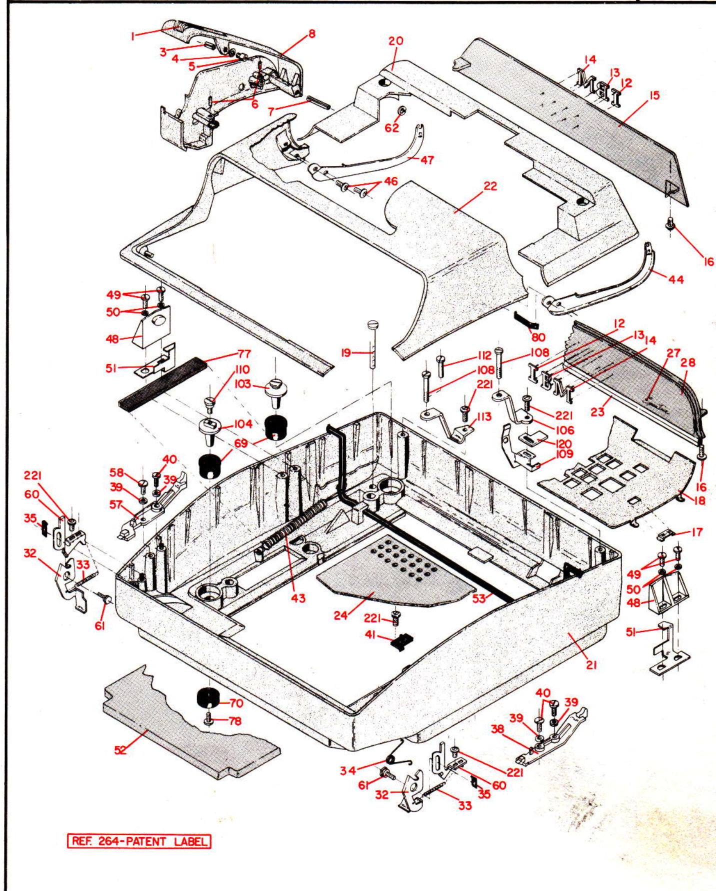
MECH. CODE 03




## COVERS
MODEL C1 & C4

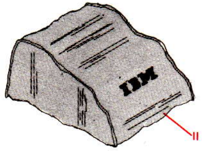
MECH. CODE 04



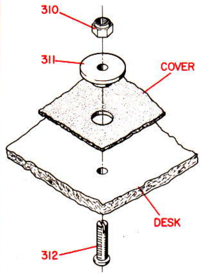
MECH. CODE **04**

# COVERS
## MODEL C1 & C4

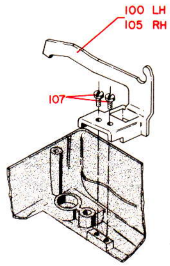
### DUST COVER



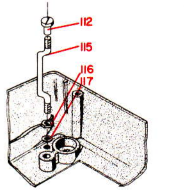

### THEFT DETERENT BOLT DOWN



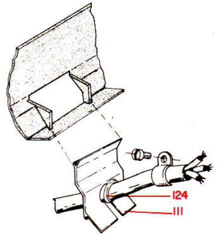

### MODEL C TILT-UP



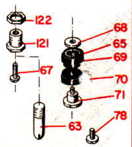

### COVER CONVERSION PARTS FOR SHADED POLE MOTOR



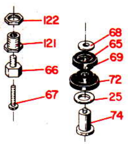

### CORD ADAPTER



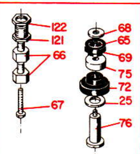

### BOLT DOWN & ELEVATION HARDWARE




NORMAL




83-B/M TO ELEV. APPROX. 3/8"

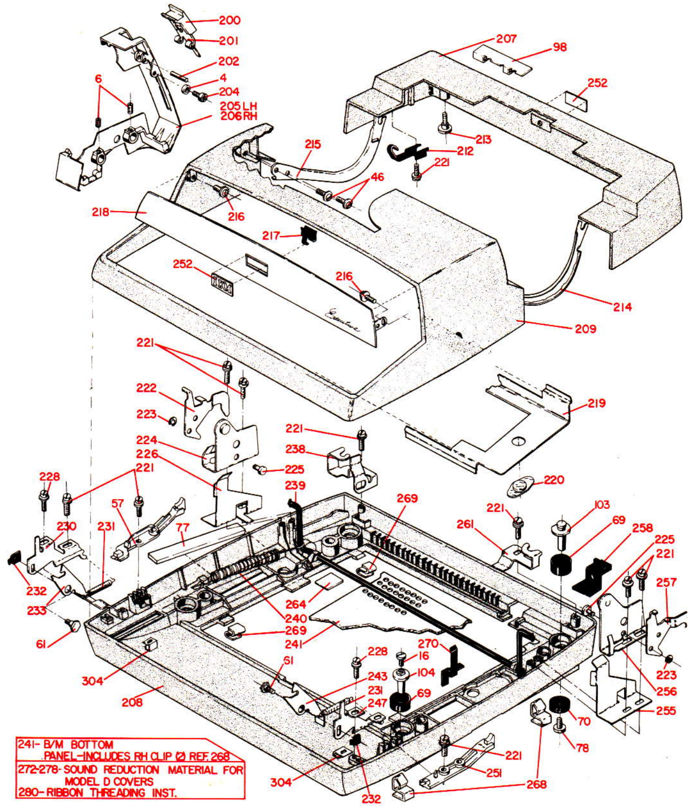



84-B/M TO ELEV. 3/4" OR 1"

| |
|---|
| 85-SNAP OUT KEYPLATE |
| 86-SNAP IN/OUT TOP COVER |
| 87-COVER CONVERSION B/M |
| 88, 89, 91-PAINT, PRIMERS & PARTS |
| 97-ROUND SHIFT STOP GROMMET |
| 123-PLUG FASTENER B/M |

MECH. CODE **04**

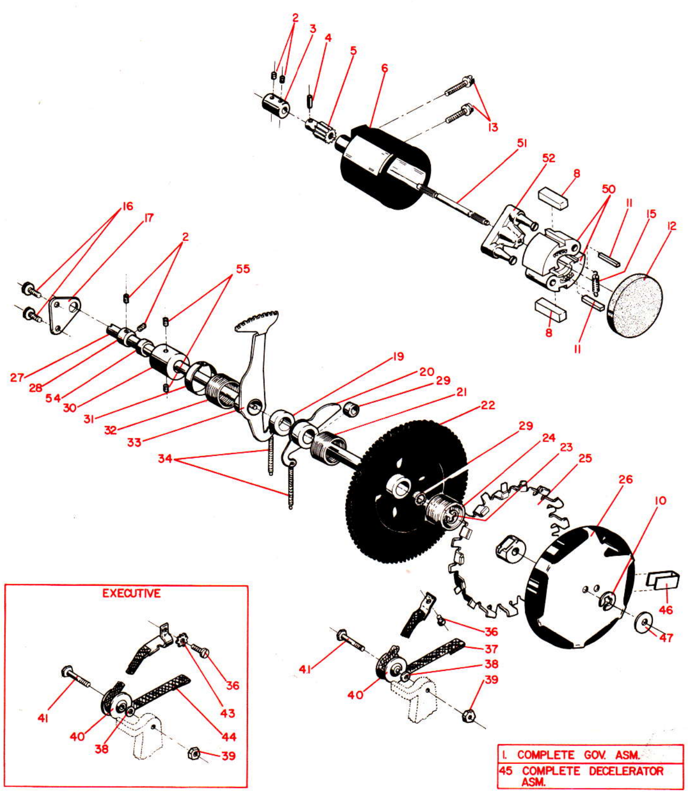
# COVERS
## MODEL D1 & D4




241- B/M BOTTOM PANEL-INCLUDES RH CLIP (2) REF. 268
272-278- SOUND REDUCTION MATERIAL FOR MODEL D COVERS
280- RIBBON THREADING INST.

## GOVERNOR & DECELERATOR

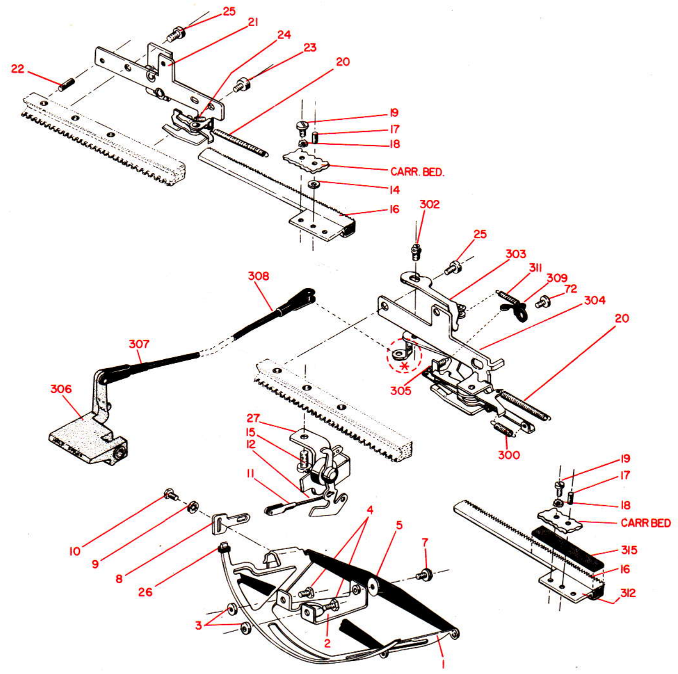
MECH. CODE **05**



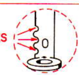

| | |
|---|---|
| 1. | COMPLETE GOV. ASM. |
| 45 | COMPLETE DECELERATOR ASM. |

## ESCAPEMENT
### MODEL C1 & D1

MECH. CODE **06**




✱
NOTCH
INDICATES
PITCH



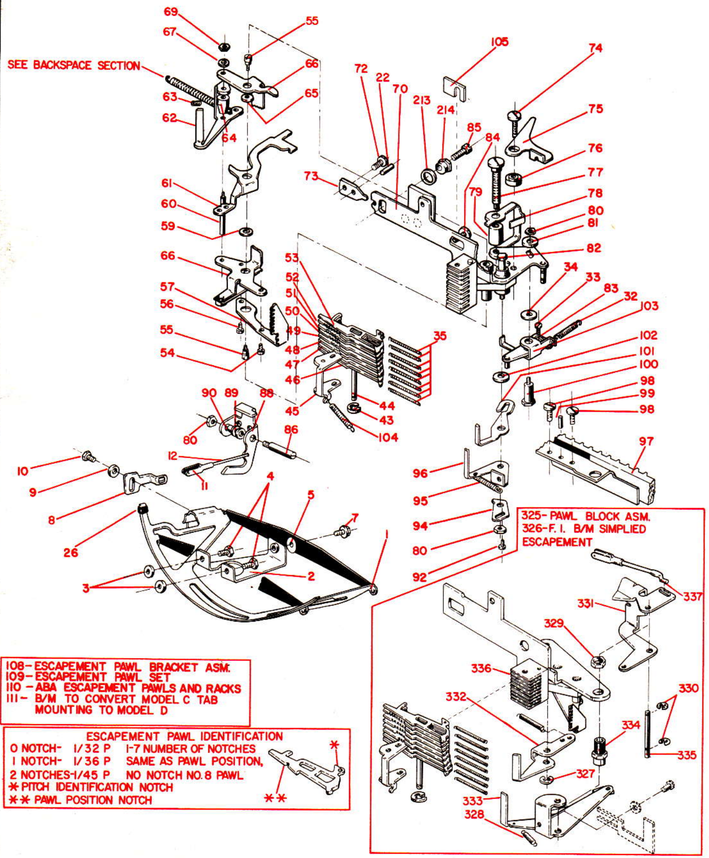
NOTCH IDENTIFICATION

| | |
|---|---|
| 0 = 10 PITCH | 4 = 11 PITCH |
| 1 = 8 PITCH | 5 = 14 PITCH |
| 2 = 9 PITCH | 6 = 6 2/5 PITCH |
| 3 = 12 PITCH | |

27- ESC. TRIP LEVER ASM.

MECH. CODE **06**

# ESCAPEMENT
## MODEL C4 & D4

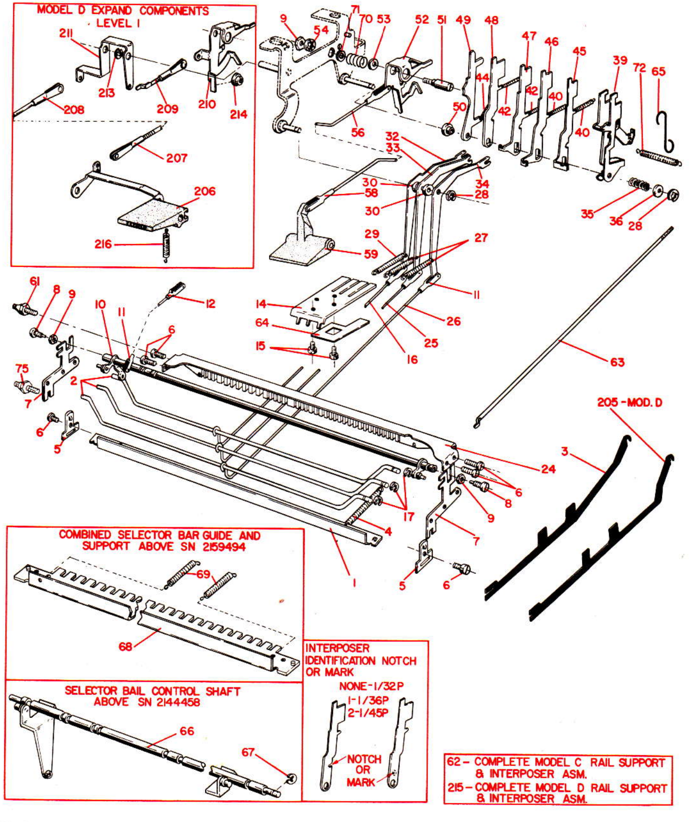



108- ESCAPEMENT PAWL BRACKET ASM.
109- ESCAPEMENT PAWL SET
110 - ABA ESCAPEMENT PAWLS AND RACKS
111- B/M TO CONVERT MODEL C TAB MOUNTING TO MODEL D

ESCAPEMENT PAWL IDENTIFICATION
0 NOTCH- 1/32 P 1-7 NUMBER OF NOTCHES
1 NOTCH- 1/36 P SAME AS PAWL POSITION,
2 NOTCHES-1/45 P NO NOTCH NO. 8 PAWL
* PITCH IDENTIFICATION NOTCH
** PAWL POSITION NOTCH

MECH. CODE **07**

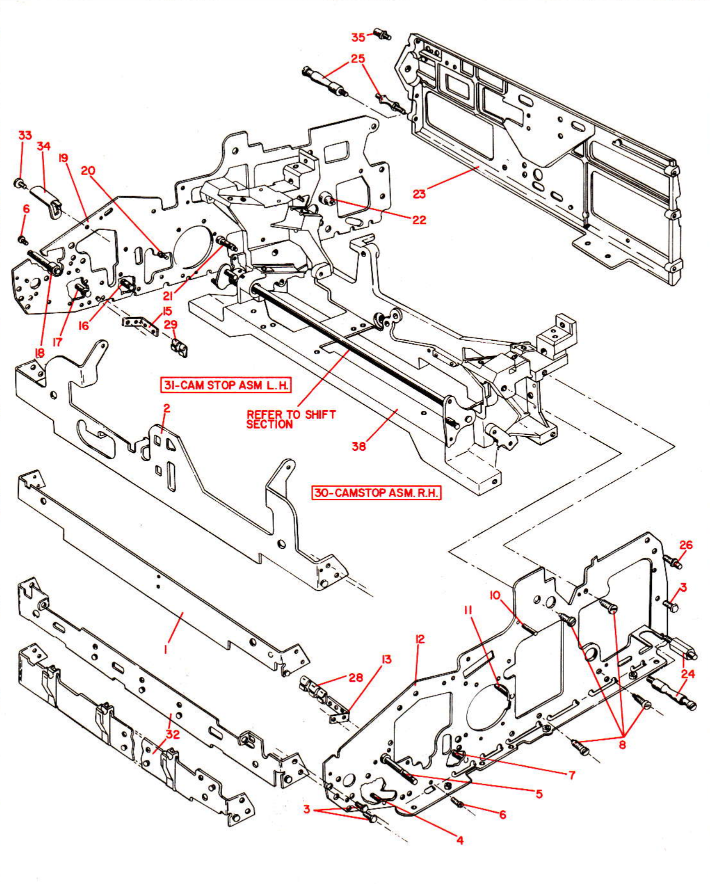
# ESCAPEMENT CONTROL
## MODEL C4 & D4




62 - COMPLETE MODEL C RAIL SUPPORT & INTERPOSER ASM.
215 - COMPLETE MODEL D RAIL SUPPORT & INTERPOSER ASM.

