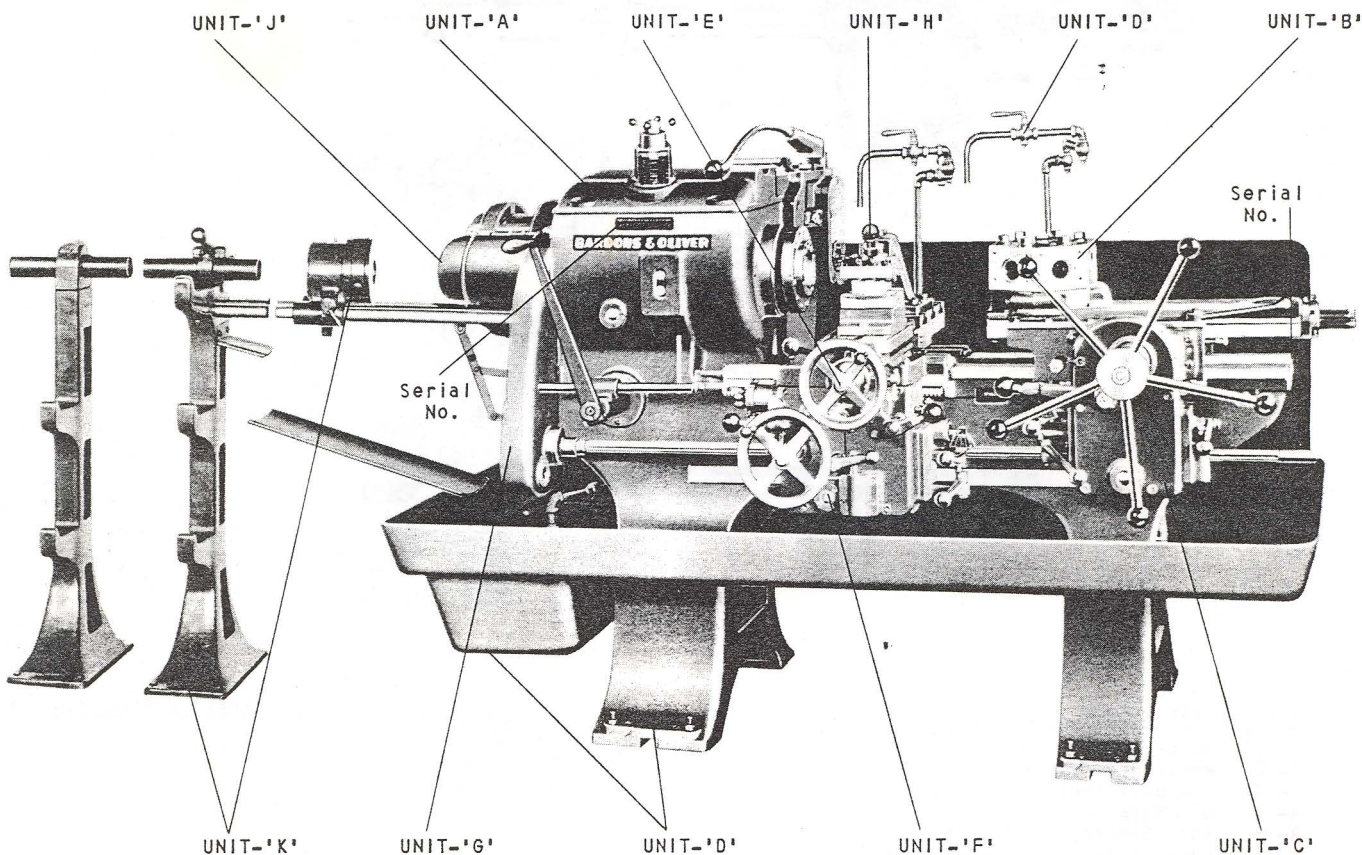


## #5 UNIVERSAL TURRET LATHE PARTS CATALOG



In order to maintain accuracy and finish requirements of today, it is necessary and economical to replace worn parts. This catalog has been prepared to simplify the ordering of repair parts.

### WHEN ORDERING: -

1. SPECIFY AMOUNT WANTED
2. GIVE SERIAL NUMBER OF MACHINE \*
3. GIVE NUMBER AND NAME OF PART EXACTLY AS SHOWN IN CATALOG

### EXAMPLE: -

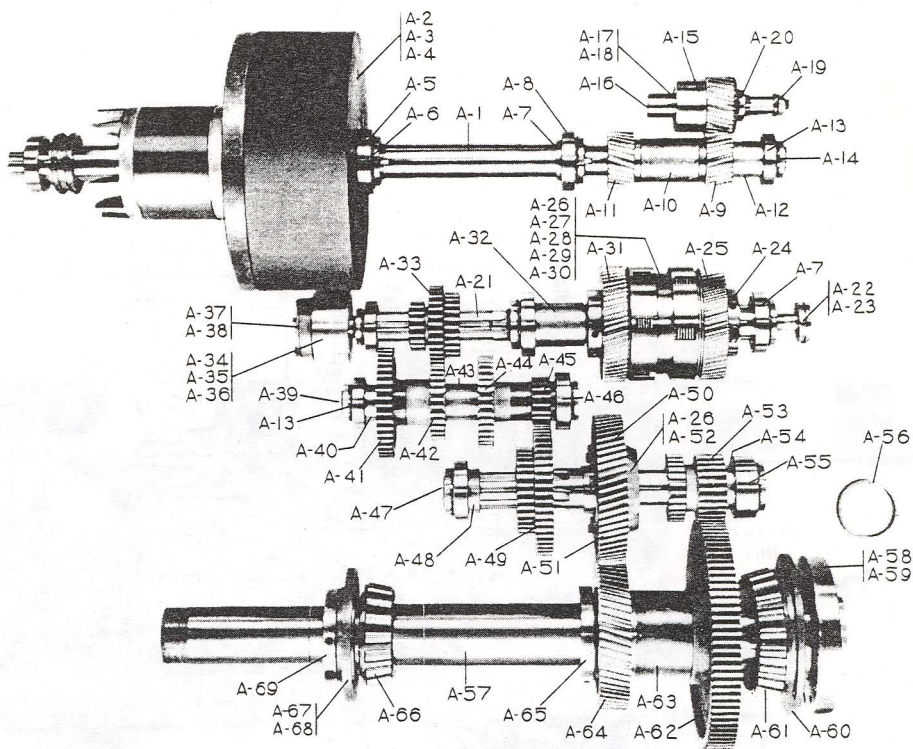
Required: - Helical Gear on motor shaft in Head.

### ORDER: -

1. Repair part for #5 U.T.L.  
Serial #17760  
A-11 Gear 27T

As some parts are fitted in assembly, these parts will be sent finished as far as possible with allowance for fitting where required.

\* THE SERIAL NUMBER OF EACH MACHINE IS STAMPED ON THE NAME PLATE AND ON THE END OF THE REAR BEDWAY.



#### MOTOR SHAFT ASSEMBLY

|      |                                |
|------|--------------------------------|
| A- 1 | Motor Shaft                    |
| A- 2 | Motor Bracket                  |
| A- 3 | V - Belt Sheave                |
| A- 4 | Oil Retainer                   |
| A- 5 | Ball Bearing MRC 210-SF        |
| A- 6 | Locknut N-10 - Lockwasher W-10 |
| A- 7 | Ball Bearing Collar            |
| A- 8 | Ball Bearing MRC 209-S         |
| A- 9 | Gear 29T                       |
| A-10 | Gear Spacer                    |
| A-11 | Gear 27T                       |
| A-12 | Bearing Spacer                 |
| A-13 | Ball Bearing MRC 207-S         |
| A-14 | Locknut N-07 - Lockwasher W-07 |

#### IDLER GEAR ASSEMBLY

|      |                                |
|------|--------------------------------|
| A-15 | Idler Gear 32T                 |
| A-16 | Gear Stud                      |
| A-17 | Ball Bearing MRC 206-S         |
| A-18 | Bearing Spacer                 |
| A-19 | Collar                         |
| A-20 | Locknut N-06 - Lockwasher W-06 |

#### FORWARD & REVERSE CLUTCH SHAFT ASSEMBLY

|      |                                |
|------|--------------------------------|
| A-21 | Reverse Clutch Shaft           |
| A-22 | Clutch Plunger                 |
| A-23 | Plunger Spool                  |
| A-24 | Adjusting Nut                  |
| A-25 | Reverse Clutch Gear 60T        |
| A-26 | Ball Bearing MRC 5211-K        |
| A-27 | Steel Clutch Disc              |
| A-28 | Bronze Clutch Disc             |
| A-29 | Clutch Spacer                  |
| A-30 | Clutch Finger                  |
| A-31 | Forward Clutch Gear 62T        |
| A-32 | Bearing Spacer                 |
| A-33 | Three Cluster Gear 20T-34T-27T |
| A-34 | Brake Cup                      |
| A-35 | Brake Cone                     |

#### FORWARD & REVERSE CLUTCH SHAFT ASSEMBLY--

##### Continued

|      |              |
|------|--------------|
| A-36 | Brake Spring |
| A-37 | Inner Shoe   |
| A-38 | Outer Shoe   |

#### INTERMEDIATE SHAFT ASSEMBLY

|      |                        |
|------|------------------------|
| A-39 | Intermediate Shaft     |
| A-40 | Bearing Spacer         |
| A-41 | Gear 46T               |
| A-42 | Gear 32T               |
| A-43 | Center Gear Spacer     |
| A-44 | Gear 39T               |
| A-45 | Gear 20T               |
| A-46 | Ball Bearing MRC 307-S |

#### HIGH & LOW TOOTH CLUTCH SHAFT ASSEMBLY

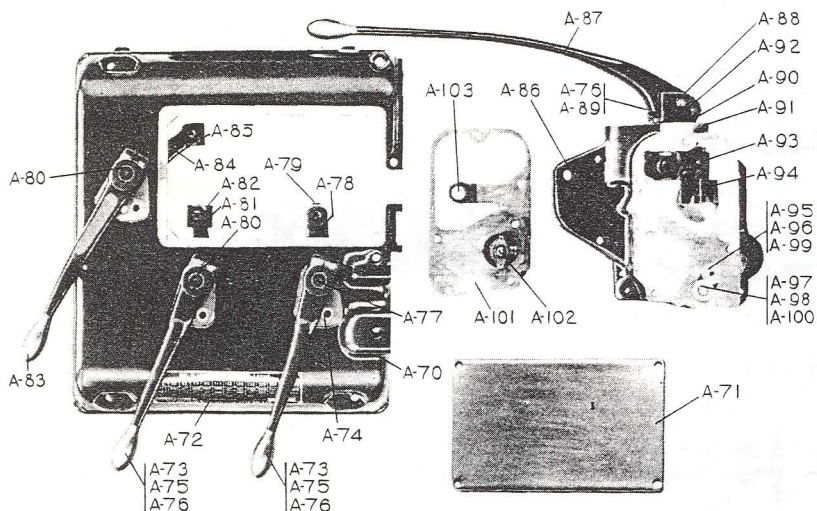
|      |                             |
|------|-----------------------------|
| A-47 | Hi-Lo Clutch Shaft          |
| A-48 | Bearing Spacer              |
| A-49 | Cluster Gear 35T-54T        |
| A-50 | Tooth Clutch Gear 62T       |
| A-51 | Bearing Retainer            |
| A-52 | Locknut                     |
| A-53 | Tooth Clutch Pinion 27T-28T |
| A-54 | Bearing Spacer              |
| A-55 | Ball Bearing MRC 5209-K     |
| A-56 | Bearing Spacer              |

#### SPINDLE ASSEMBLY

|      |                             |
|------|-----------------------------|
| A-57 | Spindle                     |
| A-58 | Driving Button              |
| A-59 | Button Screw                |
| A-60 | Bearing Closer              |
| A-61 | Timken Roller Bearing Front |
| A-62 | Spindle Gear 94T            |
| A-63 | Gear Spacer                 |
| A-64 | Spindle Gear 59T            |
| A-65 | Adjusting Nut               |
| A-66 | Timken Roller Bearing Rear  |
| A-67 | Oil Retainer                |
| A-68 | Bearing Closer              |
| A-69 | Adjusting Nut               |



## THREE LEVER SHIFT HEAD — UNIT 'A'



### HOUSING ASSEMBLY

|      |                             |
|------|-----------------------------|
| A-70 | Housing                     |
| A-71 | Top Cover                   |
| A-72 | Name Plate                  |
| A-73 | Gear Shift Lever "B" or "C" |
| A-74 | Hardened Detent             |
| A-75 | Detent Spring               |
| A-76 | Steel Ball                  |
| A-77 | Lever Shaft "B"             |

|      |                        |
|------|------------------------|
| A-78 | Fork Lever             |
| A-79 | Shifter                |
| A-80 | Lever Shaft "A" or "C" |
| A-81 | Fork Lever             |
| A-82 | Fork                   |
| A-83 | Gear Shift Lever "A"   |
| A-84 | Fork Lever             |
| A-85 | Fork                   |

### REVERSE CLUTCH LEVER BRACKET ASSEMBLY

|       |                     |
|-------|---------------------|
| A- 86 | Bracket             |
| A- 87 | Lever               |
| A- 88 | Pivot Pin           |
| A- 89 | Spring              |
| A- 90 | Lever Lock Stud     |
| A- 91 | Lock Block          |
| A- 92 | Lever Shaft         |
| A- 93 | Fork Lever          |
| A- 94 | Plunger Fork        |
| A- 95 | Pump Pinion Bushing |
| A- 96 | Pump Pinion         |
| A- 97 | Pump Gear           |
| A- 98 | Gear Stud           |
| A- 99 | Pinion Plate        |
| A-100 | Gear Plate          |
| A-101 | Bracket Cover       |
| A-102 | Oil Filter CUNO-TS  |
| A-103 | Oiler Stud          |