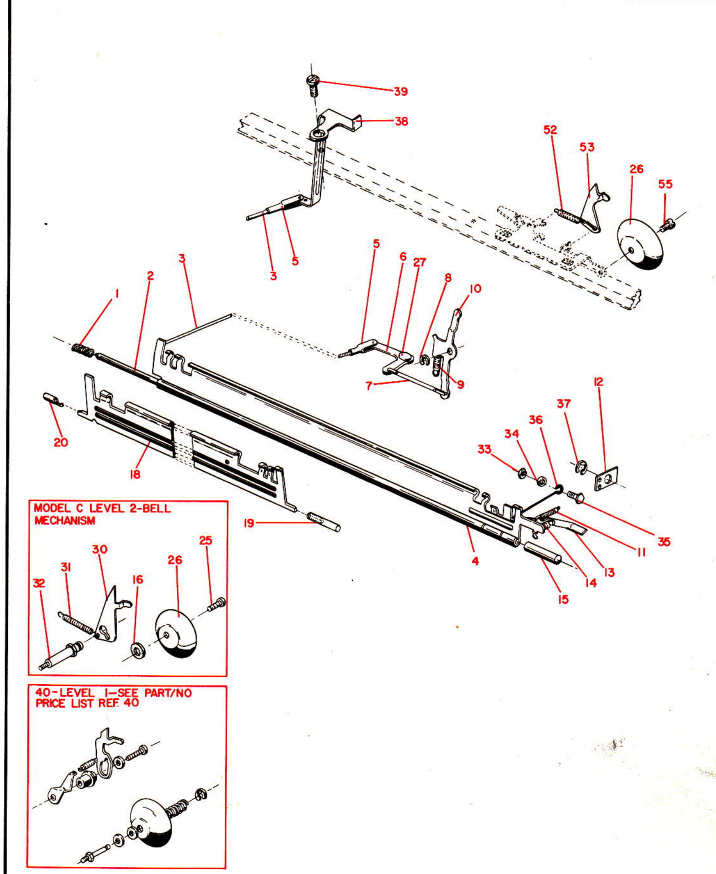
## FRAMES

MECH. CODE 08



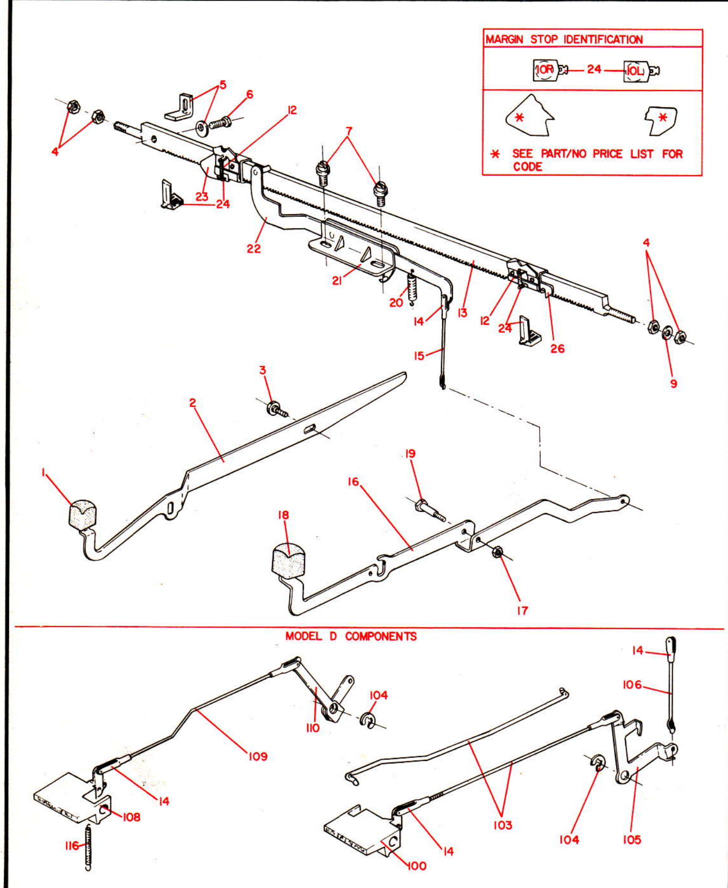

## KEYBOARD LOCK & BELL

MECH. CODE 09



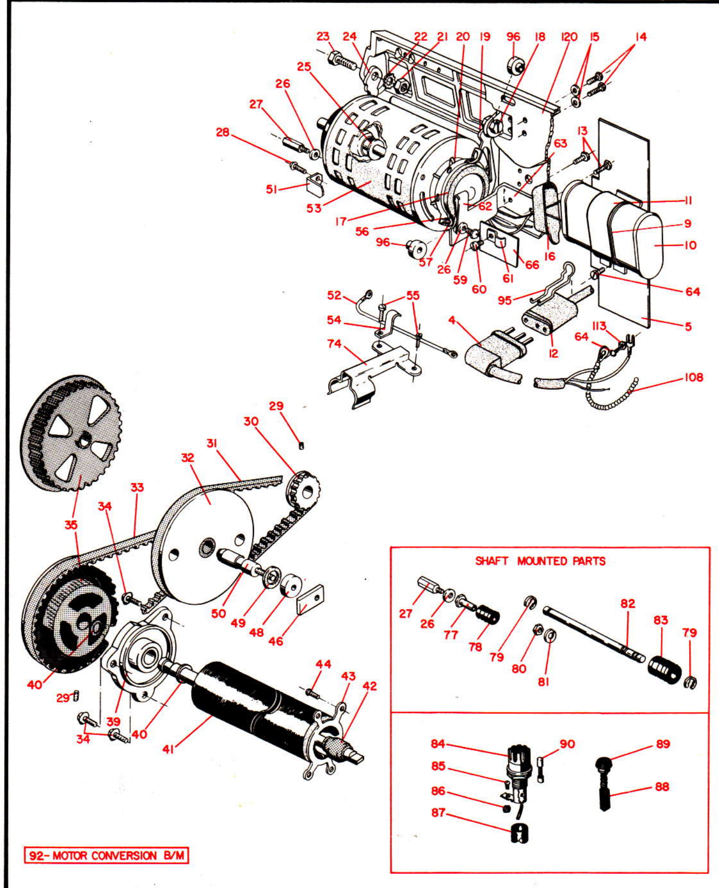
MECH. CODE 10

## MARGINS



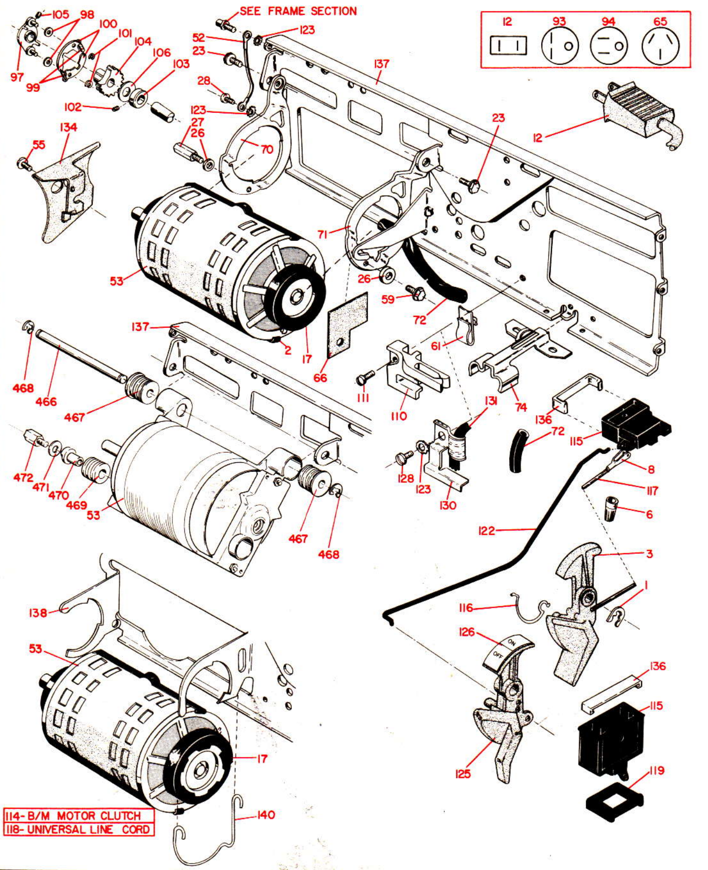

MECH. CODE 11

## MOTOR & DRIVE, OLD STYLE & SPECIAL VOLTAGE



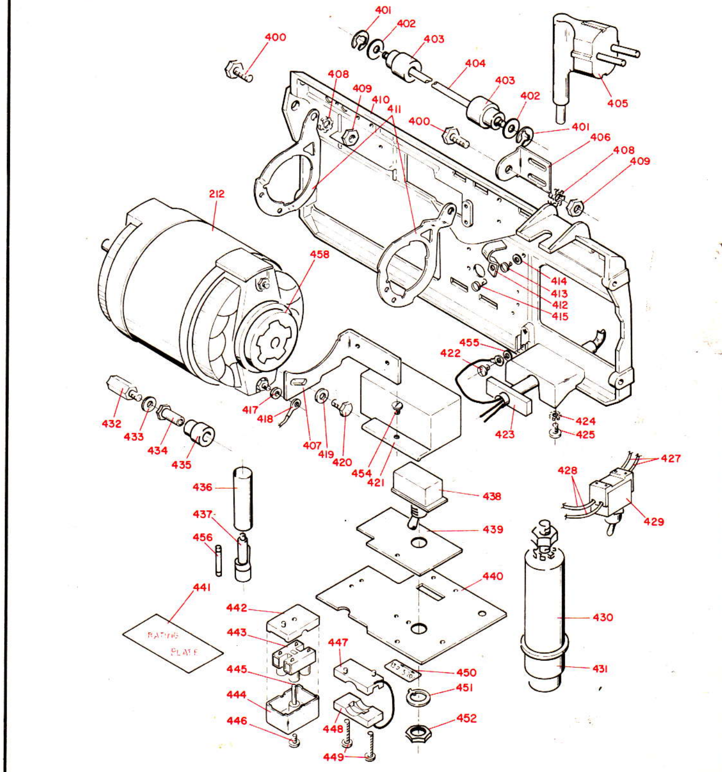
# MOTOR & DRIVE, CURRENT LEVEL

MECH. CODE 11




# MOTOR, GERMAN PRODUCTION INTERMEDIATE LEVEL

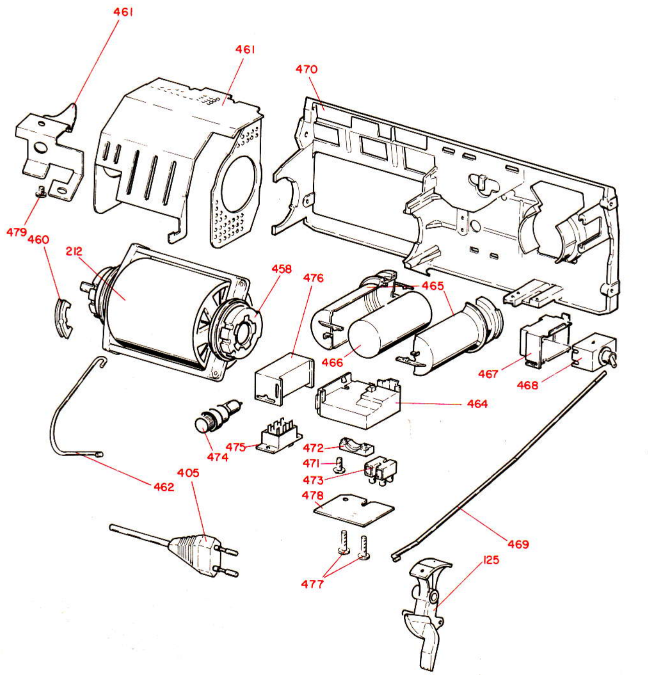
MECH. CODE 11



MECH. CODE 11

# MOTOR, GERMAN PRODUCTION

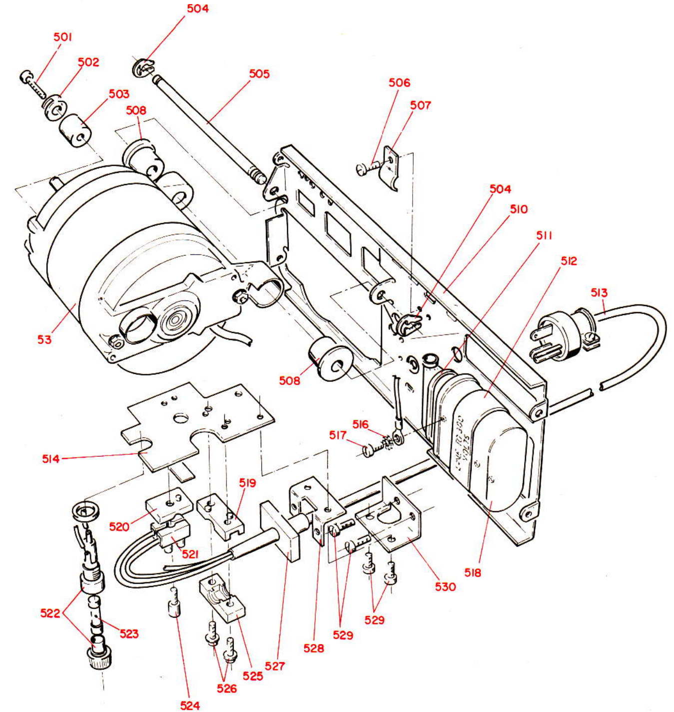
## SOLID MOUNT DOUBLE INSULATION




MECH. CODE 11

# MOTOR CANADIAN PRODUCTION

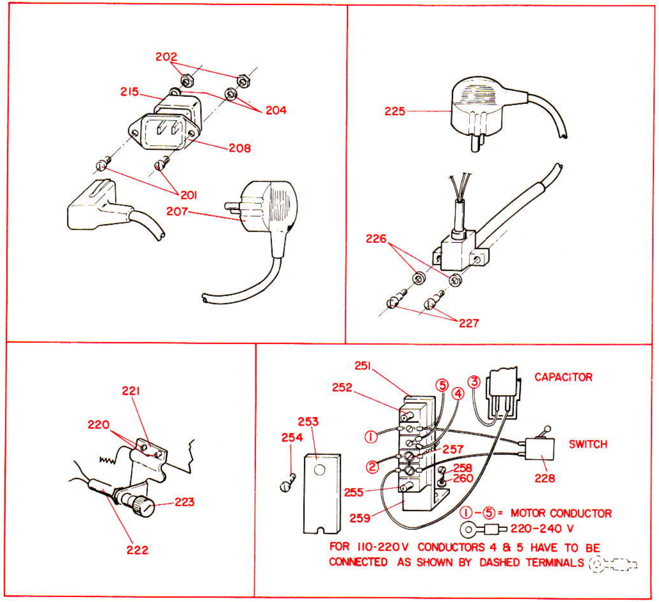
## MODEL D1 & D4



# LINECORDS & SPECIAL COMPONENTS

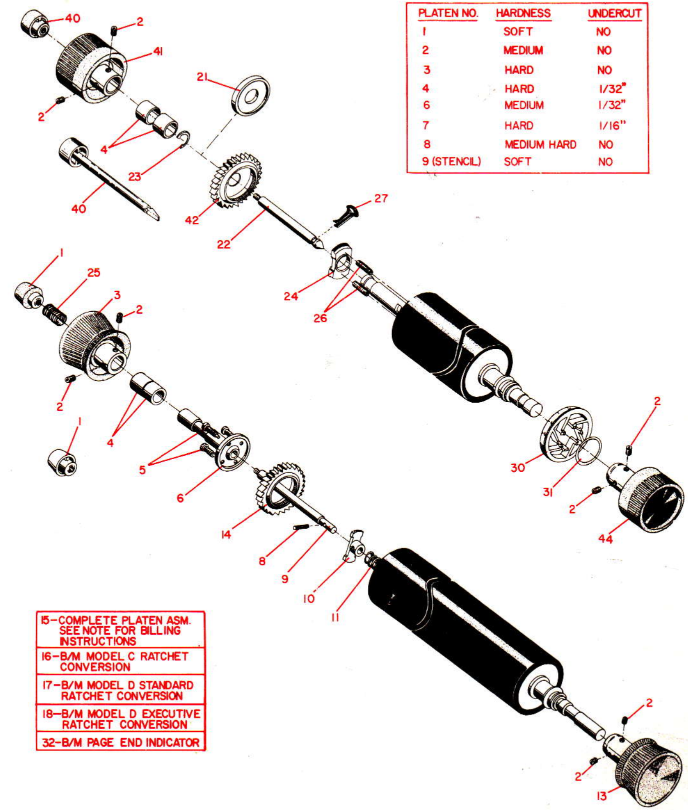
MODEL C1 & C4

MECH. CODE 11




# PLATEN

MECH. CODE 12




| PLATEN NO. | HARDNESS | UNDERCUT |
|---|---|---|
| 1 | SOFT | NO |
| 2 | MEDIUM | NO |
| 3 | HARD | NO |
| 4 | HARD | 1/32" |
| 6 | MEDIUM | 1/32" |
| 7 | HARD | 1/16" |
| 8 | MEDIUM HARD | NO |
| 9 (STENCIL) | SOFT | NO |

15—COMPLETE PLATEN ASM. SEE NOTE FOR BILLING INSTRUCTIONS

16—B/M MODEL C RATCHET CONVERSION

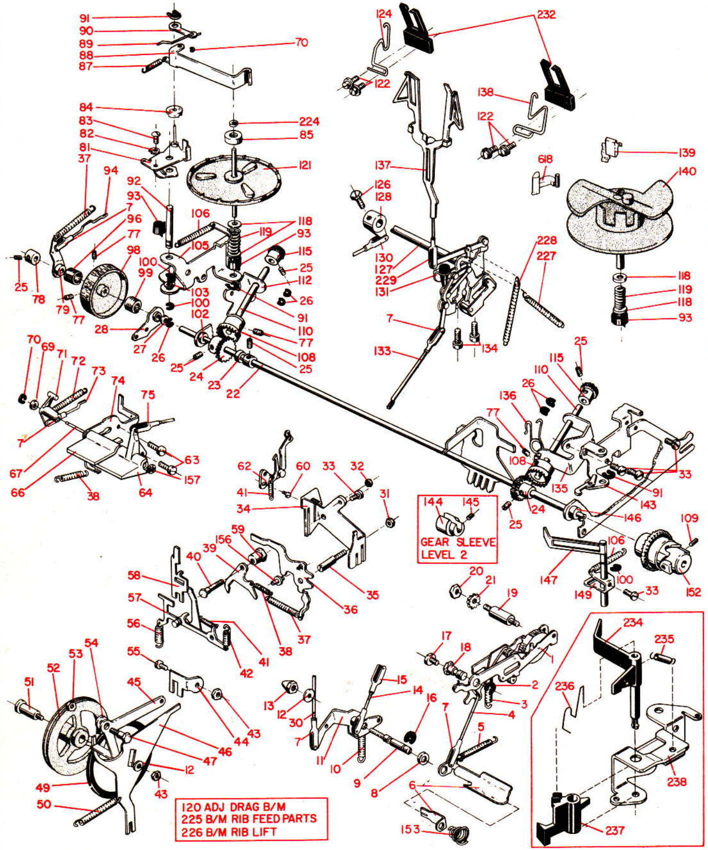
17—B/M MODEL D STANDARD RATCHET CONVERSION

18—B/M MODEL D EXECUTIVE RATCHET CONVERSION

32—B/M PAGE END INDICATOR

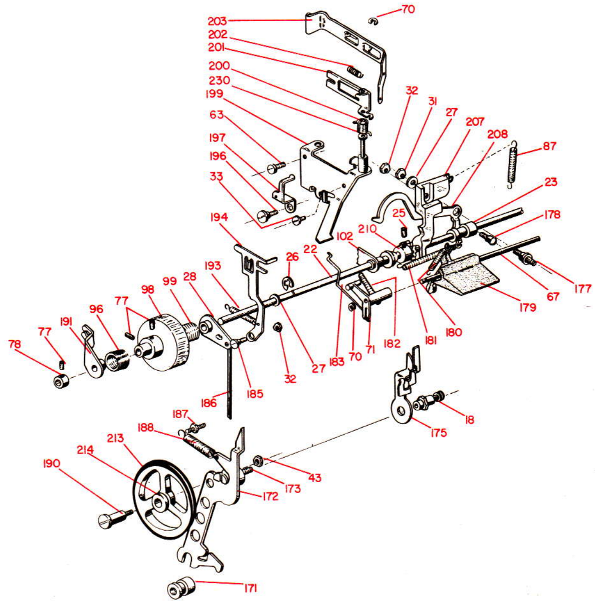
MECH. CODE **13**

# FABRIC RIBBON



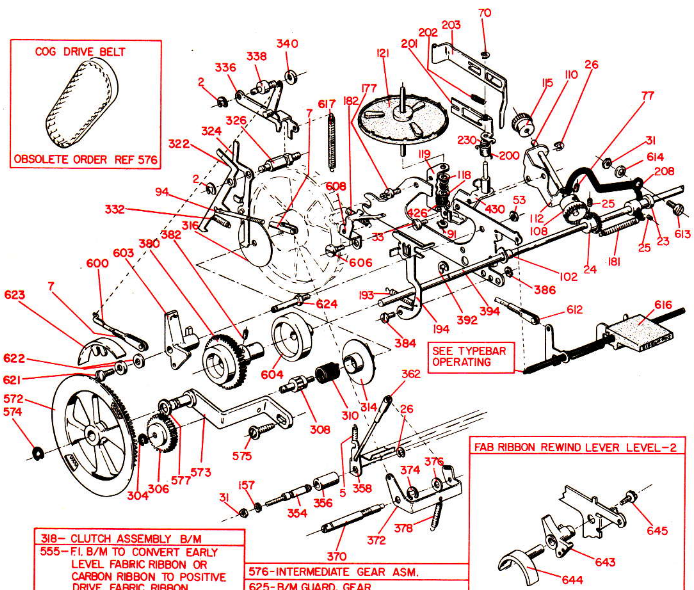

MECH. CODE **13**

# MODIFIED RIBBON
## MODEL C1 & C4



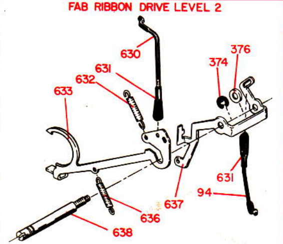
# POSITIVE DRIVE FABRIC RIBBON

MECH. CODE **13**

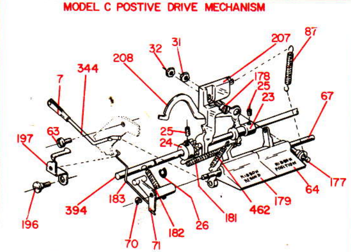



318- CLUTCH ASSEMBLY B/M
555- F.I. B/M TO CONVERT EARLY LEVEL FABRIC RIBBON OR CARBON RIBBON TO POSITIVE DRIVE FABRIC RIBBON
576- INTERMEDIATE GEAR ASM.
625- B/M GUARD, GEAR

FAB RIBBON DRIVE LEVEL 2

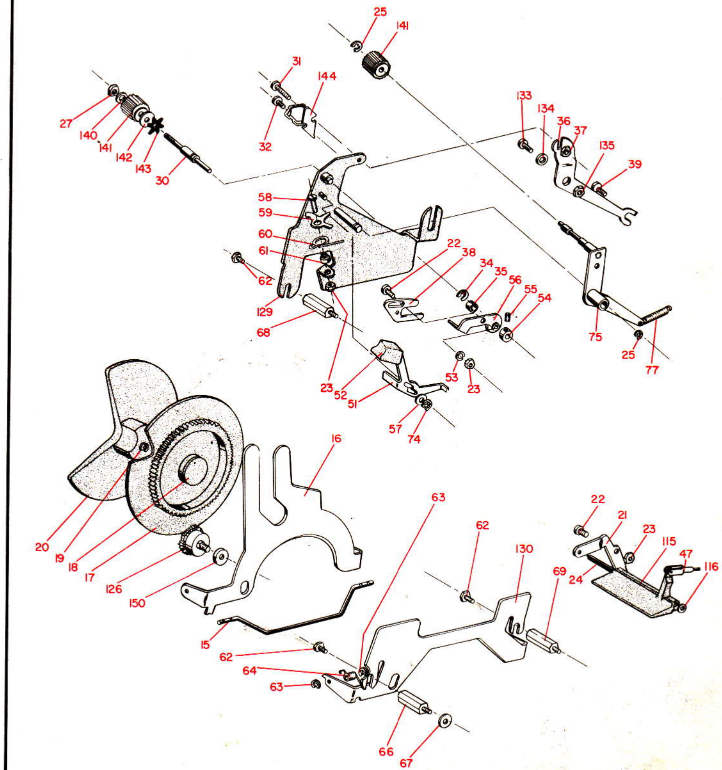


MODEL C POSTIVE DRIVE MECHANISM



# CARBON RIBBON
## MODEL C1 & C4

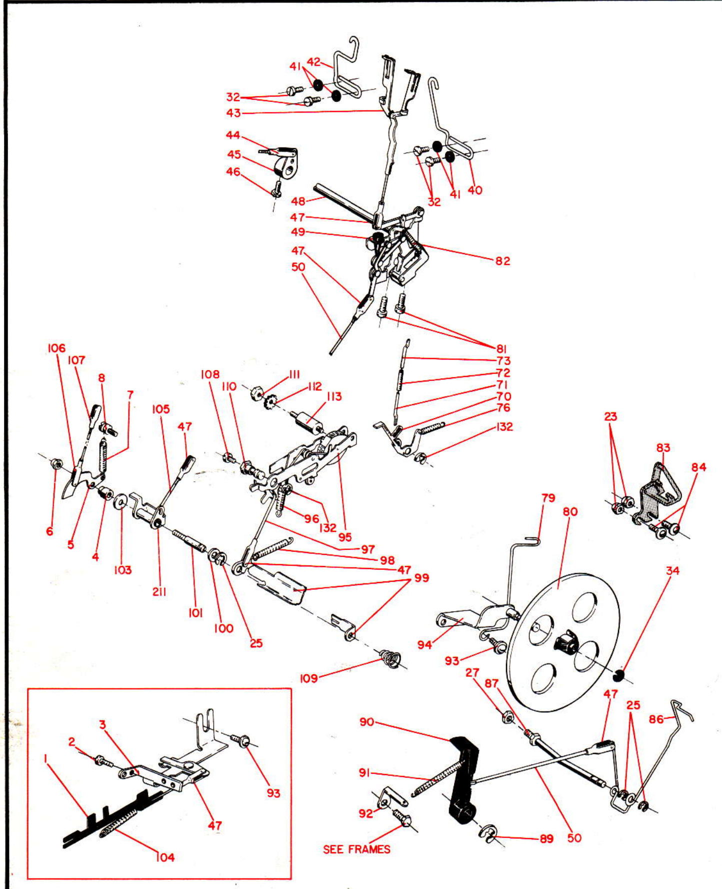
MECH. CODE **14**



125- PLATE ASM. UPPER FEED
128- PLATE ASM. LOWER TAKE-UP
145- GEARED FEED ROLLER B/M

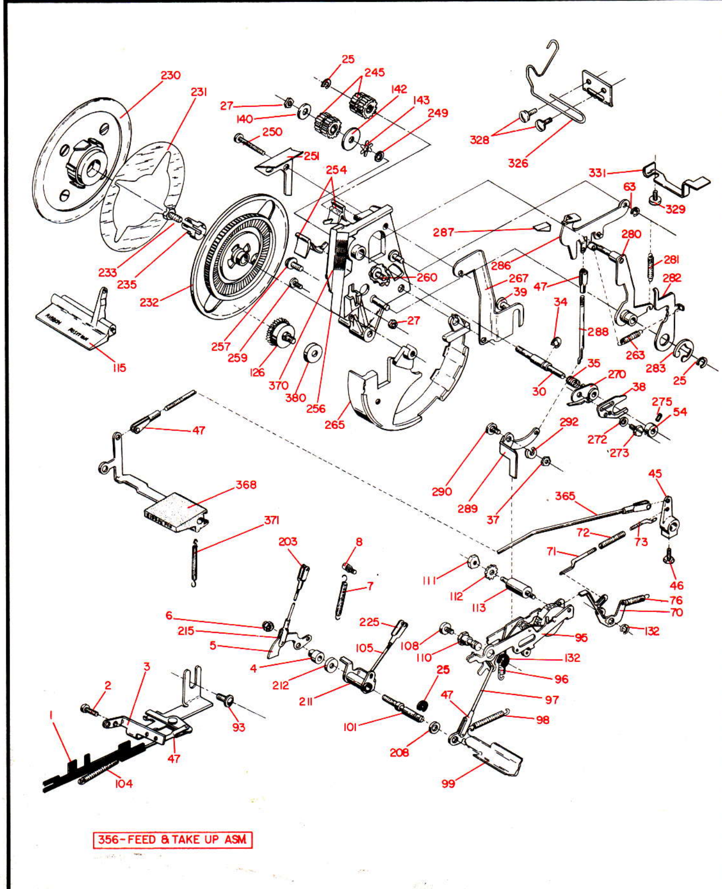
MECH. CODE 14

# CARBON RIBBON
## MODEL C1 & C4



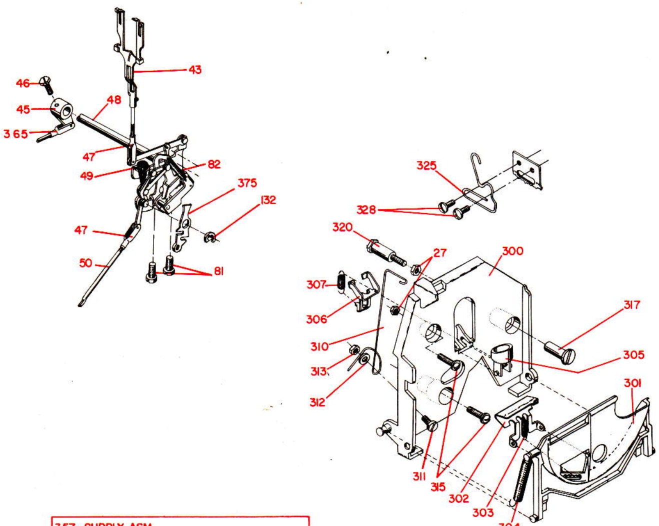

MECH. CODE 14

# MODIFIED CARBON RIBBON



# MODIFIED CARBON RIBBON

MECH. CODE 14

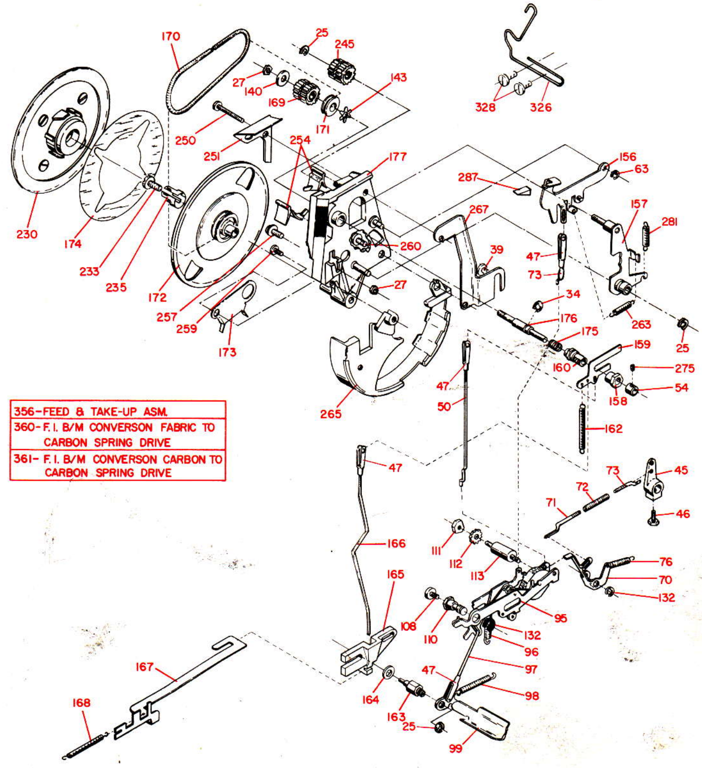


357- SUPPLY ASM.
355-DECAL- RIBBON THREADING INST.

# CARBON RIBBON SPRING DRIVE

## MODEL D1 & D4

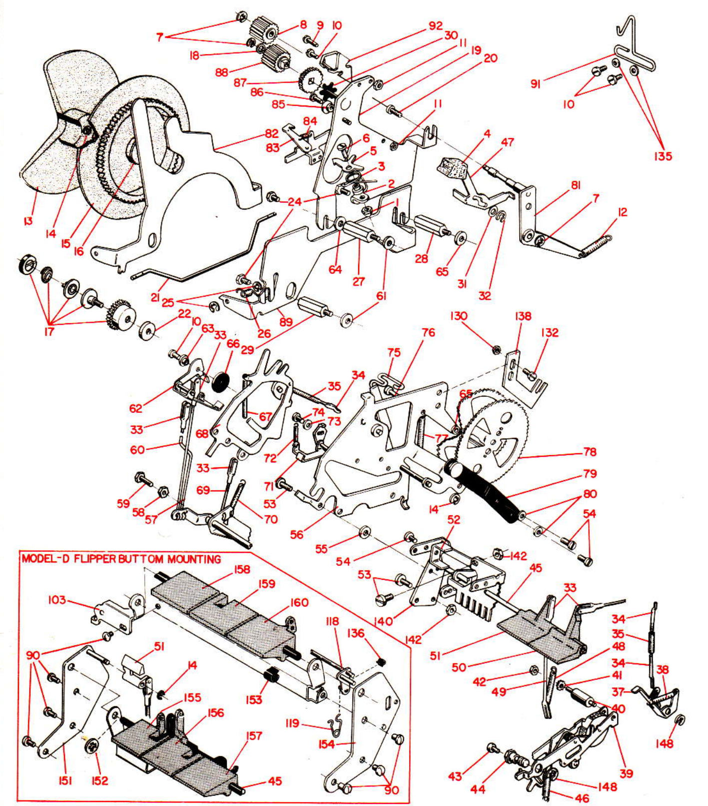
MECH. CODE 14



356-FEED & TAKE-UP ASM.
360- F. I. B/M CONVERSON FABRIC TO CARBON SPRING DRIVE
361- F. I. B/M CONVERSON CARBON TO CARBON SPRING DRIVE

MECH. CODE 15

## DUAL RIBBON

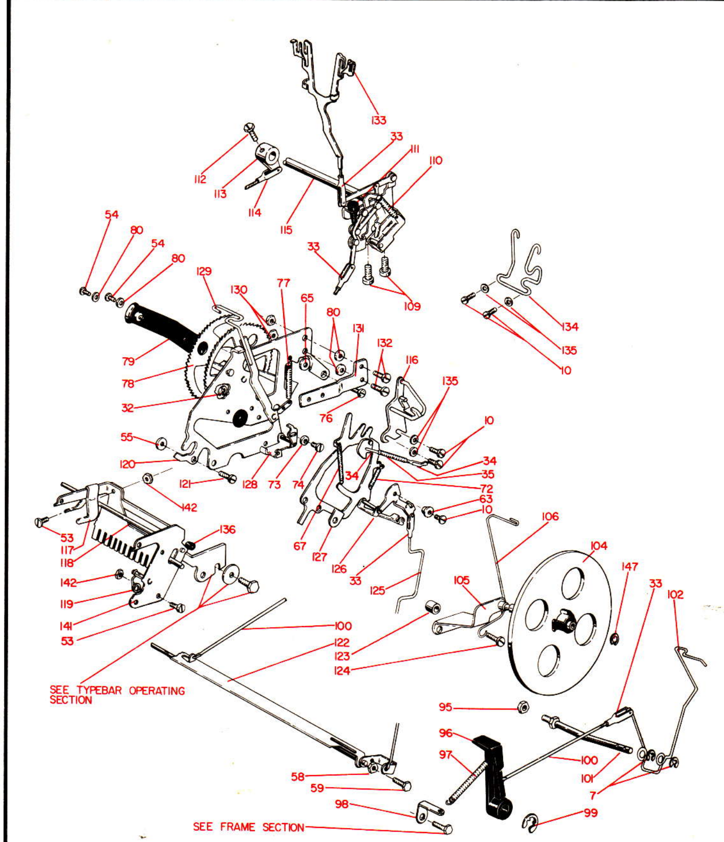



SEE FRAME SECTION FOR DUAL RIBBON SIDE FRAMES

| | | |
|---|---|---|
| 93-L.H. FABRIC RIBBON SIDE PLATE ASM. | 94-L.H. CARBON RIBBON FEED UPPER PLATE & FLANGE ASM. | 150-L.H. CARBON RIBBON TAKE UP PLATE ASM. LOWER |
| 146-PLATE ASM. | | |