## SINGLE LEVER PRESELECTOR HEAD — UNIT 'A'

### HOUSING ASSEMBLY

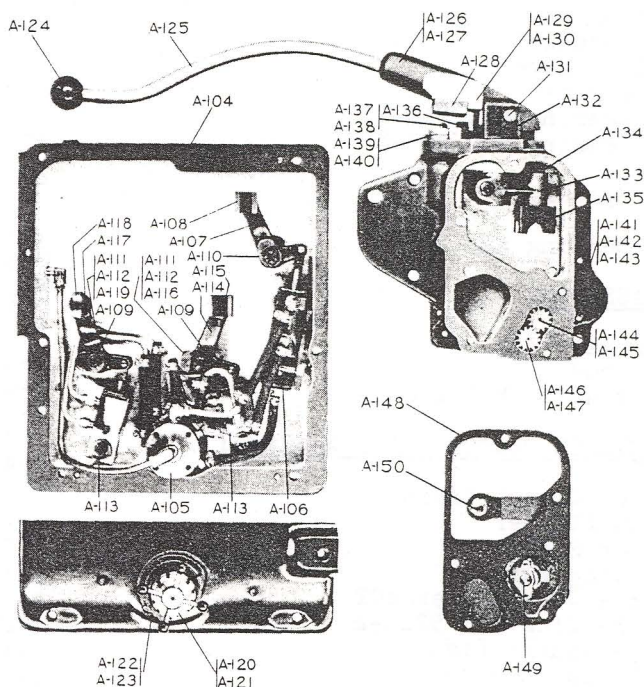
|       |                      |
|-------|----------------------|
| A-104 | Housing              |
| A-105 | Master Valve Unit    |
| A-106 | Double Cylinder Unit |
| A-107 | Fork Lever           |
| A-108 | Fork                 |
| A-109 | Bushing              |
| A-110 | Detent Plate         |
| A-111 | Steel Ball           |
| A-112 | Spring               |
| A-113 | Single Cylinder Unit |
| A-114 | Fork Lever           |
| A-115 | Fork                 |
| A-116 | Detent Plate         |
| A-117 | Fork Lever           |
| A-118 | Fork                 |
| A-119 | Detent Plate         |
| A-120 | Drum                 |
| A-121 | Drum Chart Plate     |
| A-122 | Drum Guard           |
| A-123 | Drum Guard Plate     |

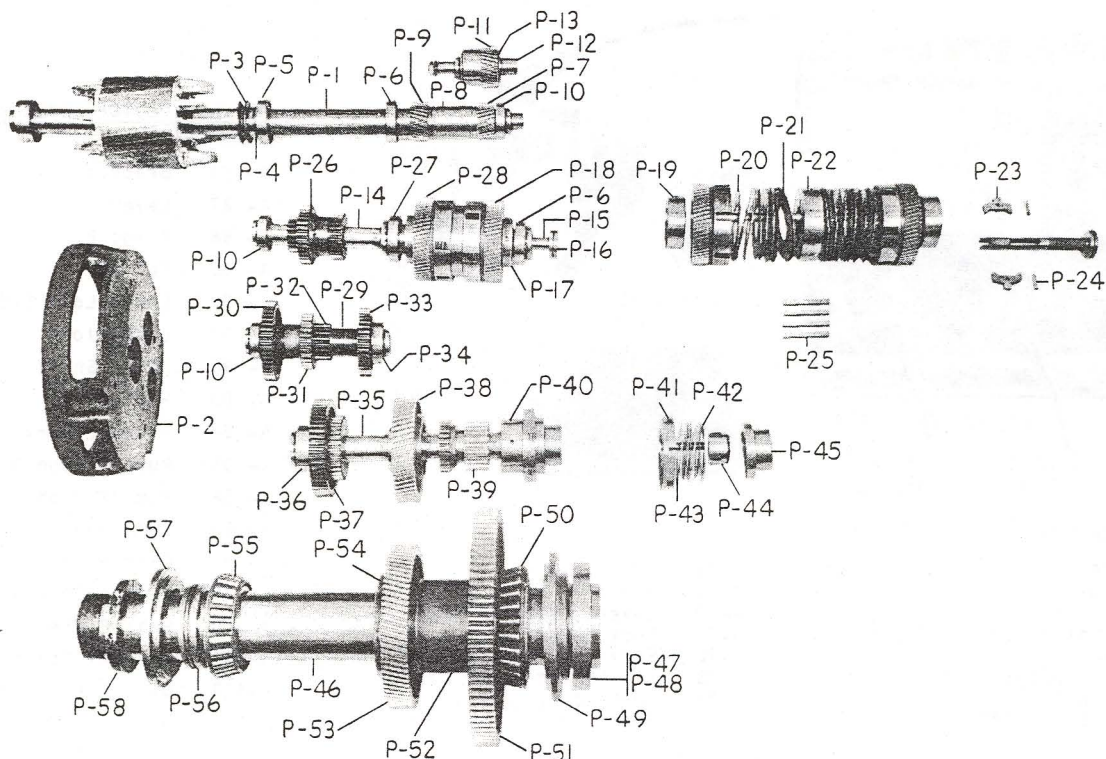
### REVERSE CLUTCH LEVER BRACKET ASSEMBLY

|       |                    |
|-------|--------------------|
| A-124 | Bakelite Ball      |
| A-125 | Lever              |
| A-126 | Lever Head         |
| A-127 | Lever Nut          |
| A-128 | Lever Block        |
| A-129 | Steel Ball         |
| A-130 | Spring             |
| A-131 | Pin                |
| A-132 | Lever Shaft        |
| A-133 | Fork Lever         |
| A-134 | Lever Collar       |
| A-135 | Plunger Fork       |
| A-136 | Valve Finder Block |

|       |                   |
|-------|-------------------|
| A-137 | Valve Plunger     |
| A-138 | Valve Spring      |
| A-139 | Body              |
| A-140 | Cover             |
| A-141 | Relief Valve Plug |
| A-142 | Valve Spring      |
| A-143 | Plunger           |

|       |                     |
|-------|---------------------|
| A-144 | Pump Pinion Bushing |
| A-145 | Pump Pinion         |
| A-146 | Pump Gear           |
| A-147 | Gear Stud           |
| A-148 | Bracket Cover       |
| A-149 | Oil Filter CUNO-TS  |
| A-150 | Oiler Stud          |





## MOTOR SHAFT ASSEMBLY

|      |                         |
|------|-------------------------|
| P- 1 | Motor Shaft             |
| P- 2 | Motor Bracket           |
| P- 3 | V-Belt Sheave           |
| P- 4 | Oil Retainer            |
| P- 5 | Ball Bearing MRC 210-SF |
| P- 6 | Ball Bearing MRC 209-S  |
| P- 7 | Gear                    |
| P- 8 | Gear Spacer             |
| P- 9 | Gear                    |
| P-10 | Ball Bearing MRC 207-S  |

## IDLER GEAR ASSEMBLY

|      |                         |
|------|-------------------------|
| P-11 | Idler Gear 32T          |
| P-12 | Gear Stud               |
| P-13 | Ball Bearing MRC 206-SG |

## FORWARD & REVERSE CLUTCH SHAFT ASSEMBLY

|      |                                |
|------|--------------------------------|
| P-14 | Reverse Clutch Shaft           |
| P-15 | Clutch Plunger                 |
| P-16 | Plunger Spool                  |
| P-17 | Adjusting Nut                  |
| P-18 | Reverse Clutch Gear 60T        |
| P-19 | Ball Bearing MRC 5211-K        |
| P-20 | Bronze Clutch Disc             |
| P-21 | Steel Clutch Disc              |
| P-22 | Clutch Spacer                  |
| P-23 | Clutch Finger                  |
| P-24 | Clutch Finger Pin              |
| P-25 | Clutch Key                     |
| P-26 | Three Cluster Gear 20T-34T-27T |
| P-27 | Ball Bearing MRC 210-S         |
| P-28 | Forward Clutch Gear 62T        |