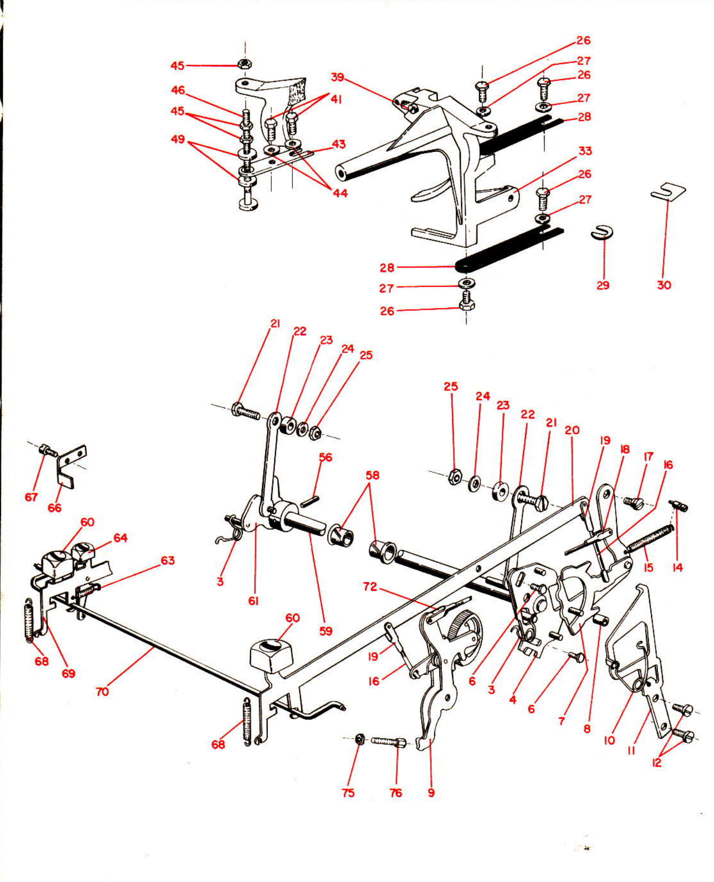
MECH. CODE 15

## DUAL RIBBON



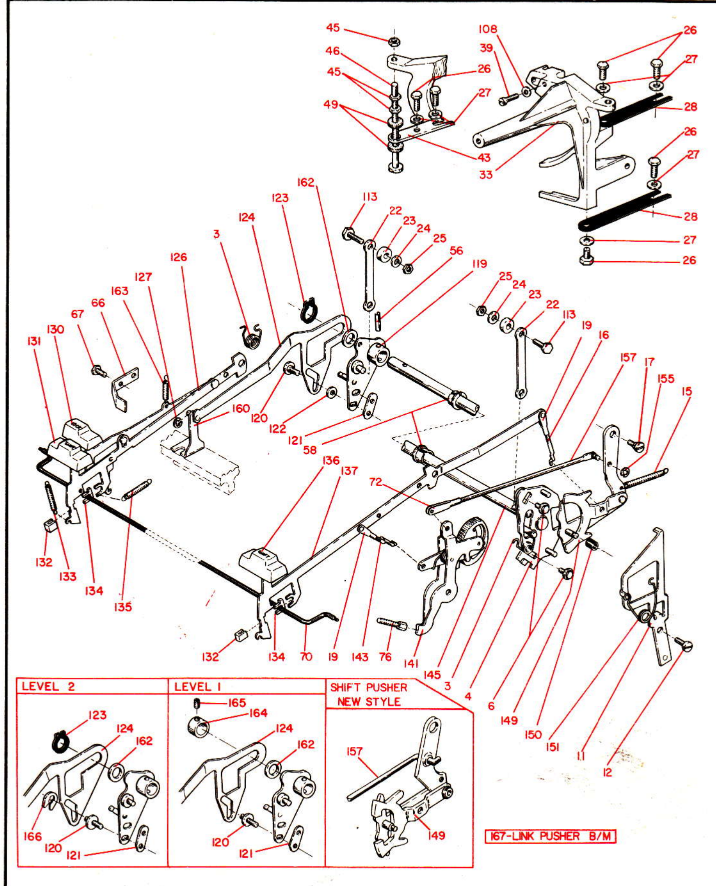
## SHIFT
### MODEL C1 & C4

MECH. CODE 16



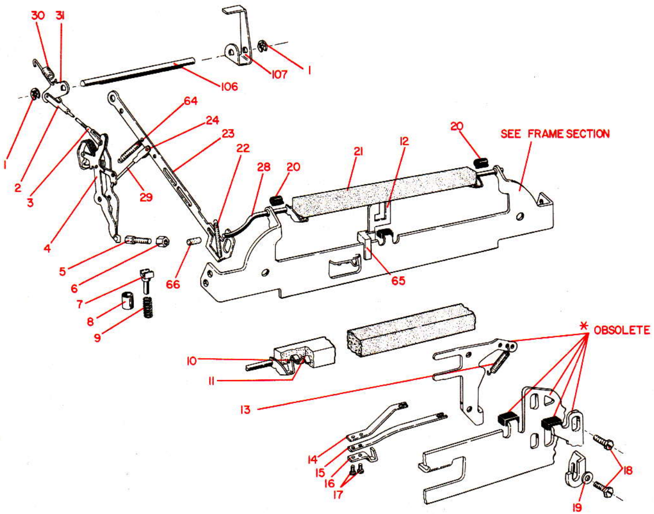
## SHIFT
### MODEL D1 & D4

MECH. CODE 16



MECH. CODE 17

# SPACEBAR
## MODEL C1

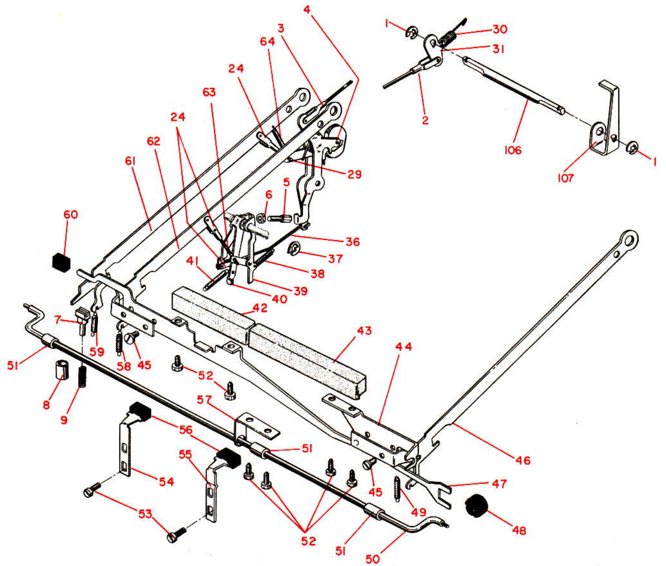



32–B/M FOR MODIFIED SPACEBAR

* WHEN REPLACING THESE PARTS ON THE OLD STYLE SPACEBAR STEM IT IS NECESSARY TO REPLACE REF. NO.S 7, 9, 12, & 21

MECH. CODE 17

# SPACEBAR
## MODEL C4

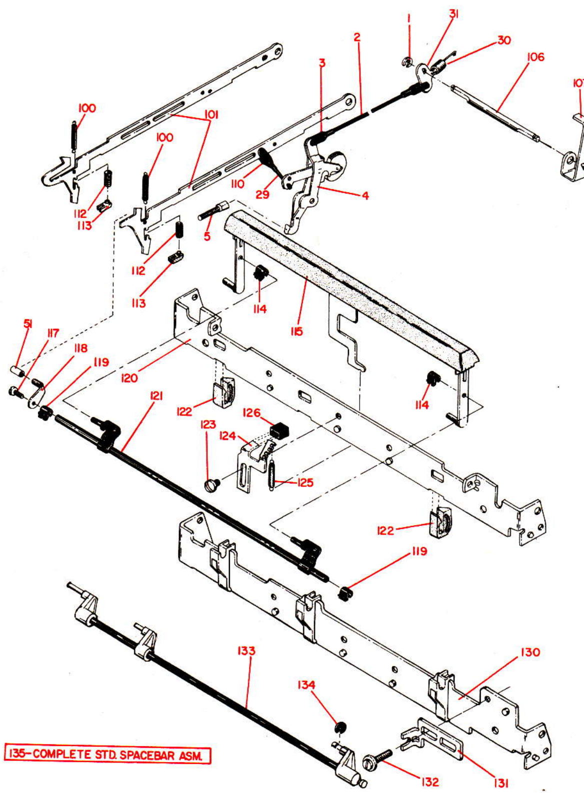



SEE TYPEBAR OPERATING FOR CAM FULCRUM WIRE

SEE FRAME SECTION FOR CAM STOP BRACKET

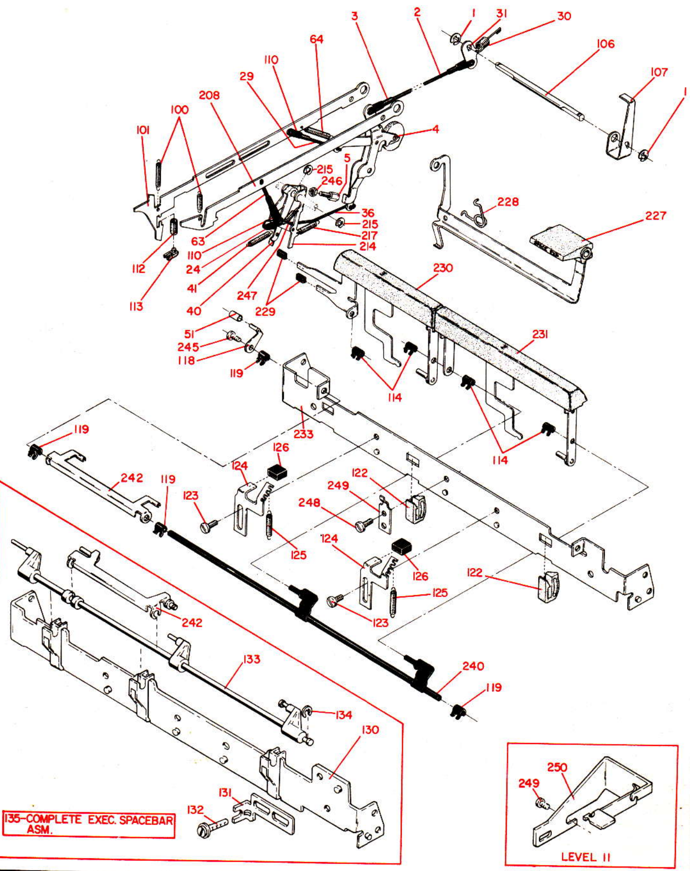
# SPACEBAR
## MODEL D1

MECH. CODE 17



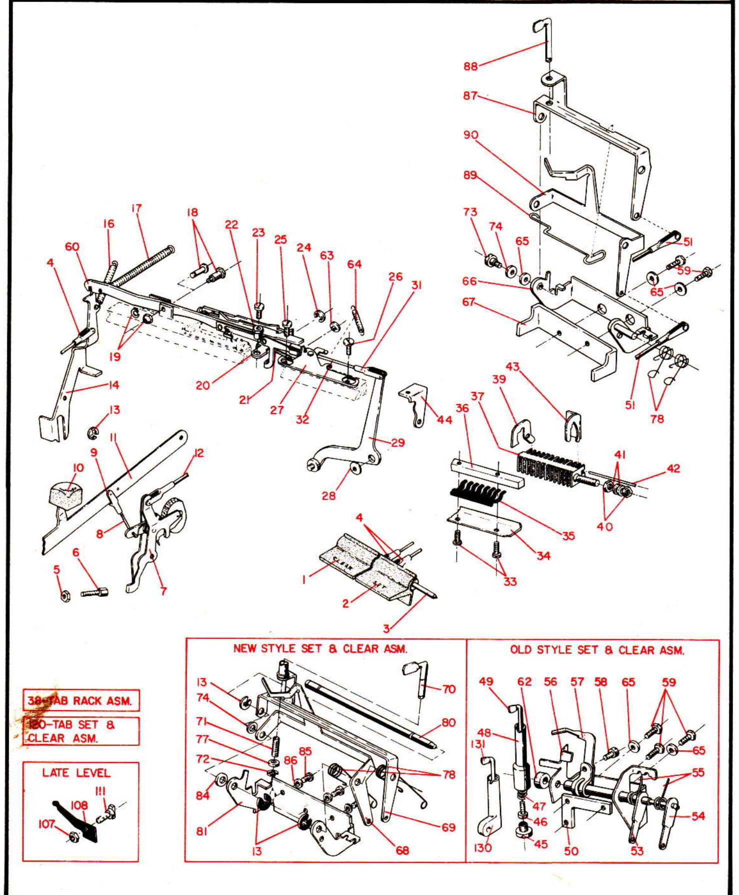

# SPACEBAR
## MODEL D4

MECH. CODE 17



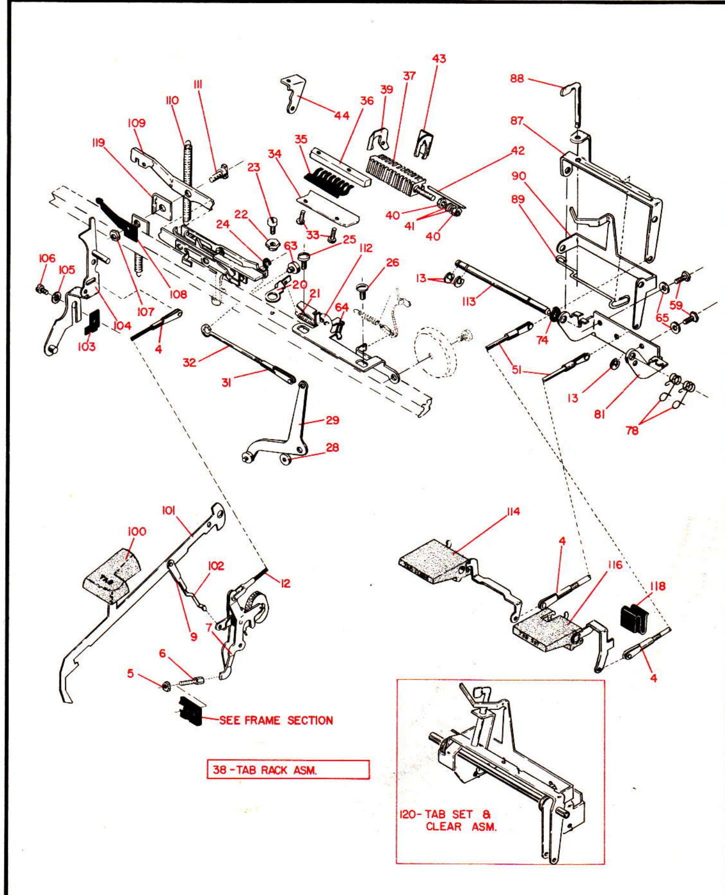
MECH. CODE
**18**

# TAB
## MODEL C1 & C4



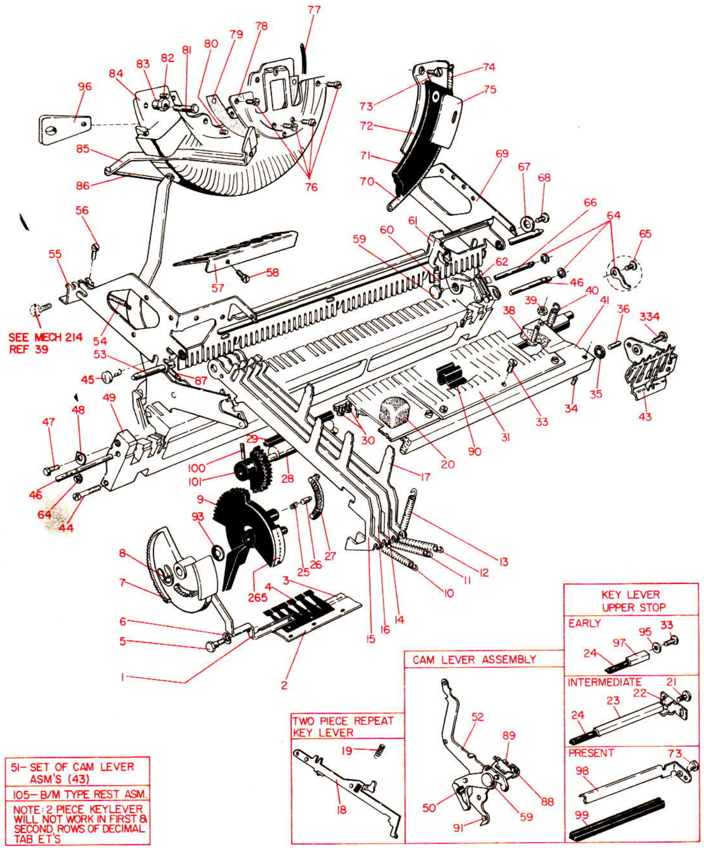

MECH. CODE
**18**

# TAB
## MODEL D1 & D4



# TYPEBAR OPERATING
## MODEL C1 & C4

MECH. CODE 19



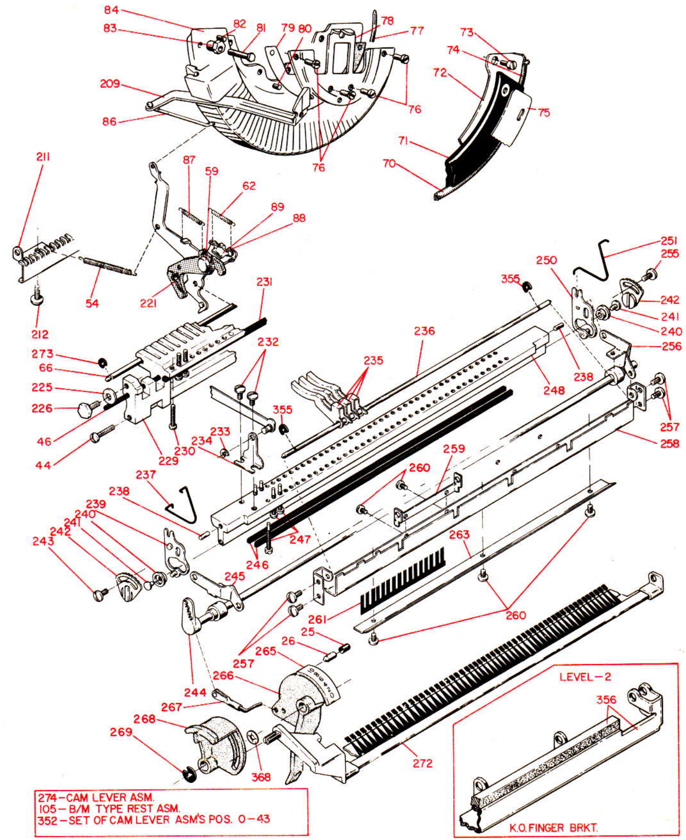

51- SET OF CAM LEVER ASM'S (43)

105- B/M TYPE REST ASM.

NOTE: 2 PIECE KEYLEVER WILL NOT WORK IN FIRST & SECOND ROWS OF DECIMAL TAB ET'S

# TYPEBAR OPERATING & DUAL KNOCK-OFF
## MODEL D1 & D4

MECH. CODE 19




274-CAM LEVER ASM.

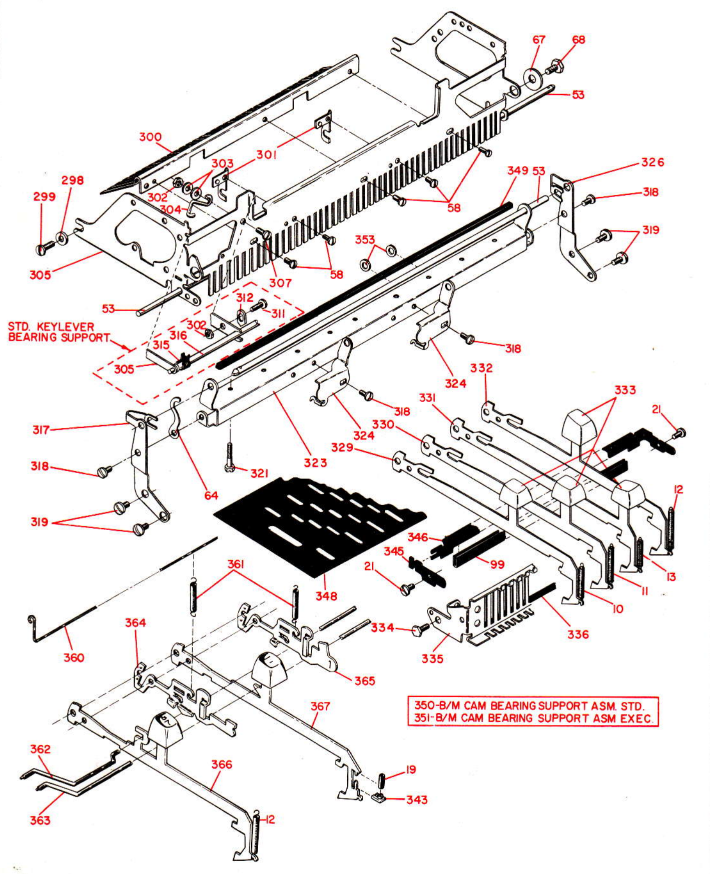
105-B/M TYPE REST ASM.

352-SET OF CAM LEVER ASM'S POS. 0-43

MECH. CODE 19

# TYPEBAR OPERATING & DUAL KNOCK-OFF

MODEL D1 & D4

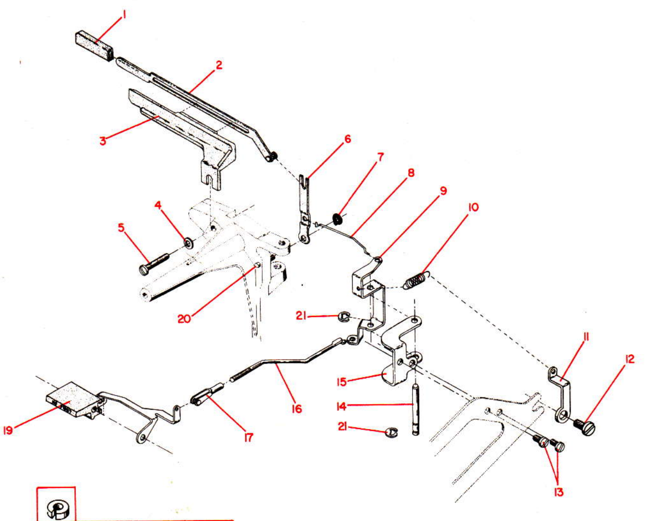



350-B/M CAM BEARING SUPPORT ASM. STD.
351-B/M CAM BEARING SUPPORT ASM EXEC.

MECH. CODE 20

# NO PRINT

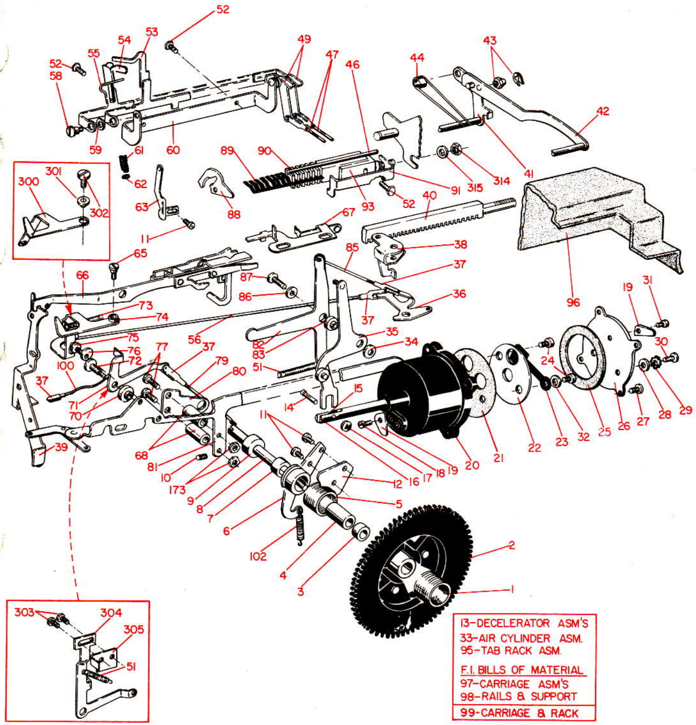
MODEL D4




22-CENTERING GROMMET MODEL

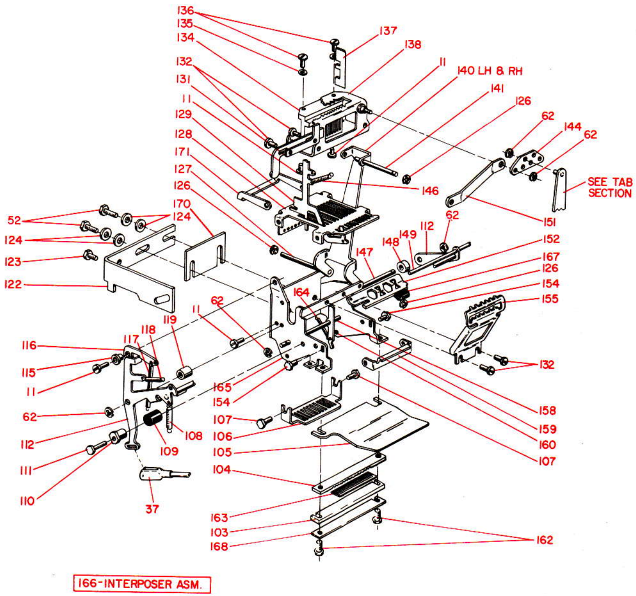
## DECIMAL TAB

MECH. CODE 30



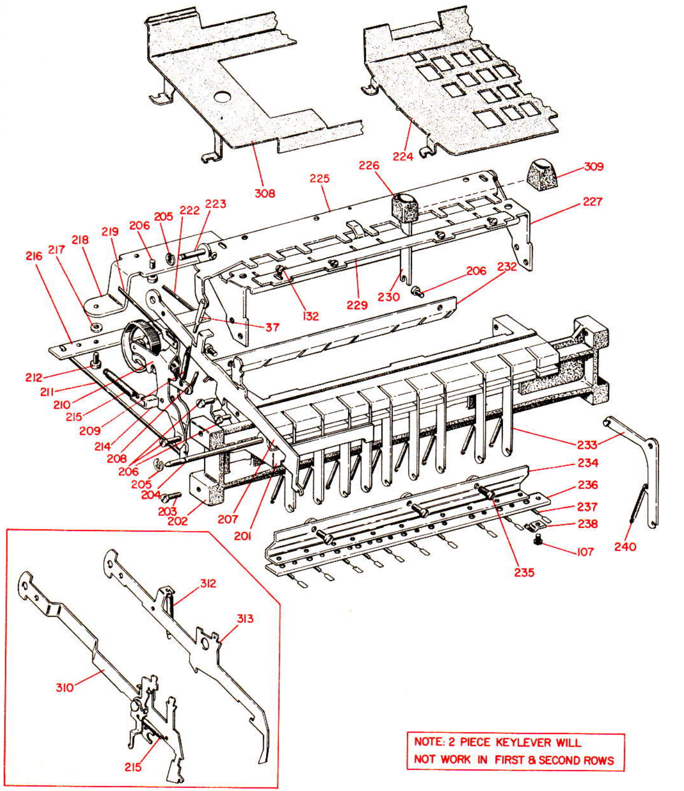

## DECIMAL TAB

MECH. CODE 30



MECH. CODE 30

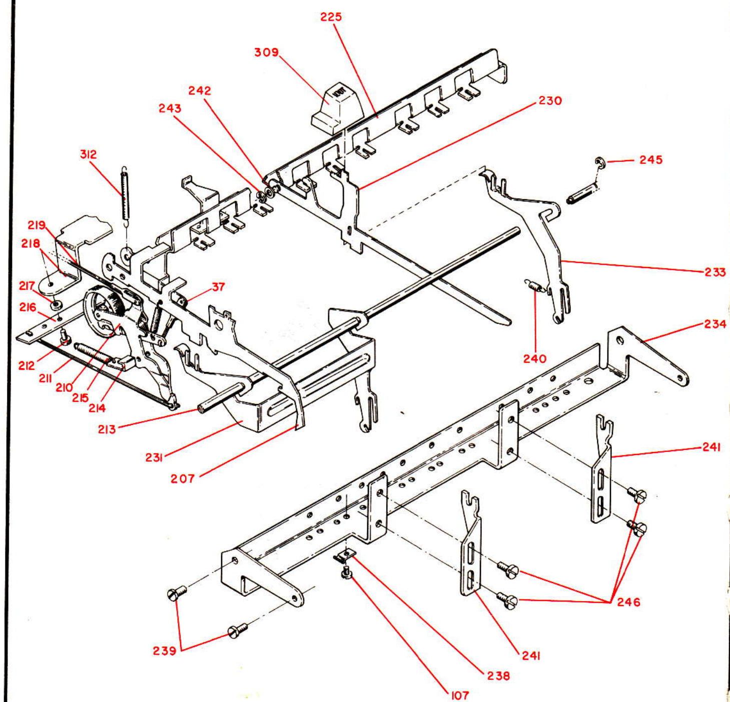
# DECIMAL TAB




NOTE: 2 PIECE KEYLEVER WILL NOT WORK IN FIRST & SECOND ROWS

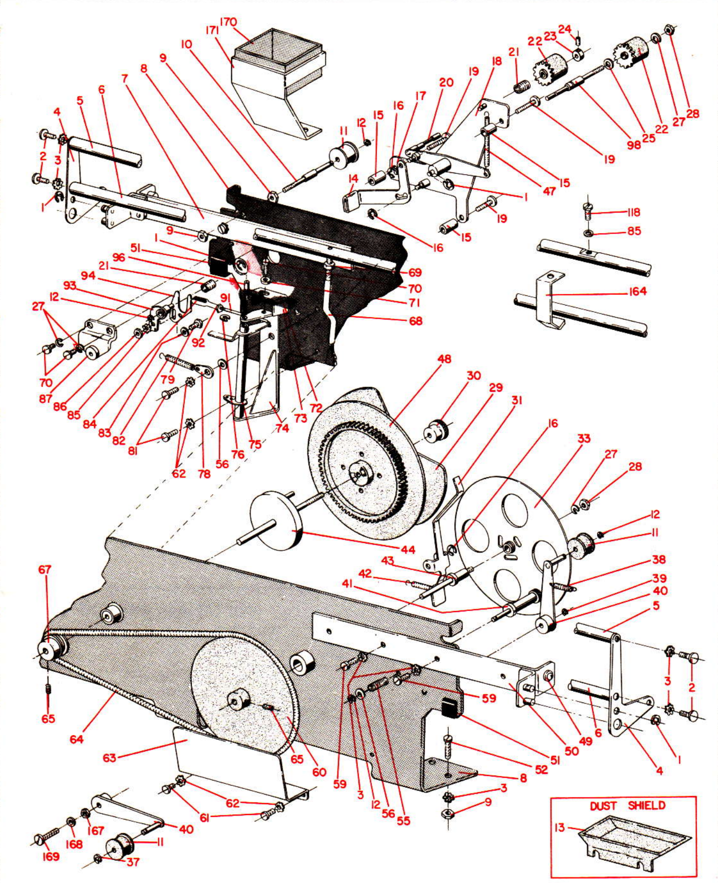
MECH. CODE 30

# DECIMAL TAB CENTERED UNDERSCORE
## MODEL D1



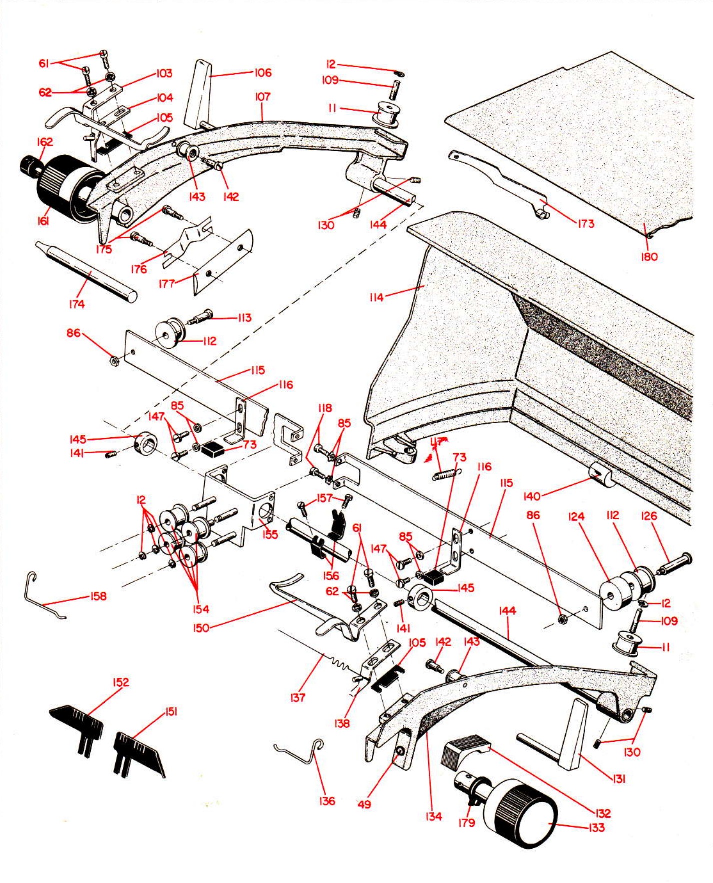
## HEKTOWRITER

MECH. CODE 31



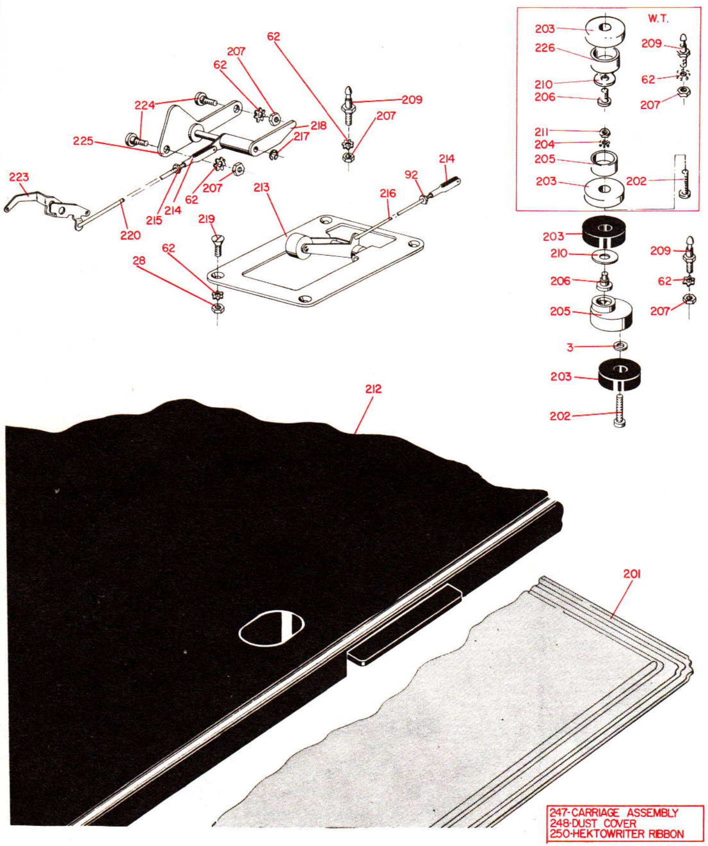

## HEKTOWRITER

MECH. CODE 31



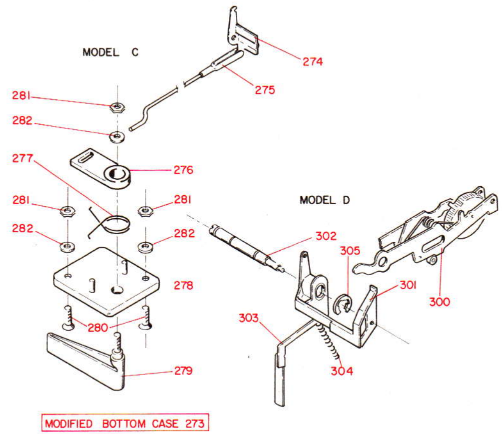
MECH. CODE 31

# HEKTOWRITER



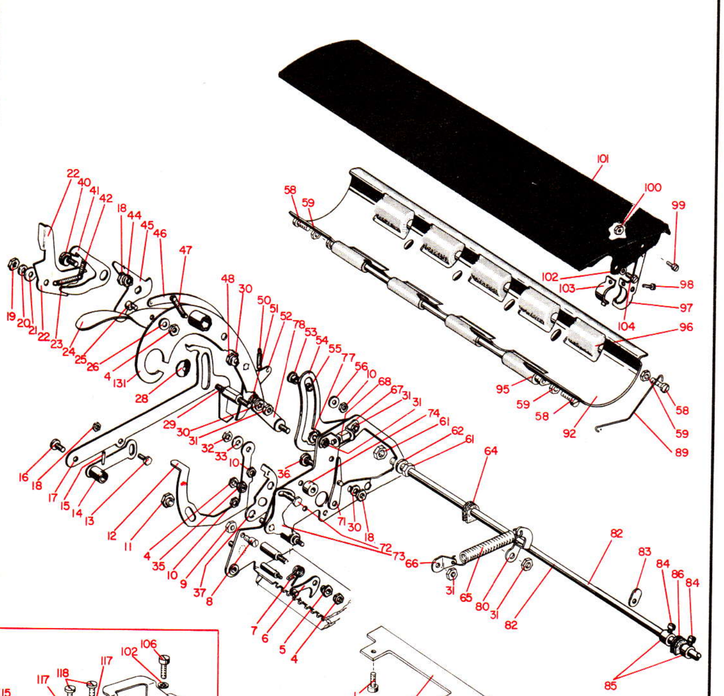

MECH. CODE 31

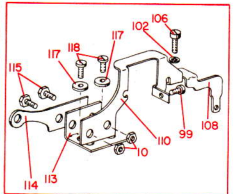
# HEKTOWRITER



# LP FORMSWRITER

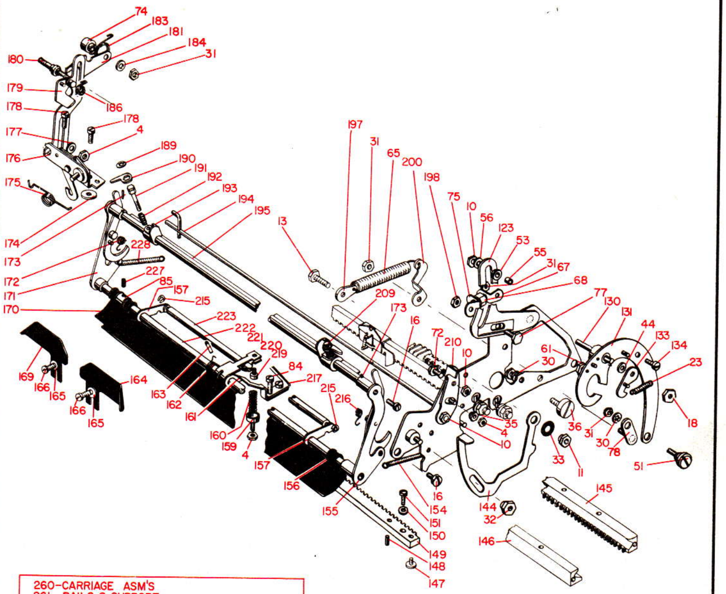
MECH. CODE 33



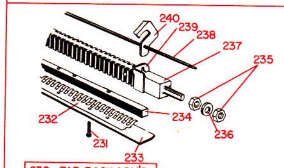


# LP FORMSWRITER

MECH. CODE 33

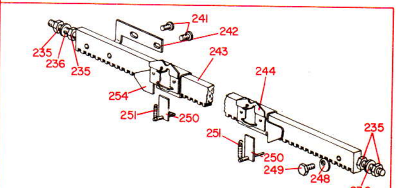


260–CARRIAGE ASM'S
261 –RAILS & SUPPORT
262 –CARRIAGE & RACK
297–CARRIAGE TRUCK



230–TAB RACK ASM'S

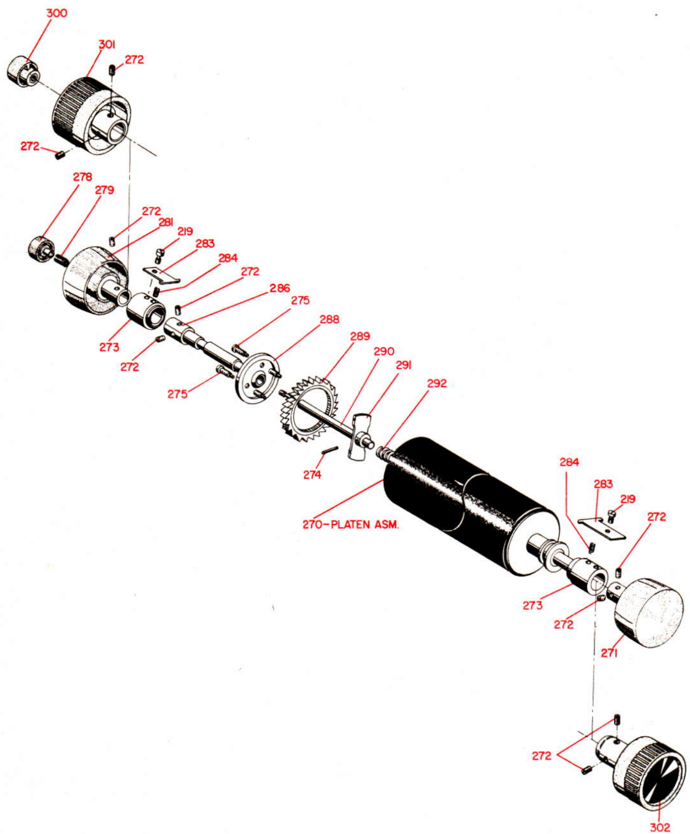
TAB RACK & COMPONENTS



MARGIN RACK & COMPONENTS

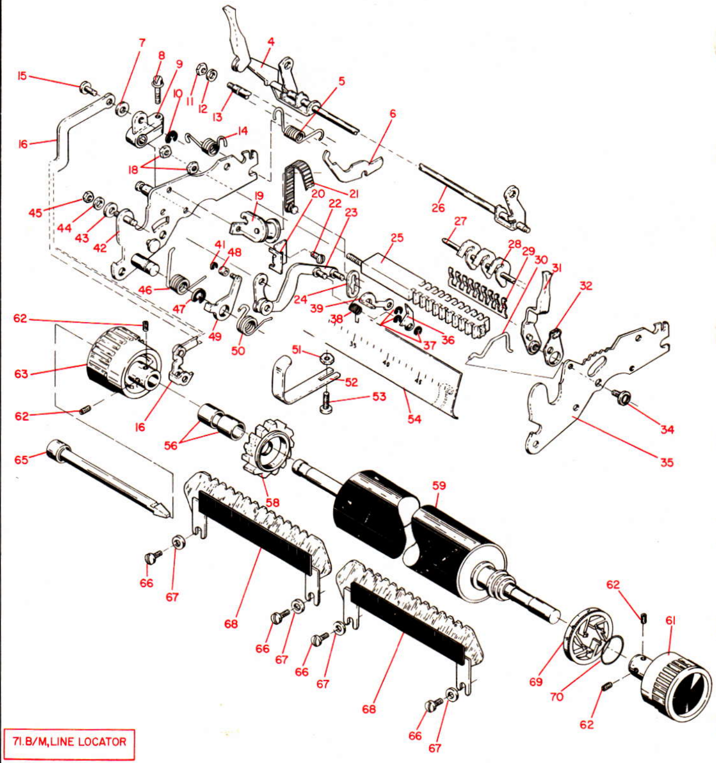
MECH. CODE 33

## LP FORMSWRITER



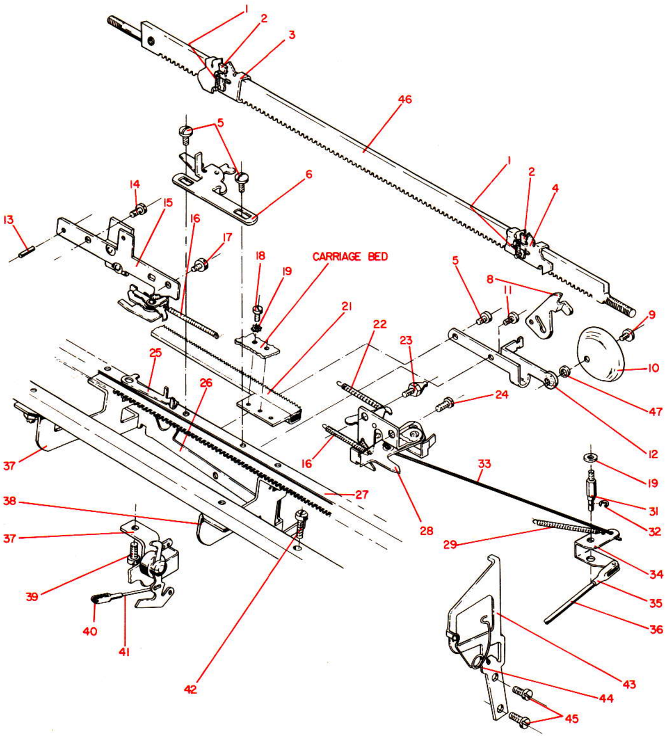

MECH. CODE 34

## BRAILLE CARRIAGE & RAILS



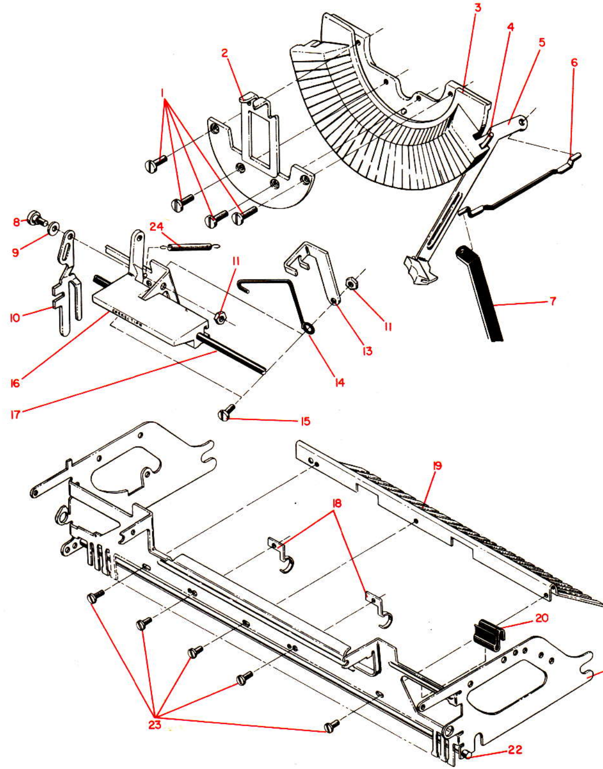
## BRAILLE RAILS & ESCAPEMENT

MECH. CODE 35



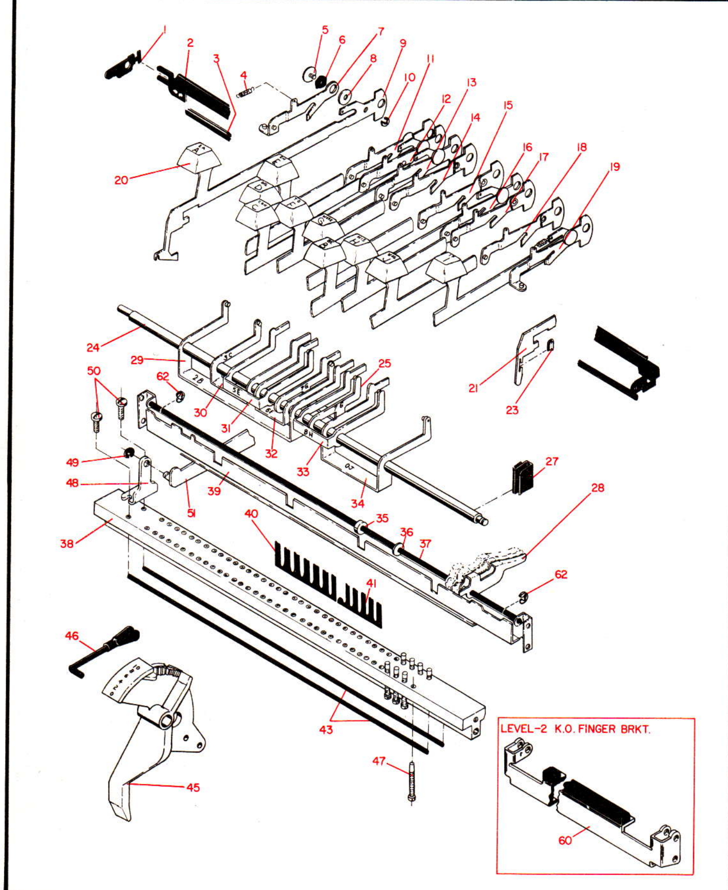

## BRAILLE TYPEBAR

MECH. CODE 37



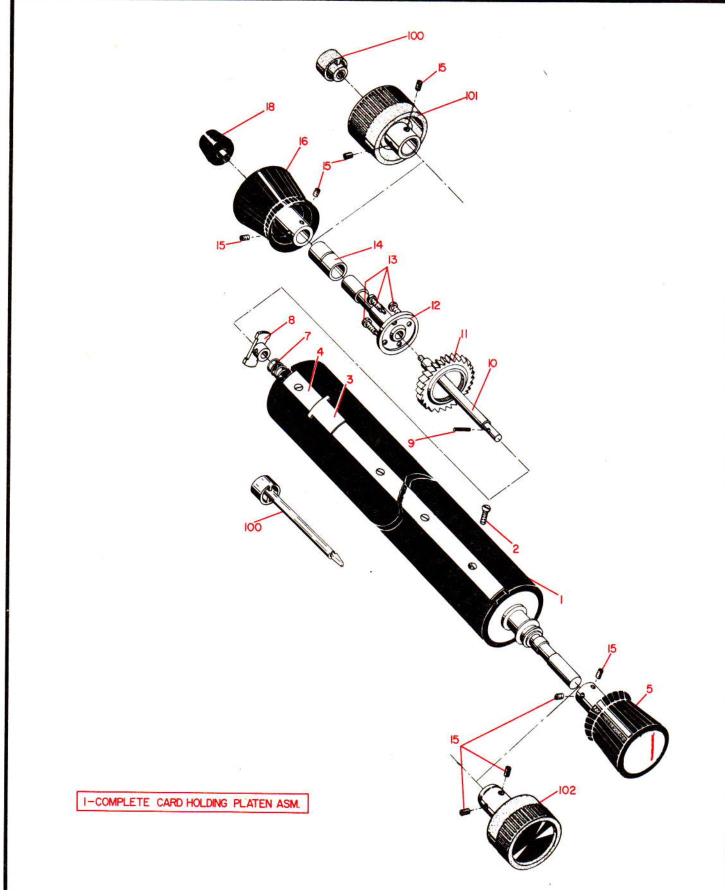
MECH. CODE 38

## BRAILLE KEYBOARD



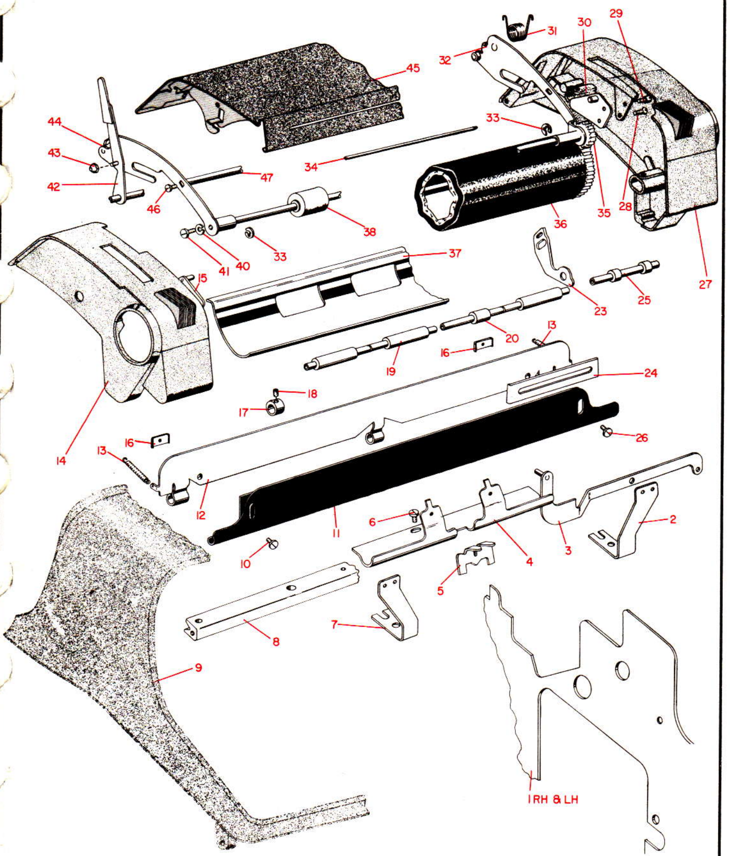

MECH. CODE 40

## CARDHOLDING PLATEN



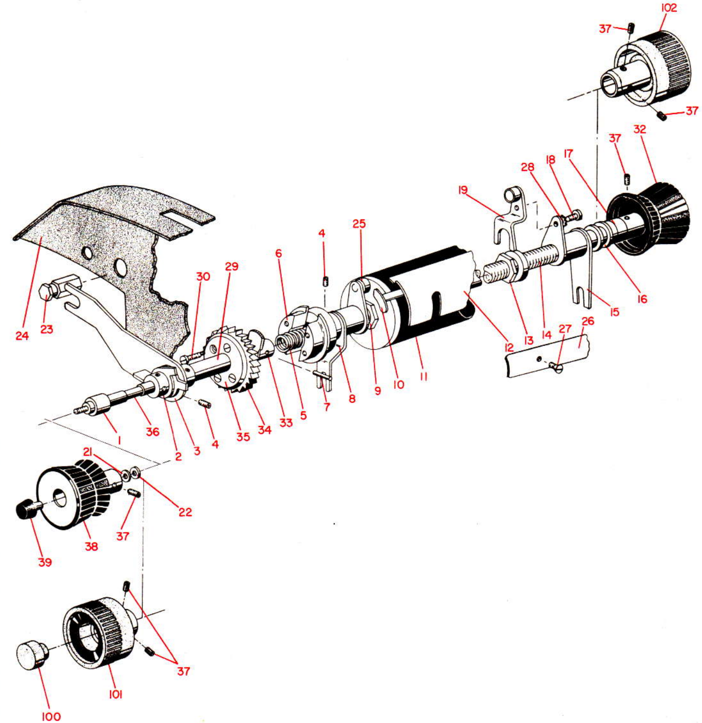
## CHECKWRITER

MECH. CODE 41




## CLAMPTYPE WAYBILL

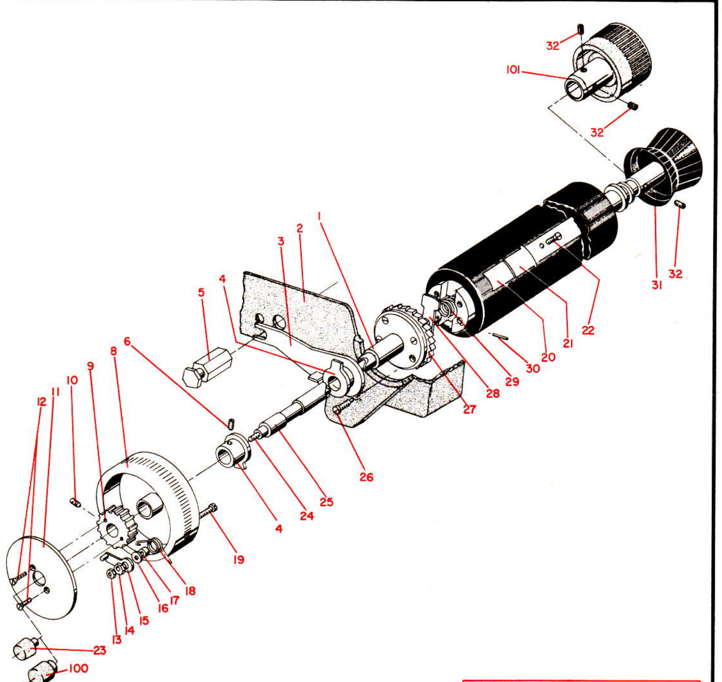
MECH. CODE 42




40-CLAMPTYPE WAYBILL PLATEN ASM

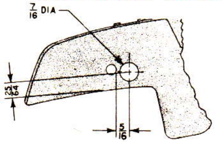
MECH. CODE **43**

# CARD POSITIONING PLATEN

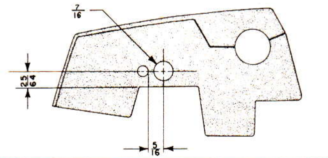


33-TAB CARD POSITIONING PLATEN ASM.

MODEL C END COVER REF. DRAWINGS

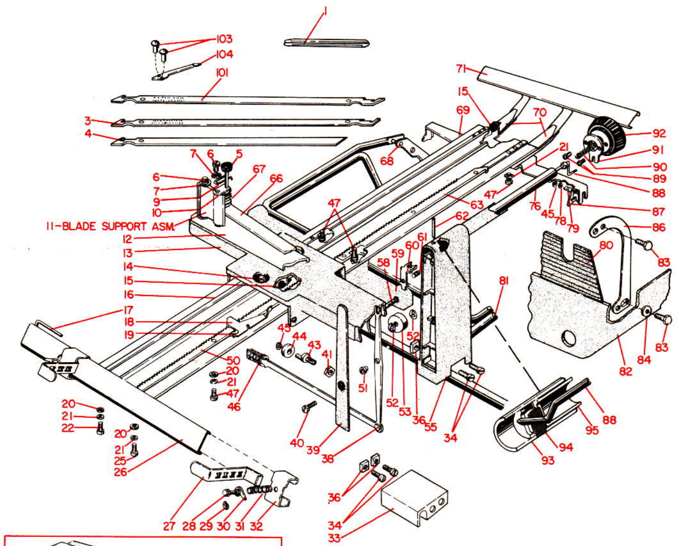


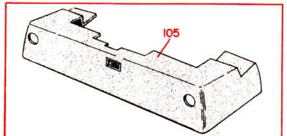