## INTERMEDIATE SHAFT ASSEMBLY

|      |                        |
|------|------------------------|
| P-29 | Intermediate Shaft     |
| P-30 | Gear 46T               |
| P-31 | Gear 32T               |
| P-32 | Gear 20T               |
| P-33 | Gear 39T               |
| P-34 | Ball Bearing MRC 307-S |

## HIGH & LOW TOOTH CLUTCH SHAFT ASSEMBLY

|      |                         |
|------|-------------------------|
| P-35 | Hi-Low Clutch Shaft     |
| P-36 | Ball Bearing MRC 5209-K |
| P-37 | Cluster Gear 54T - 35T  |
| P-38 | Clutch Gear             |
| P-39 | Clutch Pinion 19T - 28T |
| P-40 | Ball Bearing MRC 5309   |
| P-41 | Brake Disc Cup          |
| P-42 | Bronze Clutch Disc      |
| P-43 | Steel Clutch Disc       |
| P-44 | Brake Coupling          |
| P-45 | Brake Piston            |

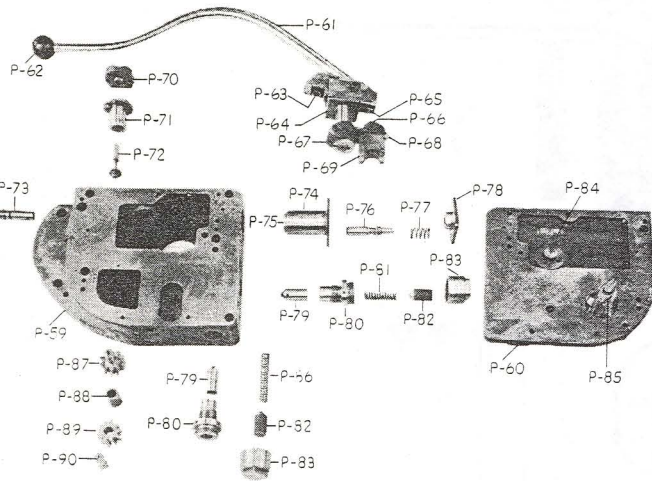
## SPINDLE ASSEMBLY

|      |                             |
|------|-----------------------------|
| P-46 | Spindle                     |
| P-47 | Driving Button              |
| P-48 | Button Screw                |
| P-49 | Front Bearing Closer        |
| P-50 | Front Timken Roller Bearing |
| P-51 | Large Spindle Gear          |
| P-52 | Gear Spacer                 |
| P-53 | Small Spindle Gear          |
| P-54 | Adjusting Nut               |
| P-55 | Rear Timken Roller Bearing  |
| P-56 | Oil Retainer                |
| P-57 | Rear Bearing Closer         |
| P-58 | Adjusting Nut               |



# CLUTCH LEVER BRACKET UNIT P

## CLUTCH LEVER BRACKET ASSEMBLY

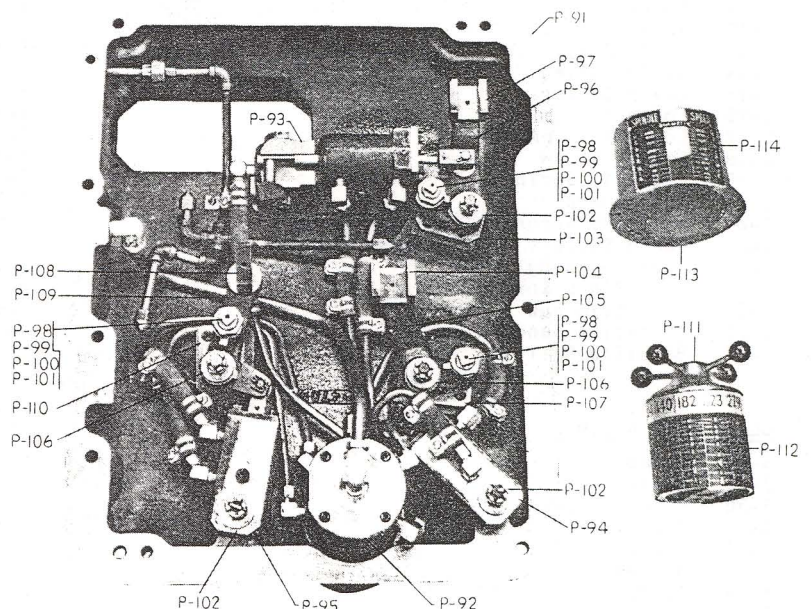


- P-59 Clutch Lever Bracket
- P-60 Clutch Lever Bracket Cover
- P-61 For. & Rev. Lever & Head
- P-62 Bakelite Ball
- P-63 Finder Stud
- P-64 Clutch Lever Fork
- P-65 Lever Lock Stud
- P-66 Brake Lock
- P-67 Clutch Bracket Lever
- P-68 Lever Button
- P-69 Clutch Shifter Rod Fork
- P-70 Finder Cover
- P-71 Valve Body
- P-72 Valve Plunger
- P-73 Valve
- P-74 Valve Body
- P-75 Valve Closer
- P-79 Valve Plunger
- P-80 Relief Valve Body
- P-81 Valve Spring
- P-82 Valve Screw
- P-83 Relief Valve Cap
- P-84 Rev. Shaft Oil Stud
- P-85 Oil Filter Cuno-TS
- P-86 Valve Spring
- P-87 Oil Pump Pinion
- P-88 Pump Pinion Bushing
- P-89 Oil Pump Gear
- P-90 Oil Pump Gear Stud