MODEL D END COVER REF. DRAWINGS




MECH. CODE **46**

# FORMSCARRIER

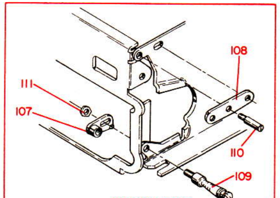



2-SLITTER BLADE ASM.
97-FORMSCARRIER ASM.

99-DUST COVER
100-FORMS GUIDE B/M

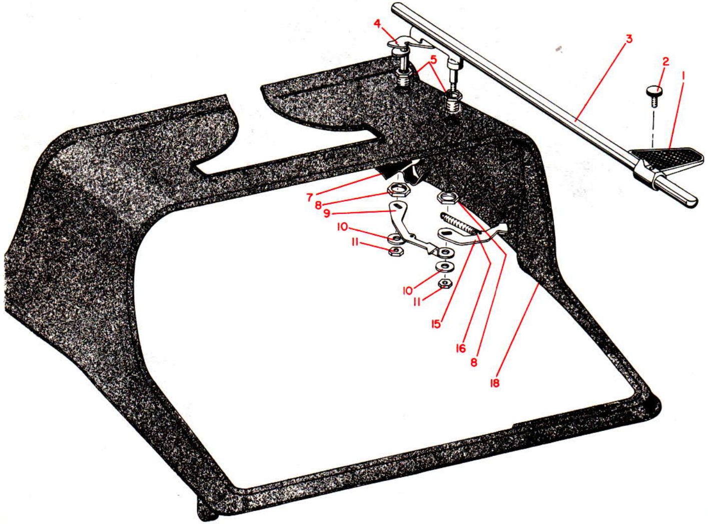
FORMS CARRIER PAINTED PARTS AVAILABLE IN GRAY ONLY, OTHER COLORS MUST BE ORDERED ON S.E.R.



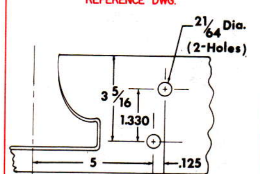

FORMSCARRIER

## LEADING EDGE GUAGE
MODEL C1 & C4

MECH. CODE 47

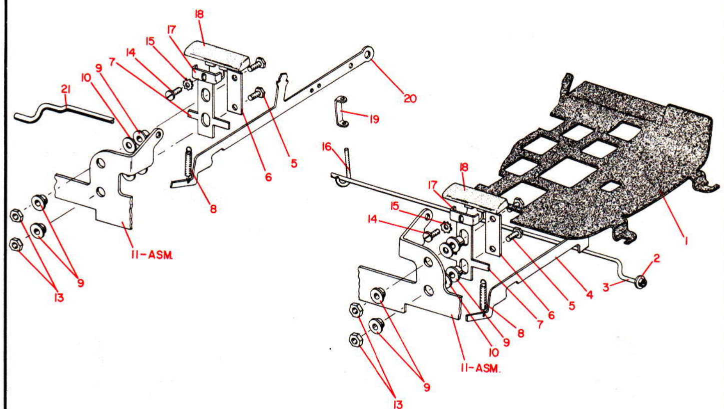



REFERENCE DWG.



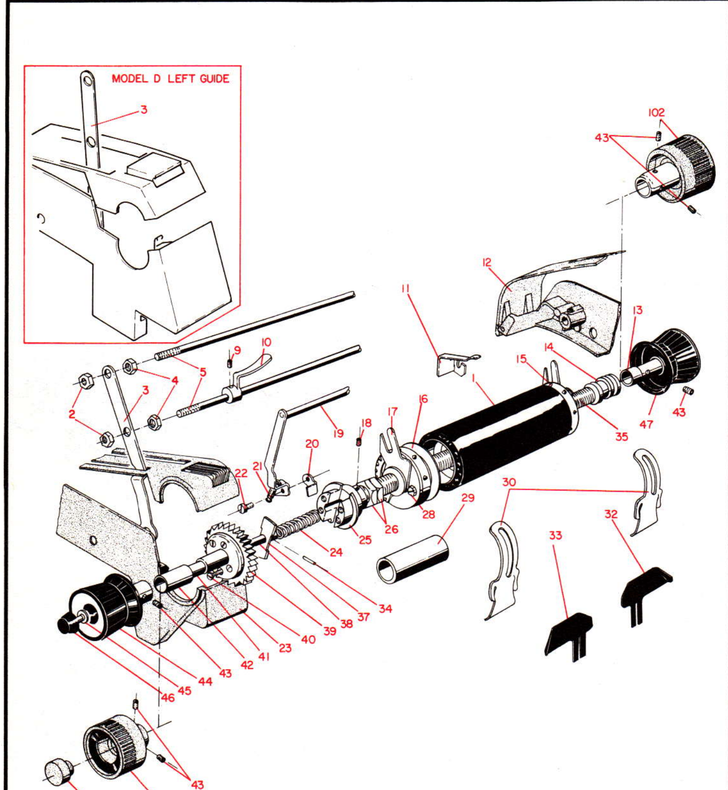

## PALM TAB

MECH. CODE 48



MECH. CODE 49

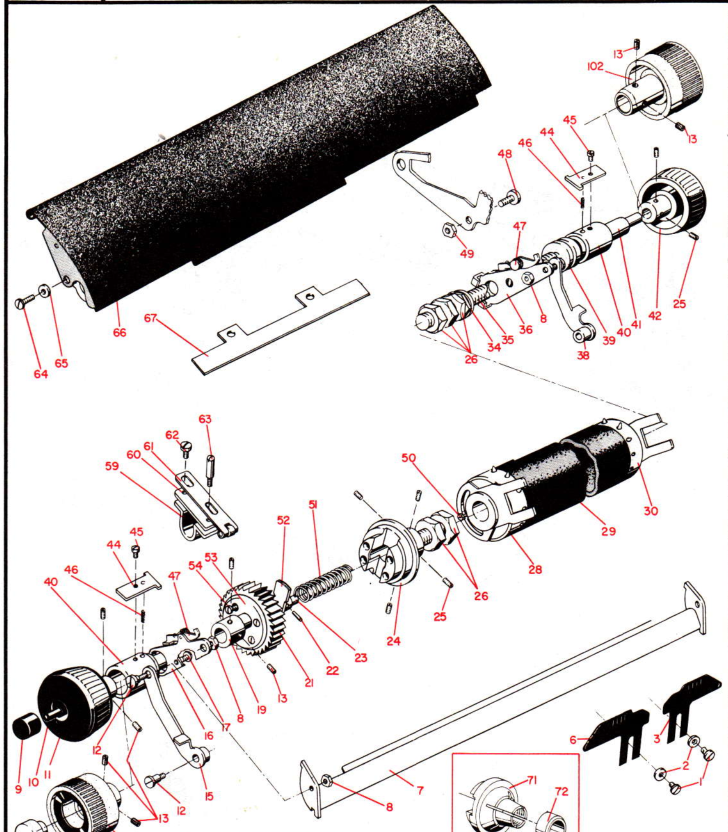
## PIN FEED PLATEN




48-PIN FEED PLATEN
49-ATTACHMENT HARDWARE FOR PIN FEED PLATEN

MECH. CODE 50

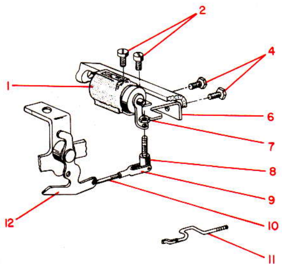
## PIN FEED LIFT PLATEN



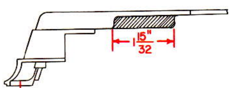
69-PIN FEED PLATEN ASM.
F.I. B/M NOT AVAILABLE

# STROKE COUNTER

MECH. CODE 51

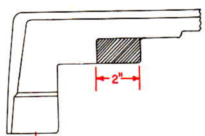



MODEL C




*SEE NOTE AT END OF LISTING

MODEL D

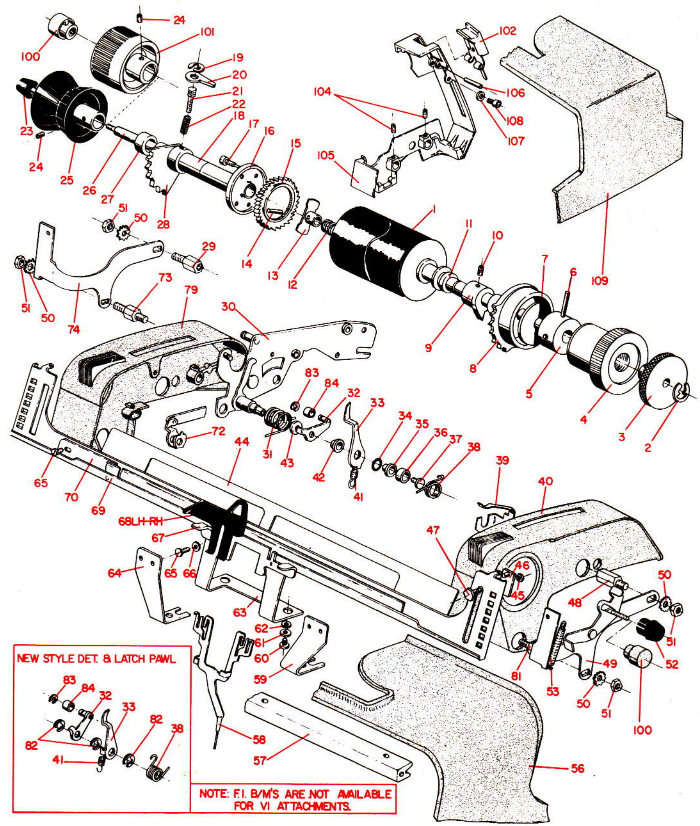



*SEE NOTE AT END OF LISTING

KEYSTROKE COUNTER PARTS FOR REPLACEMENT ONLY- F.I. B/M NOT AVAILABLE.

# VISIBLE INDEX PLATEN

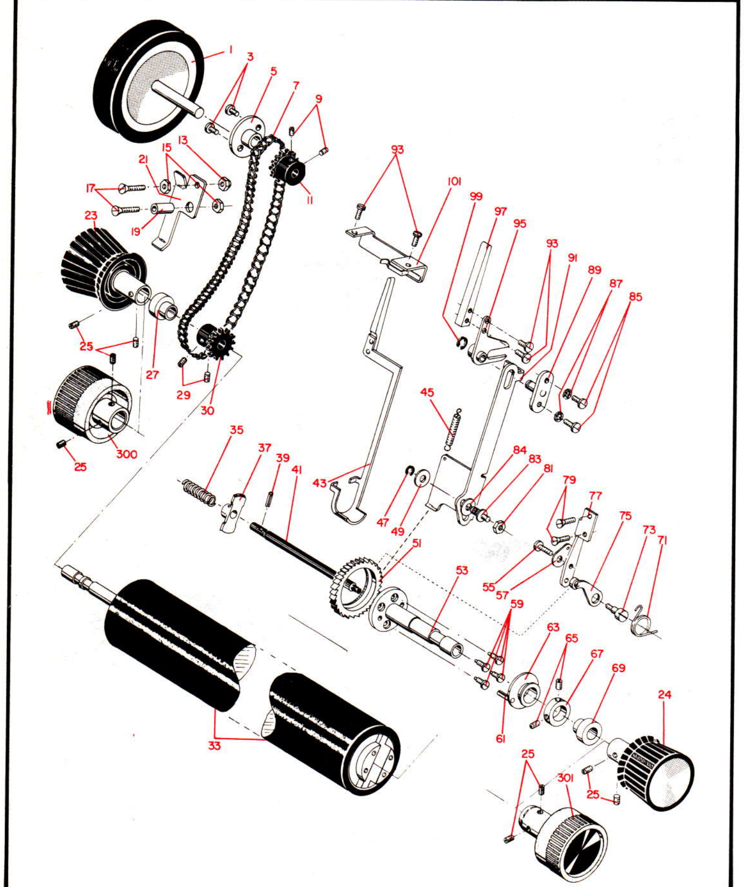
MECH. CODE 52




NOTE: F.I. B/M'S ARE NOT AVAILABLE FOR VI ATTACHMENTS.

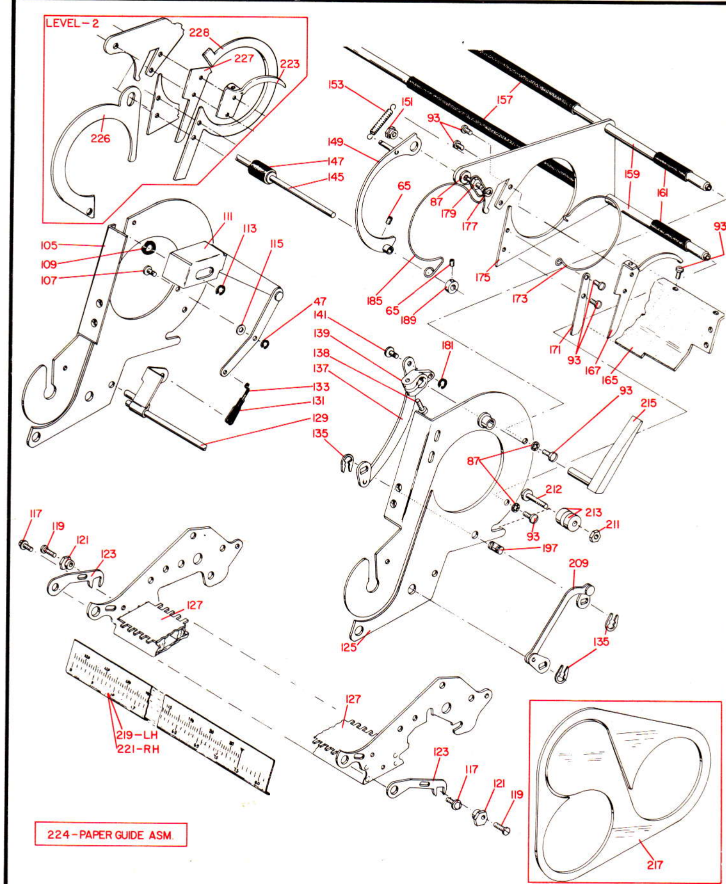
MECH. CODE
**54**

## OPEN END CARRIAGE



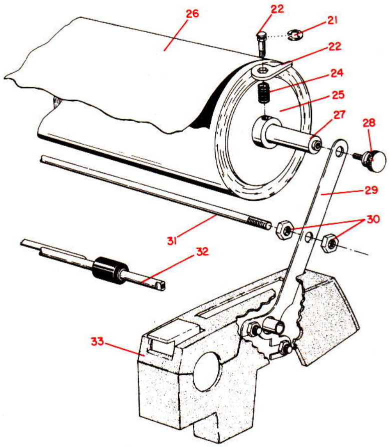

MECH. CODE
**54**

## OPEN END CARRIAGE



# HANDICAP ATTACHMENTS
MODEL D1 & D4

MECH. CODE 60



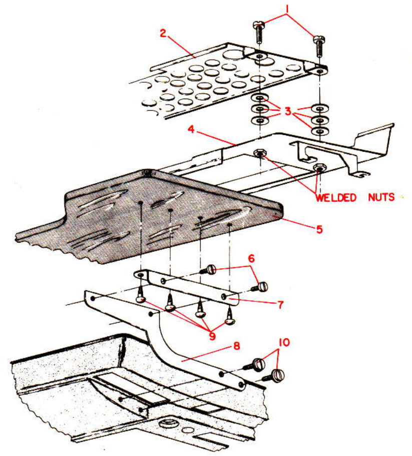

## INSTALLATION INSTRUCTIONS

**Paper Holder**

1. Remove and discard existing Right & Left Carriage End Covers.
2. Fasten Right & Left Upright Guides (Ref. 29) as shown.
3. Install Right & Left Carriage End Covers over Right & Left Upright Guides.
4. Place one Nut (Ref. 30) on each end of Stiffener Rod. Insert Stiffener Rod into Upright Guide and secure with Nuts (Ref. 30).
5. Assemble and install Paper Roll, Flanges, and Lock Screws and attach to Upright Guides with thumb screws.
6. Replace paper bail shaft with tear-off blade (Ref. 32).
7. Position Paper Roll Left to Right on Shaft for desired typing position.

# HANDICAP ATTACHMENT
MODEL D1 & D4

MECH. CODE 60




## INSTALLATION INSTRUCTIONS

**Arm Rest**

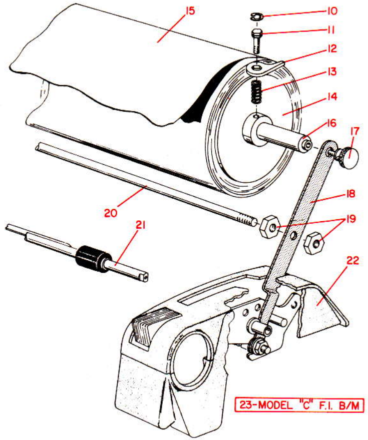
1. Fasten Keyboard rest to Mounting Supports (Ref. 7) with eight wood screws.
2. Install Right & Left Arm Rest Brackets (Ref. 8) on the Mounting Supports.
3. Using the Arm Rest Assembly as a guide, drill four holes (use a number 33 size drill) in the Bottom Cover as shown in the illustration.
4. Secure the Keyboard Rest to the bottom Cover with self-tapping screws provided (Ref. 6).
5. Replace the Carriage Return button with one of the three buttons provided (Ref. 11).

**Keyboard Rest**

1. Remove existing Keyplate and replace with Lower Keyplate (Ref. 4).
2. Install Upper Keyplate (Ref. 2) using spacing Washers (Ref. 3) as required to obtain desired elevation.

MECH. CODE 61

# HANDICAP ATTACHMENT
MODEL C1 & C4



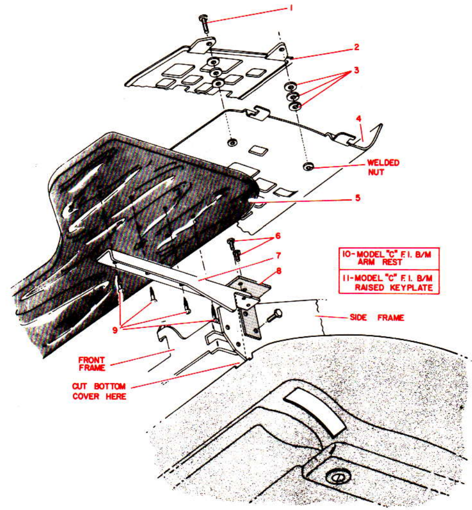

## INSTALLATION INSTRUCTIONS

**Paper Holder**

1. Remove and discard existing Right & Left Carriage End Covers.
2. Fasten Right & Left Upright Guides as shown.
3. Install Right & Left Carriage End Covers over Right & Left Upright Guides.
4. Place one Nut, Ref. 19, on each end of Stiffener Rod. Insert Stiffener Rod into Upright Guides & secure with Nuts, Ref. 19.
5. Assemble and install paper roll, Flanges, & Lock Screws and attach to upright guides with thumb screws.
6. Replace paper bail shaft with tear-off blade.
7. Position Paper Roll Left to Right on Shaft for desired typing position.

MECH. CODE 61

# HANDICAP ATTACHMENT
MODEL C1 & C4




## INSTALLATION INSTRUCTIONS

**Arm Rest**

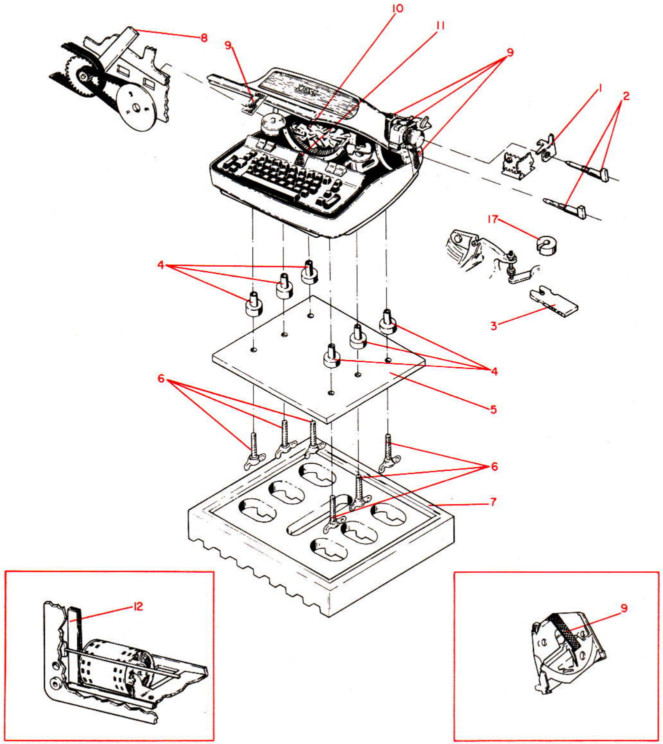
1. Fasten Keyboard Rest to Mounting Brackets (Ref. 7) with eight wood screws.
2. Remove Bottom Cover. Install Right & Left Brackets outside Side Frames with existing frame screws.
3. File Bottom Cover to fit around Right & Left Brackets in area shown and re-install cover.
4. Secure Keyboard Rest beneath Right & Left Brackets as shown.

**Keyboard Rest**

1. Remove existing Keyplate and replace with Lower Keyplate, Ref. 4.
2. Install Upper Keyplate, Ref. 2, using Spacing Washers, Ref. 3, as required to obtain desired elevation.

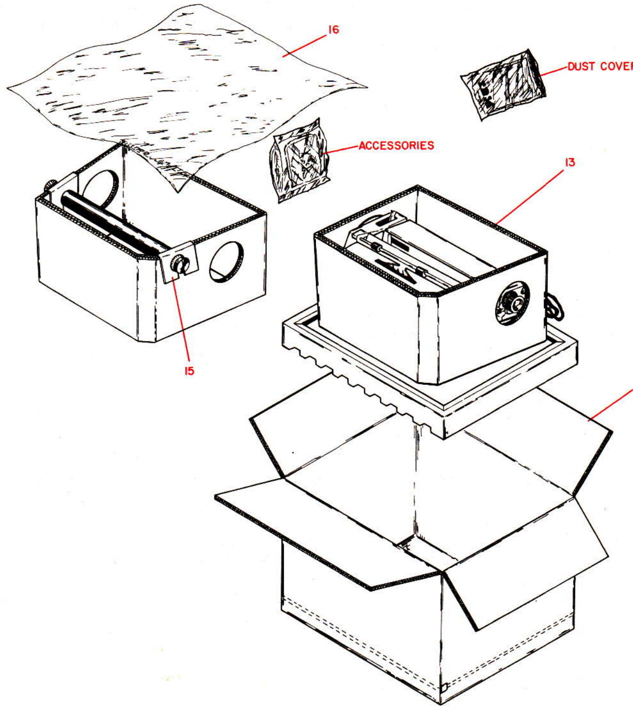
# PACKING PARTS

MECH. CODE 65




# PACKING PARTS

MECH. CODE 65



MECH. CODE
65

# PACKING/UNPACKING PROCEDURES

## PACKING PROCEDURE

A. Tilt machine so it rests on rear of bottom cover, insert motor wedge 7340494 folded double at scoreline, on left end of motor as shown. Insert plastic spacers 7340206 (6) in bottom case. Place pallet over spacers, insert thumbscrews through pallet and tighten: middle screws first. Torque applied to thumbscrews 7340205 not to exceed 20 inch pounds.

B. Place one inch strip of tape 7340090 one-half inch from end on top of rear rail on both sides. Grain of tape to run with length of rail. Center carriage on machine so rails are flush. Insert carriage bracket over carriage end plate at right rear and left rear of carriage as shown. Put end plug 7340743 through holes in brackets and push them between the rails. Put end plugs between the front rails on both sides of the machine.

C. With basket raised, insert segment support cushion (2) on each side of machine. Insert belt retainer 7340494 between frame and pulley, using double thickness on fabric ribbon machines and single thickness on carbon ribbon machines. On carbon ribbon machine, secure ribbon pressure plate using a three to four inch piece of tape 7340090. Tape rear paper table on 23 and 29 inch Model D by applying tape from front paper scale across paper bail to the rear paper table approximately 6 inches in on 2 sides.

D. Place rest pad spring retainer under rest pad by folding double at scoreline and slipping folded edge between rear of rest pad and selector bar guide. Place tissue paper in basket. Wrap tape under and over lip of cover and close cover. Seal loose end of tape to bottom cover. Tape rear cover to bottom cover on both sides of machine as shown on Model C only. Tape carriage end cover on both sides as shown on Model D only.

E. Place foam tray in carton. Set palletized machine in tray. Cover machine with polyethylene sheet 7341223. Slip liner over machine. Place accessory pack and dust cover between liner and carton. Cord to be placed between liner and carton. Seal carton.

F. On 23 and 29 inch machines, P/N 7340837, outer liner, is placed around assembly 7340544 front liner and 7340543 back liner.

G. On 12.5 and 16 inch machines, when shipping extra platen, place platen in slots in liner and secure with retainer 7341085.

## UNPACKING PROCEDURES

A Open carton by pulling tear tape completely around four sides; remove detached portion; lift out liner by spreading sides away from carriage ends; remove polyethylene sheet; lift machine out of tray.

B. Tilt palletized machine on end so it rests on rear of bottom cover.

C. Remove thumbscrews; by hand normally, but if screws are abnormally tight a silver dollar, 50 cent piece, or a strong pencil serves very well as a loosening device.

D. Remove pallet board and plastic spacers. Remove bottom pan and pull out cardboard motor wedge located on left end of motor, set machine down and open top cover. Remove tape.

E. Remove belt retainer wedge. Basket tissue paper. Type rest springs retainer and segment support cushions. On carbon ribbon machine, remove the tape from the ribbon pressure plate. For 17 inch machine, remove rail guards from basket and mounting.

F. Remove end plugs by applying a slight pull while turning to right or left and pull out. Remove carriage brackets from carriage end plates. Remove tape from rear rails both sides.

G. Machine is now ready for preinstallation checkout.

# POLYESTER PAINTED COVERS - ALL COLORS

**NOTE:** A. Where Cover Parts for Special Machines are not listed, order Std. or Exec. parts as Appropiate.
B. End Covers are complete. Other cover parts in this chart do not come with screws or supporting hardware.

| REAR COVER | MECH. | REF. | Pearl White P/N | Sapphire Blue P/N | Emerald Green P/N | Raven Black P/N | Gray-Stone P/N | Sdstone Beige P/N | Topaz Bronze P/N | Opal Gray P/N | Garnet Rose P/N | Onyx Blue P/N | Classic Blue P/N | Willow Green P/N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Std. & Exec. | 204 | 207 | 1268850 | 1268851 | 1268852 | 1268853 | 1268854 | 1268855 | 1268856 | 1268857 | 1268858 | 1268859 | 1231501 | 1231508 |
| Dec. Tab | 230 | 96 | 1268860 | 1268861 | 1268862 | 1268863 | 1268864 | 1268865 | 1268866 | 1268867 | 1268868 | 1268869 | 1231502 | 1231509 |
| Formscarrier | 246 | 105 | 1268870 | 1268871 | 1268872 | 1268873 | 1268874 | 1268875 | 1268876 | 1268877 | 1268878 | 1268879 | 1231503 | 1231510 |
| Std. 30" | 204 | 207 | 1268880 | 1268881 | 1268882 | 1268883 | 1268884 | 1268885 | 1268886 | 1268887 | 1268888 | 1268889 | 1231504 | 1231511 |
| Dec. Tab 30" | 230 | 96 | 1268890 | 1268891 | 1268892 | 1268893 | 1268894 | 1268895 | 1268896 | 1268897 | 1268898 | 1268899 | 1231505 | 1231512 |
| Std. Stke. Ctr. | 204 | 207 | 1268900 | 1268901 | 1268902 | 1268903 | 1268904 | 1268905 | 1268906 | 1268907 | 1268908 | 1268909 | 1231506 | 1231513 |
| Dec. Tab. Stke. Ctr. | 230 | 96 | 1268910 | 1268911 | 1268912 | 1268913 | 1268914 | 1268915 | 1268916 | 1268917 | 1268918 | 1268919 | 1231507 | 1231514 |
| 30" Std. Stke. Ctr. | 204 | 207 | 1268920 | 1268921 | 1268922 | 1268923 | 1268924 | 1268925 | 1268926 | 1268927 | 1268928 | 1268929 | 1231516 | 1231520 |
| 30" Dec. Tab Stke. Ctr. | 230 | 96 | 1268930 | 1268931 | 1268932 | 1268933 | 1268934 | 1268935 | 1268936 | 1268937 | 1268938 | 1268939 | 1231515 | 1231519 |
| **FRONT COVER** | | | | | | | | | | | | | | |
| 30" | 204 | 209 | 1268940 | 1268941 | 1268942 | 1268943 | 1268944 | 1268945 | 1268946 | 1268947 | 1268948 | 1268949 | 1231517 | 1231521 |
| All Except 30" | 204 | 209 | 1268950 | 1268951 | 1268952 | 1268953 | 1268954 | 1268955 | 1268956 | 1268957 | 1268958 | 1268959 | 1231518 | 1231522 |

### LH END COVER RAVEN BLACK

| TYPE | MECH. | REF. | P/N |
|---|---|---|---|
| Std. | 204 | 205 | 1268966 |
| Ck. Writer | 241 | 14 | 1268960 |
| Crd. Pos. Pltn. | 243 | 2 | 1268974 |
| Pin Feed | 249 | 23 | 1268982 |
| Exec. | 204 | 205 | 1171306 |

### RH END COVER RAVEN BLACK

| TYPE | MECH. | REF. | P/N |
|---|---|---|---|
| Std. | 204 | 206 | 1268964 |
| Ck. Writer | 241 | 27 | 1268984 |
| Pin Feed | 249 | 12 | 1268980 |
| Braille | 204 | 206 | 1268962 |
| Exec. | 204 | 206 | 1171307 |

### BOTTOM COVER RAVEN BLACK

| TYPE | MECH. | REF. | P/N |
|---|---|---|---|
| Std. | 204 | 208 | 1268972 |
| Exec. | 204 | 208 | 1268970 |
| Formscarr. | 246 | 82 | 1268968 |
| - - - - - - - - | - - - | - - - | - - - - - - - |
| - - - - - - - - | - - - | - - - | - - - - - - - |

### 30" RAIL SUPP. RAVEN BLACK

| TYPE | MECH. | REF. | P/N |
|---|---|---|---|
| L/H | 202 | 105 | 1268842 |
| R/H | 202 | 105 | 1268840 |
| - - - | - - - | - - - | - - - - - - - |
| - - - | - - - | - - - | - - - - - - - |
| - - - | - - - | - - - | - - - - - - - |

### RAIL GUARD RAVEN BLACK

| SIZE | MECH. | REF. | P/N |
|---|---|---|---|
| 20" & 24" | 202 | 101 | 1268697 |
| 30" | 202 | 101 | 1268997 |
| - - - - - - - | - - - | - - - | - - - - - - - |
| - - - - - - - | - - - | - - - | - - - - - - - |
| - - - - - - - | - - - | - - - | - - - - - - - |

### REAR PAPER TBL. RAVEN BLACK

| SIZE | MECH. | REF. | P/N |
|---|---|---|---|
| 13" | 202 | 303 | 1268986 |
| 17" | 202 | 303 | 1268988 |
| 20" | 202 | 303 | 1268990 |
| 24" | 202 | 303 | 1268992 |
| 30" | 202 | 303 | 1268994 |

### LH END COVER ONYX BLUE

| TYPE | MECH. | REF. | P/N |
|---|---|---|---|
| Std. | 204 | 205 | 1268967 |
| Ck. Writer | 241 | 14 | 1268961 |
| Crd. Pos. Pltn. | 243 | 2 | 1268975 |
| Pin Feed | 249 | 23 | 1268983 |
| Exec. | 204 | 205 | 1171306 |

### RH END COVER ONYX BLUE

| TYPE | MECH. | REF. | P/N |
|---|---|---|---|
| Std. | 204 | 206 | 1268965 |
| Ck. Writer | 241 | 27 | 1268985 |
| Pin Feed | 249 | 12 | 1268981 |
| Braille | 204 | 206 | 1268963 |
| Exec. | 204 | 206 | 1171307 |

### BOTTOM COVER ONYX BLUE

| TYPE | MECH. | REF. | P/N |
|---|---|---|---|
| Std. | 204 | 208 | 1268973 |
| Exec. | 204 | 208 | 1268971 |
| Formscarr. | 246 | 82 | 1268969 |
| - - - - - - - - | - - - | - - - | - - - - - - - |
| - - - - - - - - | - - - | - - - | - - - - - - - |

### 30" RAIL SUPP. ONYX BLUE

| TYPE | MECH. | REF. | P/N |
|---|---|---|---|
| L/H | 202 | 105 | 1268844 |
| R/H | 202 | 105 | 1268838 |
| - - - | - - - | - - - | - - - - - - - |
| - - - | - - - | - - - | - - - - - - - |
| - - - | | | - - - - - - - |

### RAIL GUARD ONYX BLUE

| SIZE | MECH. | REF. | P/N |
|---|---|---|---|
| 20" & 24" | 202 | 101 | 1268698 |
| 30" | 202 | 101 | 1268998 |
| - - - - - - - | - - - | - - - | - - - - - - - |
| - - - - - - - | - - - | - - - | - - - - - - - |
| - - - - - - - | - - - | - - - | - - - - - - - |

### REAR PAPER TBL. ONYX BLUE

| SIZE | MECH. | REF. | P/N |
|---|---|---|---|
| 13" | 202 | 303 | 1268987 |
| 17" | 202 | 303 | 1268989 |
| 20" | 202 | 303 | 1268991 |
| 24" | 202 | 303 | 1268993 |
| 30" | 202 | 303 | 1268836 |

MECH. CODE 12

# PLATEN INDEXING CHART

The platen indexing chart was designed using part numbers for all machines that use standard indexing parts. It can be used for finding the number of lines in 10 inches of form. To determine the number of lines in 1" of form, move decimal point one place to left To read the chart, follow horizontal lines to right-hand margin. All parts in a specific line that are designated C in the chart heading are used as an assembly to give specified lines per inch on a Model C. The same applies to parts under headings marked A or B. Allowance for the thickness of forms must be made when selecting the ratchet. This chart applies to forms with .030" thickness or less. Each additional .030" thickness requires more teeth in the ratchet By using the table listed below, additional thickness can be compensated