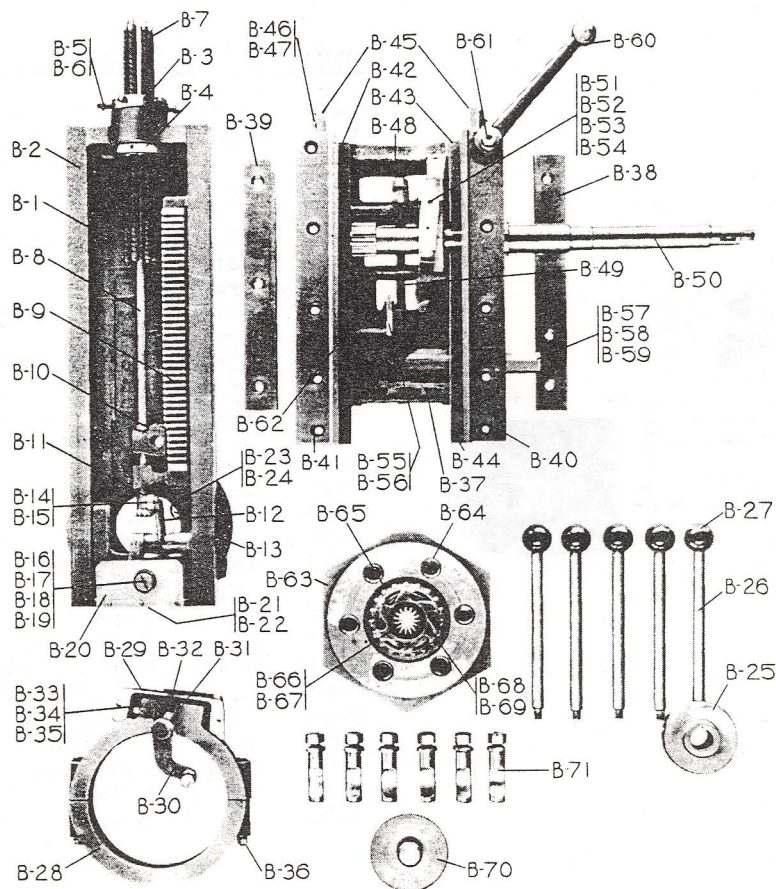
# PRESELECTOR UNIT P

## PRESELECTOR ASSEMBLY

- 91 Housing
- 92 Master Valve Unit
- 93 Double Cylinder Unit
- 94 Single Cylinder Unit
- 95 Single Cylinder Unit
- 96 Gear Shift Lever
- 97 Triple Cluster Fork
- 98 Detent
- 99 Detent Spring
- 100 Spring Retainer
- 101 Hex Nut
- 102 Bushing
- 103 Detent Plate
- 104 Clutch Pinion Fork
- 105 Gear Shift Lever
- 106 Bushing
- 107 Detent Plate
- 108 Two Gear Fork
- 109 Gear Shift Lever
- 110 Detent Plate
- 111 Drum Unit
- 112 Drum Chart Plate
- 113 Drum Guard
- 114 Drum Guard Plate



# TURRET, SLIDE & SADDLE — UNIT 'B'



## TURRET SLIDE ASSEMBLY

|      |                                  |
|------|----------------------------------|
| B- 1 | Turret Slide                     |
| B- 2 | Slide Way                        |
| B- 3 | Stop Screw Carrier               |
| B- 4 | Carrier Nut                      |
| B- 5 | Binder Screw                     |
| B- 6 | Binder Shoe                      |
| B- 7 | Stop Screw                       |
| B- 8 | Bevel Gear Shaft                 |
| B- 9 | Rack                             |
| B-10 | Bevel Gear Shaft Collar          |
| B-11 | Bevel Gear 15T                   |
| B-12 | Lock Bolt Lever                  |
| B-13 | Lever Pivot Pin                  |
| B-14 | Lever Roller                     |
| B-15 | Lever Collar                     |
| B-16 | Lockbolt                         |
| B-17 | Lockbolt Sleeve                  |
| B-18 | Sleeve Screw                     |
| B-19 | Lockbolt Spring                  |
| B-20 | Chip Guard                       |
| B-21 | Neoprene Apron Guard (Not Shown) |
| B-22 | Guard Support (Not Shown)        |
| B-23 | Locating Ring                    |
| B-24 | Ring Pin & Spring                |
| B-25 | Turnstile Hub                    |
| B-26 | Turnstile Handle                 |
| B-27 | Bakelite Ball                    |

## CLAMP RING ASSEMBLY

|      |                   |
|------|-------------------|
| B-28 | Clamp Ring        |
| B-29 | Guard             |
| B-30 | Clamp Lever       |
| B-31 | Clamp Spreader    |
| B-32 | Spreader Plate    |
| B-33 | Washer            |
| B-34 | Clamp Spring      |
| B-35 | Clamp Spring Bolt |
| B-36 | Turret Clamp Bolt |

## SADDLE ASSEMBLY

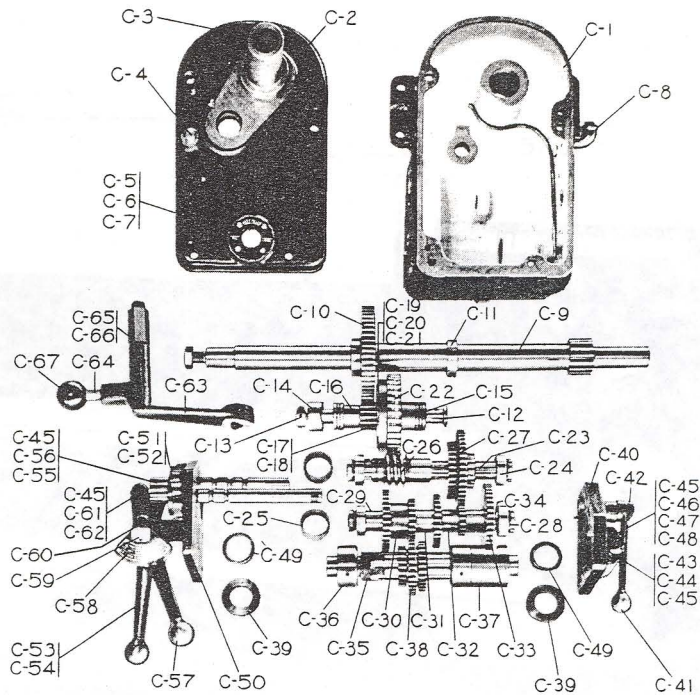
|      |                     |
|------|---------------------|
| B-37 | Saddle              |
| B-38 | Lower Front Cap     |
| B-39 | Lower Rear Cap      |
| B-40 | Upper Front Cap     |
| B-41 | Upper Rear Cap      |
| B-42 | Rear Way            |
| B-43 | Front Short Way     |
| B-44 | Front Long Way      |
| B-45 | Taper Gib           |
| B-46 | Gib Nut             |
| B-47 | Gib Stud            |
| B-48 | Indexing Screw Stop |
| B-49 | Stop Rod            |
| B-50 | Pinion Shaft        |
| B-51 | Pawl                |
| B-52 | Pawl Pivot          |
| B-53 | Pawl Stop Pin       |
| B-54 | Pawl Spring         |
| B-55 | Tumbler             |
| B-56 | Tumbler Screw       |
| B-57 | Knockout Rod Plug   |
| B-58 | Knockout Rod        |
| B-59 | Knockout Spring     |
| B-60 | Binder Lever        |
| B-61 | Binder Stud         |
| B-62 | Turret Clamp Cam    |

## HEXAGON TURRET ASSEMBLY

|      |                            |
|------|----------------------------|
| B-63 | Turret                     |
| B-64 | Lockbolt Bushing           |
| B-65 | Timken Roller Bearing Cone |
| B-66 | Bevel Gear 15T             |
| B-67 | Bevel Gear Nut             |
| B-68 | Ratchet                    |
| B-69 | Ratchet Pin                |
| B-70 | Turret Cover               |
| B-71 | Binder Bolts               |



# SADDLE APRON — UNIT 'C'



## COVER ASSEMBLY

|      |                  |
|------|------------------|
| C- 1 | Apron Gear Box   |
| C- 2 | Apron Cover      |
| C- 3 | Turnstile Sleeve |
| C- 4 | Stop Pin         |
| C- 5 | Oil Gage Cover   |
| C- 6 | Gage Glass       |
| C- 7 | Gage Gasket      |
| C- 8 | Street Ell       |

## PINION SHAFT ASSEMBLY

|      |                 |     |
|------|-----------------|-----|
| C- 9 | Pinion Shaft    | 16T |
| C-10 | Gear            | 58T |
| C-11 | Locating Sleeve |     |

## WORM GEAR SHAFT ASSEMBLY

|      |                       |           |
|------|-----------------------|-----------|
| C-12 | Worm Gear Shaft       |           |
| C-13 | Binder Nut            |           |
| C-14 | Lever Cam             |           |
| C-15 | Thrust Bearing        | MRC 898-E |
| C-16 | Bronze Bushing        |           |
| C-17 | Friction Gear         | 15T       |
| C-18 | Friction Gear Bushing |           |
| C-19 | Friction Clutch       |           |
| C-20 | Clutch Plug           |           |
| C-21 | Clutch Spring         |           |
| C-22 | Worm Gear             | 37T       |

## WORM SHAFT ASSEMBLY

|      |                    |             |
|------|--------------------|-------------|
| C-23 | Worm Shaft         |             |
| C-24 | Ball Bearing       | MRC 204-S   |
| C-25 | End Bearing Spacer |             |
| C-26 | Worm               |             |
| C-27 | Three Cluster Gear | 32T-46T-18T |

## INTERMEDIATE SHAFT ASSEMBLY

|      |                    |         |
|------|--------------------|---------|
| C-28 | Intermediate Shaft |         |
| C-29 | End Gear Spacer    |         |
| C-30 | Two Cluster Gear   | 35T-25T |
| C-31 | Center Gear Spacer |         |
| C-32 | Two Cluster Gear   | 30T-16T |
| C-33 | Gear               | 43T     |
| C-34 | End Gear Spacer    |         |

## HOLLOW FEED SHAFT ASSEMBLY

|      |                    |             |
|------|--------------------|-------------|
| C-35 | Hollow Feed Shaft  |             |
| C-36 | Roller Bearing     | Hyatt C-305 |
| C-37 | Slotted Spacer     |             |
| C-38 | Three Cluster Gear | 22T-32T-27T |
| C-39 | Bearing Retainer   |             |

## PUMP BRACKET ASSEMBLY

|      |                |  |
|------|----------------|--|
| C-40 | Pump Bracket   |  |
| C-41 | Pump Lever     |  |
| C-42 | Lever Bushing  |  |
| C-43 | Lever Plunger  |  |
| C-44 | Packing Gland  |  |
| C-45 | Steel Ball     |  |
| C-46 | Spring         |  |
| C-47 | Spring Plunger |  |
| C-48 | Screw Plug     |  |
| C-49 | Oil Seal       |  |

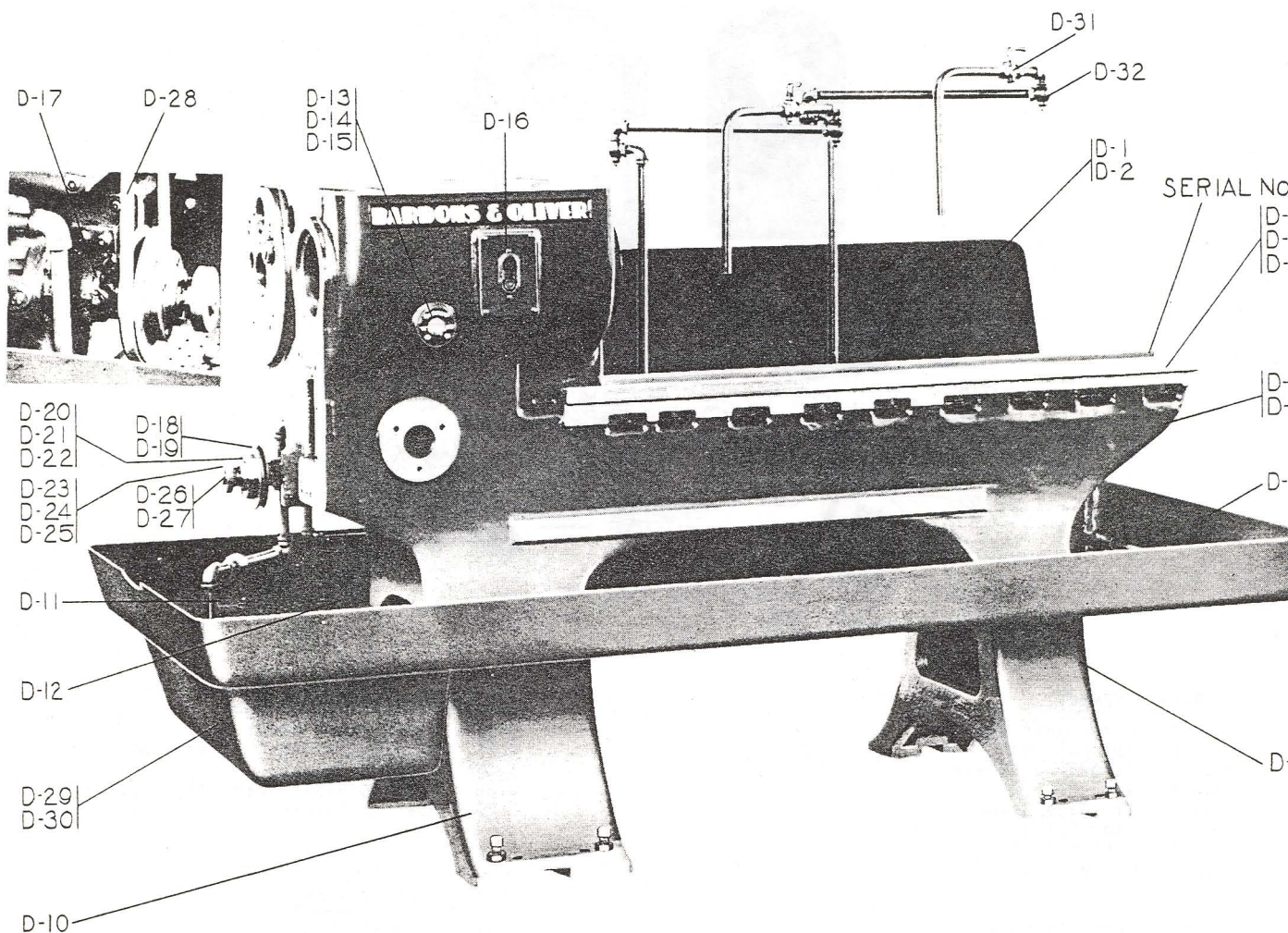
## LEVER BRACKET ASSEMBLY

|      |                  |  |
|------|------------------|--|
| C-50 | Lever Bracket    |  |
| C-51 | Bracket Cover    |  |
| C-52 | Oil Seal         |  |
| C-53 | Lower Lever      |  |
| C-54 | Lever Bushing    |  |
| C-55 | Lower Shift Rod  |  |
| C-56 | Detent Spring    |  |
| C-57 | Upper Lever      |  |
| C-58 | Lever Feed Plate |  |
| C-59 | Feed Plate Arrow |  |
| C-60 | Lever Stud       |  |
| C-61 | Upper Shift Rod  |  |
| C-62 | Detent Spring    |  |

## POWER FEED LEVER ASSEMBLY

|      |                  |  |
|------|------------------|--|
| C-63 | Power Feed Lever |  |
| C-64 | Handle           |  |
| C-65 | Plunger          |  |
| C-66 | Plunger Spring   |  |
| C-67 | Bakelite Ball    |  |