29T to 34T – 1 additional tooth
35T to 57T – 2 additional teeth
58T to 66T – 3 additional teeth

| PLATEN RATCHET P/N's | | | | | DETENT LEVER POSITIONS | | | | | | DETENT P/N's | | | DETENT SPRINGS | | | INDEX PAWLS | | | UPPER INDEX ** PAWL STOP | | LINE SPACE LEVERS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No of Teeth | Model A | Model B Universal | Model C Old Style | Late C Model D | 1 pos | Teeth Index | 2 pos | Teeth Index | 3 pos | Teeth Index | Mod A | Mod B | Mod C&D Roller | Mod A | Mod B | Mod C Mod D | Mod A | Mod B | Mod C Mod D | Mod A | Mod B | Mod C | Mod. D Std. | Mod. D Exec. | Stamp No |
| 24 | 1002224 | ------- | ------- | ------- | 43.7 | 1 | 21.8 | 2 | 14.5 | 3 | 1072875 | ------- | ------- | 1072479 | ------- | ------- | 1073401 | ------- | ------- | 1076865 | ------- | ------- | ------- | ------- | - |
| 25 | ------- | ------- | ------- | ------- | 45.5 | 1 | 22.7 | 2 | 15.2 | 3 | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | - |
| 26 | ------- | ------- | ------- | ------- | 47.3 | 1 | 23.7 | 2 | 15.8 | 3 | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | - |
| 27 | 1002227 | ------- | ------- | ------- | 49.1 | 1 | 24.6 | 2 | 16.4 | 3 | 1072875 | ------- | ------- | 1072479 | ------- | ------- | 1073401 | ------- | ------- | 1076865 | ------- | ------- | ------- | ------- | - |
| 28 | ------- | 1261928 | ------- | ------- | 50.9 | 1 | 25.5 | 2 | 17.0 | 3 | ------- | 1103670 | ------- | ------- | 1108928 | ------- | ------- | 1103599 | ------- | ------- | 1103612 | ------- | ------- | ------- | - |
| 29 | 1002229 | 1107229 | 1117129 | 1155129 | 52.8 | 1 | 26.4 | 2 | 17.6 | 3 | 1076864 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103613 | 1115681 | 1171652 | 11/1669 | 1 |
| 30 | 1002230 | 1108330 | ------- | ------- | 54.6 | 1 | 27.3 | 2 | 18.2 | 3 | 1076880 | 1103670 | ------- | 1072479 | 1108928 | ------- | 1073401 | 1103599 | ------- | 1076865 | 1103613 | ------- | ------- | ------- | - |
| 31 | 1002231 | 1110231 | ------- | ------- | 56.4 | 1 | 28.2 | 2 | 18.8 | 3 | 1076880 | 1103670 | ------- | 1072479 | 1108928 | ------- | 1073401 | 1103599 | ------- | 1000325 | 1103613 | ------- | ------- | ------- | - |
| 32 | 1002232 | 1109832 | 1117132 | 1155132 | 58.2 | 1 | 29.1 | 2 | 19.4 | 3 | 1072875 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103614 | 1115682 | 1171653 | 1171670 | 2 |
| 33 | 1002233 | 1107233 | 1117133 | 1155133 | 60.0 | 1 | 30.0 | 2 | 20.0 | 3 | 1076864 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103614 | 1115682 | 1171653 | 1171670 | 2 |
| 34 | 1002234 | 1104034 | 1117134 | 1155134 | 61.8 | 1 | 30.9 | 2 | 20.6 | 3 | 1076882 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103614 | 1115682 | 1171653 | 1171670 | 2 |
| 35 | 1002235 | 1104035 | 1117135 | 1155135 | 63.7 | 1 | 31.8 | 2 | 21.2 | 3 | 1072875 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103614 | 1115683 | 1171654 | 1171671 | 3 |
| 36 | 1002236 | 1104036 | 1117136 | 1155136 | 65.5 | 1 | 32.7 | 2 | 21.8 | 3 | 1076880 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103615 | 1115683 | 1171654 | 1171671 | 3 |
| 37 | ------- | 1110237 | 1117137 | 1155137 | 67.3 | 1 | 33.7 | 2 | 22.4 | 3 | ------- | 1103670 | 1115657 | ------- | 1108928 | 1117928 | ------- | 1103599 | 1103599 | ------- | 1103615 | 1115683 | ------- | ------- | 3 |
| 38 | 1002238 | 1104038 | 1117138 | 1155138 | 69.1 | 1 | 34.6 | 2 | 23.0 | 3 | 1076864 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103615 | 1115684 | 1171655 | 1171672 | 4 |
| 39 | 1002239 | 1104039 | 1117139 | 1155139 | 70.9 | 1 | 35.5 | 2 | 23.7 | 3 | 1076880 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103615 | 1115684 | 1171655 | 1171672 | 4 |
| 40 | 1002240 | 1104040 | 1117140 | 1155140 | 72.8 | 1 | 36.4 | 2 | 24.3 | 3 | 1076880 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103615 | 1115684 | 1171655 | 1171672 | 4 |
| 41 | 1002241 | 1104041 | 1117141 | 1155140 | 37.3 | 2 | 24.9 | 3 | 18.6 | 4 | 1076882 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103603 | 1115685 | 1171656 | 1171673 | 5 |
| 42 | ------- | 1104042 | ------- | ------- | 38.2 | 2 | 25.5 | 3 | 19.1 | 4 | ------- | 1103670 | ------- | ------- | 1108928 | ------- | ------- | 1103599 | ------- | ------- | 1103603 | ------- | ------- | ------- | - |
| 43 | 1002243 | 1110243 | ------- | ------- | 39.1 | 2 | 26.1 | 3 | 19.5 | 4 | 1072875 | 1103670 | ------- | 1072479 | 1108928 | ------- | 1073401 | 1103599 | ------- | 1000325 | 1103603 | ------- | ------- | ------- | - |
| 44 | 1002244 | 1104044 | 1117144 | 1155144 | 40.0 | 2 | 26.6 | 3 | 20.0 | 4 | 1076864 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103604 | 1115686 | 1171657 | 1171674 | 6 |
| 44 | 1002244 | 1104044 | 1117144 | 1155144 | 80.0 | 1 | 40.0 | 2 | 26.6 | 3 | 1076864 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1002273 | 1103603 | 1115683 | 1171654 | 1171671 | 3 |
| 45 | 1002245 | 1104045 | 1117145 | 1155145 | 81.8 | 1 | 40.9 | 2 | 20.5 | 4 | 1076880 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1076866 | 1103601 | 1115687 | 1171658 | 1171675 | 7 |
| 46 | 1002246 | 1104046 | 1117146 | 1155146 | 83.7 | 1 | 41.8 | 2 | 20.9 | 4 | 1072880 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1076866 | 1103601 | 1115687 | 1171658 | 1171675 | 7 |
| 47 | ------- | 1110247 | 1117147 | 1155147 | 85.5 | 1 | 42.8 | 2 | 21.4 | 4 | ------- | 1103670 | 1115657 | ------- | 1108928 | 1117928 | ------- | 1103599 | 1103599 | ------- | 1103601 | 1115687 | ------- | ------- | 7 |
| 48 | 1002248 | 1104048 | 1117148 | 1155148 | 43.7 | 2 | 29.1 | 3 | 17.5 | 5 | 1072875 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1076865 | 1103602 | 1115688 | 1171659 | 1171676 | 8 |
| 48 | ------- | 1104048 | ------- | 1155148 | 43.7 | 2 | 21.8 | 4 | 14.6 | 6 | ------- | 1103670 | ------- | ------- | 1108928 | ------- | ------- | 1103599 | ------- | ------- | 1103610 | ------- | ------- | ------- | - |
| 49 | 1002249 | 1104049 | 1117149 | 1155149 | 44.6 | 2 | 29.7 | 3 | 17.8 | 5 | 1076864 | 1103670 | 1115657 | 1072479 | 1108928 | 1117928 | 1073401 | 1103599 | 1103599 | 1000325 | 1103602 | 1115688 | 1171659 | 1171676 | 8 |
| 50 | 1002250 | 1104050 | 1117150 | 1155150 | 45.5 | 2 | 30.3 | 3 | 22.7 | 4 | 1076884 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002272 | 1103605 | 1115689 | 1171660 | 1171677 | 9 |
| 50 | ------- | 1104050 | ------- | 1155150 | 45.5 | 2 | 22.7 | 4 | 15.2 | 6 | ------- | 1103634 | ------- | ------- | 1103637 | ------- | ------- | 1107452 | ------- | ------- | 1103610 | ------- | ------- | ------- | - |
| 51 | 1002251 | 1104051 | 1117151 | 1155151 | 46.4 | 2 | 30.9 | 3 | 23.2 | 4 | 1076884 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002272 | 1103605 | 1115689 | 1171660 | 1171677 | 9 |
| 52 | 1002252 | 1104052 | 1117152 | 1155152 | 47.3 | 2 | 31.5 | 3 | 23.7 | 4 | 1076884 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002272 | 1103606 | 1115689 | 1171660 | 1171677 | 9 |

MECH. CODE 12

# PLATEN INDEXING CHART

| PLATEN RATCHET P/N's | | | | | DETENT LEVER POSITIONS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| No of Teeth | Model A | Model B Universal | Model C Old Style | Late C Model D | 1 pos | Teeth Index | 2 pos | Teeth Index | 3 pos | Teeth Index |
| 52 | ------- | 1104052 | ------- | 1155152 | 43.3 | 2 | 23.7 | 4 | 15.8 | 6 |
| 53 | 1002253 | 1104053 | 1117153 | 1155153 | 48.2 | 2 | 32.1 | 3 | 24.1 | 4 |
| 54 | ------- | 1104054 | 1117154 | 1155154 | 49.1 | 2 | 24.6 | 4 | 16.4 | 6 |
| 55 | 1002255 | 1104055 | 1117155 | 1155155 | 50.0 | 2 | 33.3 | 3 | 25.0 | 4 |
| 56 | 1002256 | 1261956 | 1117156 | 1155156 | 50.9 | 2 | 34.0 | 3 | 25.5 | 4 |
| 56 | ------- | 1261956 | ------- | 1155156 | 50.9 | 2 | 25.5 | 4 | 17.0 | 6 |
| 57 | 1002257 | 1104057 | 1117157 | 1155157 | 51.8 | 2 | 34.6 | 3 | 25.9 | 4 |
| 58 | 1002258 | 1104058 | 1117158 | 1155158 | 52.8 | 2 | 35.2 | 3 | 26.4 | 4 |
| 58 | ------- | 1104058 | 1117158 | 1155158 | 52.8 | 2 | 26.4 | 4 | 17.6 | 6 |
| 59 | 1002259 | 1104059 | 1117159 | 1155159 | 53.7 | 2 | 35.8 | 3 | 26.8 | 4 |
| 60 | 1002260 | 1104060 | 1117160 | 1155160 | 54.6 | 2 | 36.4 | 3 | 27.3 | 4 |
| 60 | ------- | 1104060 | 1117160 | 1155160 | 54.6 | 2 | 27.3 | 4 | 18.2 | 6 |
| 61 | 1002261 | 1104061 | 1117161 | 1155161 | 55.5 | 2 | 37.0 | 3 | 27.7 | 4 |
| 62 | 1002262 | 1104062 | 1117162 | 1155162 | 56.4 | 2 | 37.6 | 3 | 28.2 | 4 |
| 62 | ------- | 1104062 | 1117162 | 1155162 | 56.4 | 2 | 28.2 | 4 | 18.8 | 6 |
| 63 | ------- | 1104063 | ------- | ------- | 57.3 | 2 | 38.2 | 3 | 28.7 | 4 |
| 64 | ------- | ------- | ------- | 1155164 | 58.2 | 2 | 38.8 | 3 | 29.1 | 4 |
| 64 | ------- | ------- | ------- | 1155164 | 58.2 | 2 | 29.1 | 4 | 19.4 | 6 |
| 65 | ------- | ------- | ------- | ------- | 59.1 | 2 | 39.4 | 3 | 29.6 | 4 |
| 66 | 1002266 | 1104066 | 1117166 | 1155166 | 60.0 | 2 | 40.0 | 3 | 30.0 | 4 |
| 66 | ------- | 1104066 | 1117166 | 1155166 | 60.0 | 2 | 30.0 | 4 | 20.0 | 6 |

| | *DETENT P/N's | | | DETENT SPRINGS | | | INDEX PAWLS | | | UPPER INDEX ** PAWL STOP | | LINE SPACE LEVERS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No of Teeth | Mod A | Mod B | Mod C&D Roller | Mod A | Mod B | Mod C Mod D | Mod A | Mod B | Mod C Mod D | Mod A | Mod B | Mod C | Mod. D Std. | Mod. D Exec. | Stamp No |
| 52 | ------- | 1103634 | ------- | ------- | 1103637 | ------- | ------- | 1107452 | ------- | ------- | 1103611 | ------- | ------- | ------- | - |
| 53 | 1076884 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002272 | 1103606 | 1115690 | 1171661 | 1171678 | 10 |
| 54 | ------- | 1103634 | 1000363 | ------- | 1103637 | 1115646 | ------- | 1107452 | 1107452 | ------- | 1103611 | 1115691 | 1171662 | 1171679 | 11 |
| 55 | 1076886 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002272 | 1103606 | 1115690 | 1171661 | 1171678 | 10 |
| 56 | 1076884 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002272 | 1103607 | 1115691 | ------- | ------- | 11 |
| 56 | ------- | 1103634 | ------- | ------- | 1103637 | ------- | ------- | 1107452 | ------- | ------- | 1103612 | ------- | ------- | ------- | -- |
| 57 | 1076884 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002272 | 1103607 | 1115692 | 1171663 | 1171680 | 12 |
| 58 | 1076886 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002272 | 1103607 | 1115692 | 1171663 | 1171680 | 12 |
| 58 | ------- | 1103634 | 1000363 | ------- | 1103637 | 1115646 | ------- | 1107452 | 1107452 | ------- | 1103612 | 1115693 | 1171664 | 1171681 | 13 |
| 59 | 1076886 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002273 | 1103607 | 1115692 | 1171663 | 1171680 | 12 |
| 60 | 1076886 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002273 | 1103608 | 1115694 | 1171665 | 1171682 | 14 |
| 60 | ------- | 1103634 | 1000363 | ------- | 1103637 | 1115646 | ------- | 1107452 | 1107452 | ------- | 1103613 | 1115681 | 1171652 | 1171669 | 1 |
| 61 | 1076884 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002273 | 1103608 | 1115694 | 1171665 | 1171682 | 14 |
| 62 | 1076884 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002273 | 1103608 | 1115694 | 1171665 | 1171682 | 14 |
| 62 | ------- | 1103634 | 1000363 | ------- | 1103637 | 1115646 | ------- | 1107452 | 1107452 | ------- | 1103613 | 1115691 | 1171662 | 1171679 | 11 |
| 63 | ------- | 1103634 | ------- | ------- | 1103637 | ------- | ------- | 1107452 | ------- | ------- | 1103608 | ------- | ------- | ------- | -- |
| 64 | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | -- |
| 64 | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | -- |
| 65 | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | ------- | -- |
| 66 | 1076884 | 1103634 | 1000363 | 1072479 | 1103637 | 1115646 | 1076862 | 1107452 | 1107452 | 1002273 | 1103609 | 1115695 | 1171666 | 1171683 | 15 |
| 66 | ------- | 1103634 | 1000363 | ------- | 1103637 | 1115646 | ------- | 1107452 | 1107452 | ------- | 1103614 | 1115693 | 1171664 | 1171681 | 13 |

| *Detent Arm P/N | Stamp |
|---|---|
| 1076864 | 29 |
| 1076880 | 31 |
| 1072875 | Unstamped |
| 1076882 | 45 |
| 1076886 | 55 |
| 1076884 | 62 |

| ** Pawl Stop P/N | Stamp |
|---|---|
| 1076865 | 29 |
| 1000325 | Unstamped |
| 1076866 | 45 |
| 1002272 | 55 |
| 1002273 | 62 |
| | |

# CALL PREVENTION PROCEDURE
# MODEL C AND D TYPEWRITER

A. *Note operator's comments
B. *Functionally check machine
C. Remove covers
D. *Clean rubber parts, cardholder, segment and type
E. Lubrication
   No. 2 Oil
   1. "Executive" interposers
   2. Decimal Tab interposers
   No. 10 Oil
   1. All bearings and pivot points
   2. *Motor bearings and power roll bearings
   3. Fulcrum wires
   4. Cross-over bails at side frame pivot points
   No. 23 Grease
   1. Decelerator clutch springs
   2. 1/2 space camming lever surface
   3. Intermediate pulley
   4. Motor pulley teeth
   5. Motor shaft
   6. Shift toggle springs
   7. Spacebar actuating lever – keylever contact point
   8. Knockoff finger channels
   9. T-bar studs and roller
   10. Primary keylever cross-over bail hooks
   11. Auxiliary keylever cross-over bail hooks
F. Planned parts replacement
G. *Electrical safety check
H. Call prevention machine check
   1. Carriage and rails
      a. Levers (operation – loose setscrews)
      b. Trucks (carriage movement)
      c. Feed rolls (binds – end play)
      d. Racks (loose nuts and screws)
      e. Rear rail (loose screws)
      f. *Repositioning indicator and expand
   2. Under machine
      a. Cam clearance (all cams)
      b. Decelerator cam arms (binds)
      c. Governor pinion (should have some backlash)
   3. Functional features
      a. Tab (short and long), check set and clear
      b. *Shift (ensure that basket restores reliably, check lock)
      c. Spacebar (binds – "power off," check for escapement trip)
      d. *Carriage return (unlatching point, tension)
      e. Backspace
      f. Backspace/carriage return and tab/carriage return (simultaneous)
      g. Margin set and release
      h. Linelock (standard)
      i. Escapement trip (typebar)
   4. Ribbon
      a. *Feed
      b. Tracking (characters on ribbon)
      c. Guides (alignment)
      d. Fabric rewind and reverse (check for backlash)
   5. Typebar operating (4-way simultaneously check)
      a. Type strike-up and simultaneously check for:
         1. Binding keylever or keybuttons
         2. "Bottoming-out" and trip lever reset
         3. Catching of adjacent typebars or cam levers
         4. Alignment, impression and motion problems

* Every call.

| Model | Product Code |
|---|---|
| C1-C4 | 13 |
| D1-D4 | 15 |

| CAUSE OF FAILURE | CODE |
|---|---|
| Bent/Warped | 01 |
| Binding/Sticking | 02 |
| Broken/Cracked | 03 |
| Burned/Pitted/Burred | 04 |
| Card/Tape Jam | 05 |
| Dirty/Corroded | 06 |
| Loose/Solder Conn. | 07 |
| Lubrication | 08 |
| Noise (Mech.) | 09 |
| Off/Off Registration | 10 |
| Open | 11 |
| Out of Adjustment | 12 |
| Out of Alignment | 13 |
| Shorted/Grounded | 14 |
| Stripped | 15 |
| Wiring Defects | 16 |
| Weak | 17 |
| Worn | 18 |
| No Trouble Found | 19 |
| Other | 20 |
| Standby | 21 |
| Operator Preference* | 22 |
| Sound Distortion | 23 |
| Beat the Operation | 24 |
| Flicking | 25 |
| Operator Error | 26 |
| Noise Electrical | 27 |
| Low Contrast | 28 |

**Operator Preference – Adjustment due to operator opinion which is not a malfunction of the machine.*

**MACHINE IDENTIFICATION CODE**
Model Code (1st & 2nd Digit)
(Machine Features)

Model Code

STANDARD Typewriters With Fabric Ribbon

11 *84 Character Keyboard without Partial Carr. Return, Decimal Tab or Electronic Tab
12 88 Character Keyboard without Partial Carr. Return, Decimal Tab or Electronic Tab
13 84 Character Keyboard with Partial Carr. Return
14 88 Character Keyboard with Partial Carr. Return
15 *84 Character Keyboard with Decimal Tabulation
16 88 Character Keyboard with Decimal Tabulation
17 84 Character Keyboard with Electronic Tabulation
18 88 Character Keyboard with Electronic Tabulation

STANDARD Typewriters With Carbon Ribbon

81 86 Character Keyboard without Decimal Tab
82 88 Character Keyboard without Decimal Tab
85 86 Character Keyboard with Decimal Tab
86 88 Character Keyboard with Decimal Tab

EXECUTIVE Typewriters

41 *84 Character Keyboard with Carbon Ribbon and with other than 1/45 unit escapement
42 88 Character Keyboard with Carbon Ribbon and with other than 1/45 unit escapement
43 *84 Character Keyboard with Carbon Ribbon and with 1/45 unit escapement
44 88 Character Keyboard with Carbon Ribbon and with 1/45 unit escapement
45 *84 Character Keyboard with Fabric Ribbon and with other than 1/45 escapement
46 88 Character Keyboard with Fabric Ribbon and with other than 1/45 escapement
47 *84 Character Keyboard with Fabric Ribbon and with 1/45 unit escapement
48 88 Character Keyboard with Fabric Ribbon and with 1/45 unit escapement

FORMSWRITERS

51 *84 Character Keyboard without Partial Carr. Return or Decimal Tabulation
52 88 Character Keyboard without Partial Carr. Return or Decimal Tabulation
53 84 Character Keyboard with Partial Carr. Return
54 88 Character Keyboard with Partial Carr. Return
55 84 Character Keyboard with Decimal Tabulation
56 88 Character Keyboard with Decimal Tabulation

TOLL BILLER

57 86 Character Keyboard
58 88 Character Keyboard

INPUT – OUTPUT

31 84 Character Keyboard Model B
32 88 Character Keyboard Model B

**86 Character Keyboard on Model C, 88 Character Keyboard on Model D*

All Model Carriage Lengths (3rd Digit)

| Code | |
|---|---|
| 1 | 12" or 13" Carriage |
| 2 | 16" or 17" Carriage |
| 3 | 20" Carriage |
| 4 | 24" Carriage |
| 5 | 30" Carriage |

All Model Pitch Codes (4th Digit)

| Code | |
|---|---|
| 0 | 11 Pitch |
| 1 | 12 Pitch |
| 2 | 10 Pitch |
| 3 | 9 Pitch |
| 4 | 8 Pitch |
| 5 | 6 2/5 Pitch |
| 6 | 14 Pitch |
| 7 | 1/45 Unit (Executive) |
| 8 | 1/32 Unit (Executive) |
| 9 | 1/36 Unit (Executive) |

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