# BED, PAN & LEGS — COOLANT PUMP & PIPING — UNIT 'D'



## BED, PAN & LEGS

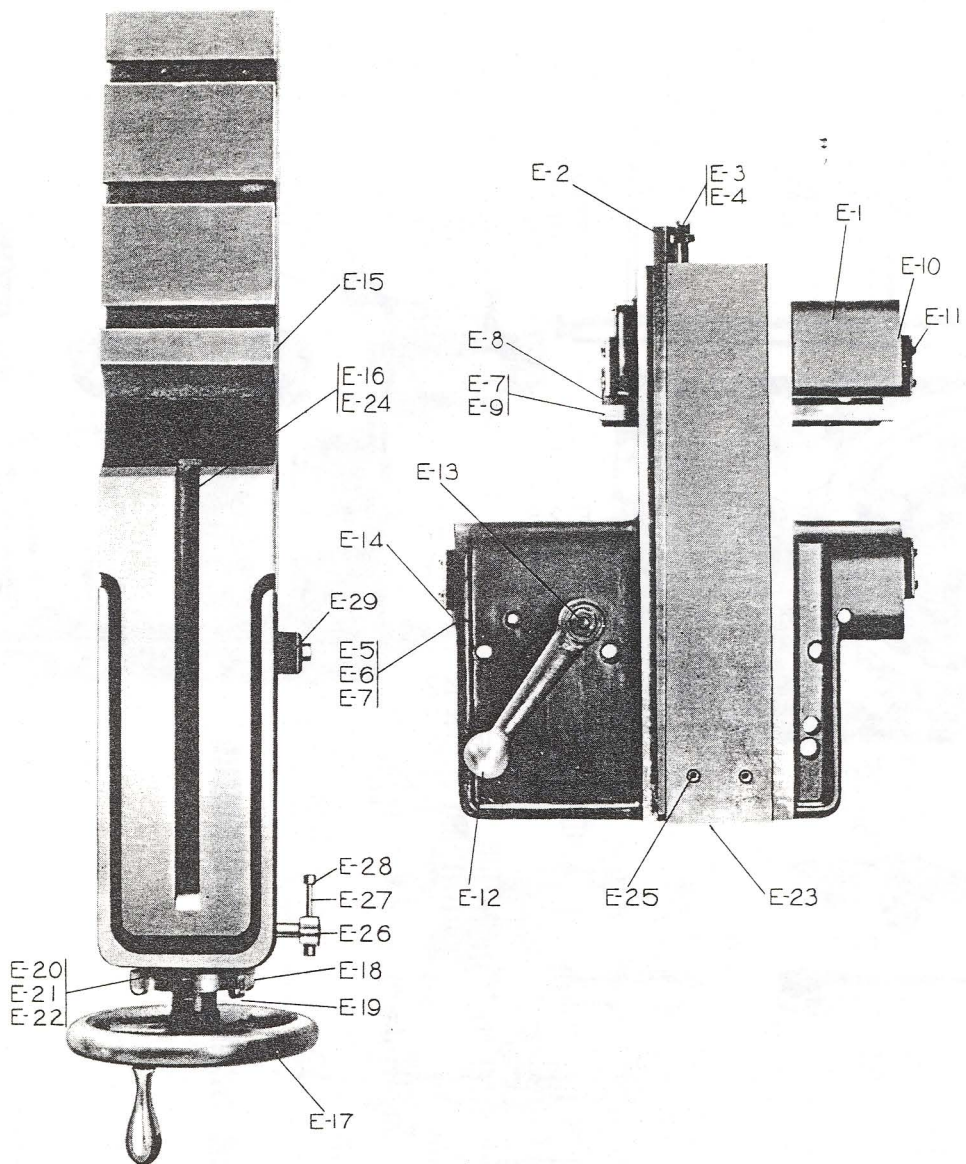
|      |                             |
|------|-----------------------------|
| D- 1 | Rear Splash Guard           |
| D- 2 | Side Splash Guard           |
| D- 3 | Front Steel Bedway          |
| D- 4 | Rear Steel Bedway           |
| D- 5 | Bedway Stud                 |
| D- 6 | Bed with Integral Cast Ways |
| D- 7 | Bed with Steel Bed Ways     |
| D- 8 | Chip Pan                    |
| D- 9 | Front Leg                   |
| D-10 | Rear Leg                    |
| D-11 | Pan Plate                   |
| D-12 | Strainer Plate              |
| D-13 | Oil Gage Cover              |
| D-14 | Gage Glass                  |
| D-15 | Gage Gasket                 |
| D-16 | Bakelite Switch Cover       |

## COOLANT PUMP & PIPING

|      |                 |            |
|------|-----------------|------------|
| D-17 | Viking Pump     | EGCC       |
| D-18 | V Belt Sheave   |            |
| D-19 | Ball Bearing    | MRC-5205 F |
| D-20 | Driving Clutch  |            |
| D-21 | Locknut         | N-05       |
| D-22 | Lockwasher      | W-05       |
| D-23 | Driven Clutch   |            |
| D-24 | Detent Spring   |            |
| D-25 | Steel Ball      |            |
| D-26 | Stop Screw      |            |
| D-27 | Shaft           |            |
| D-28 | V - Belt        |            |
| D-29 | Strainer Body   |            |
| D-30 | Strainer Screen |            |
| D-31 | Stop Cock       |            |
| D-32 | Swing Joint     |            |



# CROSS SLIDE & CARRIAGE — UNIT 'E'

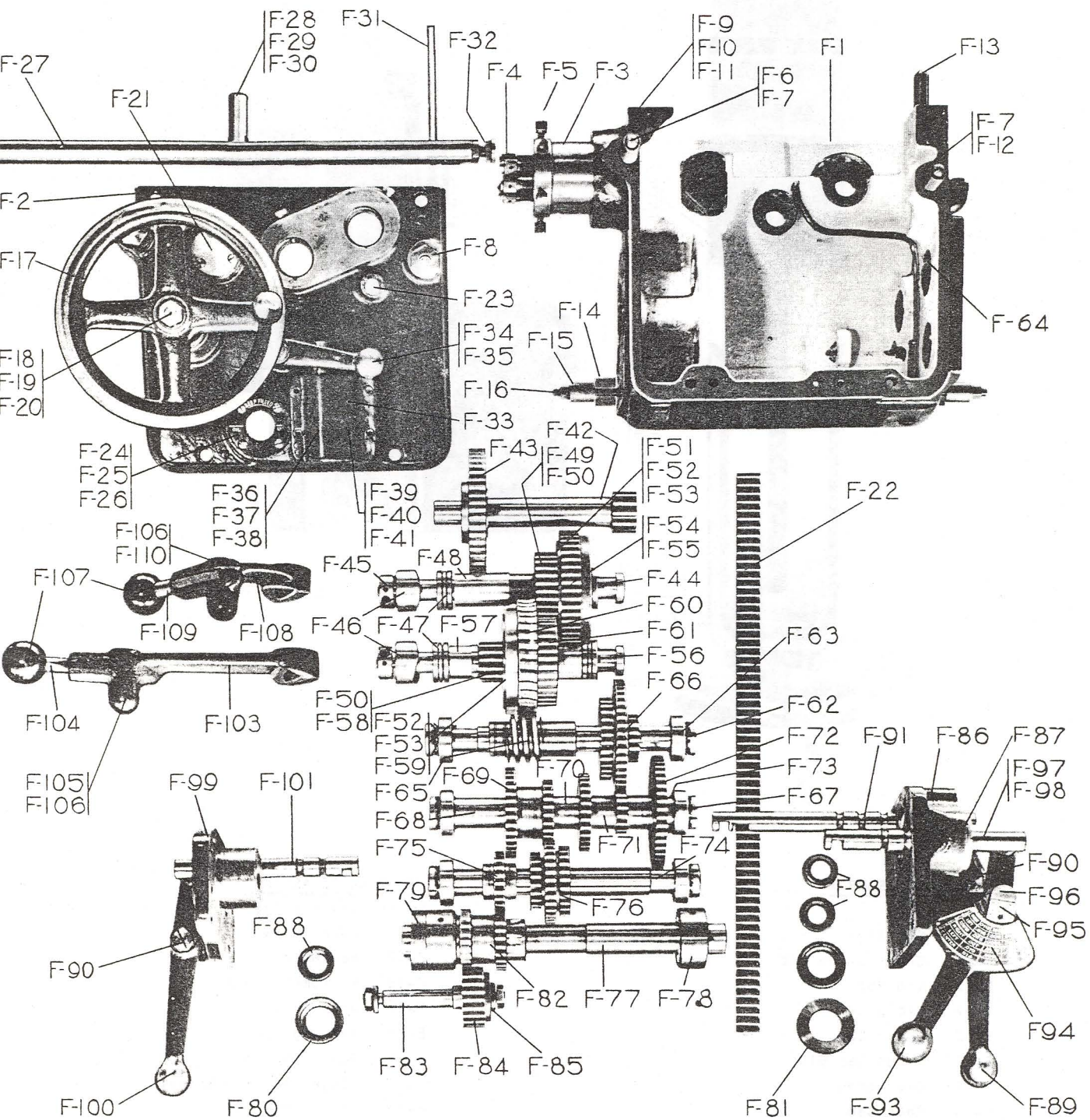


## CARRIAGE ASSEMBLY

|      |                 |
|------|-----------------|
| E- 1 | Carriage        |
| E- 2 | Cross Slide Gib |
| E- 3 | Gib Nut         |
| E- 4 | Gib Stud        |
| E- 5 | Front Cap       |
| E- 6 | Front Cap Gib   |
| E- 7 | Gib Screw       |
| E- 8 | Rear Cap        |
| E- 9 | Rear Cap Gib    |
| E-10 | Felt Wiper      |
| E-11 | Brass Cap       |
| E-12 | Binder Handle   |
| E-13 | Binder Stud     |
| E-14 | Brass Shoe      |

## CROSS SLIDE ASSEMBLY

|      |                         |
|------|-------------------------|
| E-15 | Cross Slide             |
| E-16 | Feed Screw              |
| E-17 | Handwheel               |
| E-18 | Micrometer Dial         |
| E-19 | Dial Clip               |
| E-20 | Bearing Spacer          |
| E-21 | Ball Bearing MRC # 7304 |
| E-22 | Binder Bearing Spacer   |
| E-23 | Feed Screw Nut          |
| E-24 | Feed Screw Gear         |
| E-25 | Taper Pin               |
| E-26 | Binder Screw            |
| E-27 | Binder Lever            |
| E-28 | Collar                  |
| E-29 | Trip Dog                |





APRON COVER ASSEMBLY

F-1 Apron Gear Box  
 F-2 Apron Cover  
 F-3 Stop Screw Roll  
 F-4 Stop Screw  
 F-5 Binder Screw  
 F-6 Longitudinal Knockout Rod  
 F-7 Knockout Spring  
 F-8 Knockout Plug  
 F-9 Steel Ball  
 F-10 Detent Spring  
 F-11 Detent Screw  
 F-12 Cross Feed Knockout Rod  
 F-13 Trip Pin  
 F-14 Side Way Gib  
 F-15 Gib Nut  
 F-16 Gib Stud  
 F-17 Handwheel  
 F-18 Pinion Shaft  
 F-19 Pinion 15T  
 F-20 Handwheel Sleeve  
 F-21 Pinion Shaft Cover  
 F-22 Rack  
 F-23 Cross Feed Stop Pin  
 F-24 Oil Gage Cover  
 F-25 Gage Glass  
 F-26 Gage Gasket  
 F-27 Stop Rod  
 F-28 Plunger  
 F-29 Plunger Spring  
 F-30 Screw Plug  
 F-31 Stop Rod Handle  
 F-32 Stop Rod Screw

LUBRICATING PUMP ASSEMBLY

F-33 Pump Body  
 F-34 Pump Lever  
 F-35 Lever Stud  
 F-36 Lever Plunger  
 F-37 Packing Gland  
 F-38 Steel Ball  
 F-39 Spring  
 F-40 Spring Plunger  
 F-41 Screw Plug

PINION SHAFT ASSEMBLY

F-42 Pinion Shaft 12T  
 F-43 Pinion Shaft Gear 50T

FRICTION GEAR SHAFT ASSEMBLY

F-44 Friction Gear Shaft  
 F-45 Binder Nut  
 F-46 Lever Cam  
 F-47 Thrust Bearing MRC 898-E  
 F-48 Bronze Spacer  
 F-49 Clutch Gear 28T  
 F-50 Clutch Gear Bushing  
 F-51 Clutch Friction  
 F-52 Friction Plug  
 F-53 Friction Spring  
 F-54 Friction Gear 45T  
 F-55 Friction Gear Bushing

WORM GEAR SHAFT ASSEMBLY

F-56 Worm Gear Shaft  
 F-57 Bronze Spacer  
 F-58 Friction Gear 15T  
 F-59 Clutch Friction  
 F-60 Worm Gear 37T  
 F-61 Gear 35T

WORM SHAFT ASSEMBLY

F-62 Worm Shaft  
 F-63 Ball Bearing MRC 204-S  
 F-64 End Bearing Spacer  
 F-65 Worm  
 F-66 Three Cluster Gear 32T-46T-18T

INTERMEDIATE SHAFT ASSEMBLY

F-67 Intermediate Shaft  
 F-68 End Gear Spacer  
 F-69 Two Cluster Gear 35T-25T  
 F-70 Center Gear Spacer  
 F-71 Two Cluster Gear 30T-16T  
 F-72 Gear 44T  
 F-73 End Gear Spacer

THREE CLUSTER GEAR SHAFT ASSEMBLY

F-74 Three Cluster Gear Shaft  
 F-75 Reverse Gear 23T  
 F-76 Three Cluster Gear 22T-32T-27T

HOLLOW FEED SHAFT ASSEMBLY

F-77 Hollow Feed Shaft  
 F-78 Roller Bearing HYATT C-305  
 F-79 Seal Cup  
 F-80 Oil Seal  
 F-81 Bearing Closer  
 F-82 Two Cluster Gear 23T-23T

IDLER GEAR SHAFT ASSEMBLY

F-83 Idler Shaft  
 F-84 Idler Gear 23T  
 F-85 Ball Bearing MRC 203-S

LEVER BRACKET ASSEMBLY

F-86 Bracket  
 F-87 Cover  
 F-88 Oil Seal  
 F-89 Lower Gear Shift Lever  
 F-90 Lever Stud  
 F-91 Gear Shift Rod  
 F-92 Detent Spring  
 F-93 Upper Gear Shift Lever  
 F-94 Lever Feed Plate  
 F-95 Feed Plate Arrow  
 F-96 Lever Stud  
 F-97 Gear Shift Rod  
 F-98 Detent Spring

REVERSE LEVER ASSEMBLY

F-99 Lever Bracket  
 F-100 Reverse Lever  
 F-101 Gear Shift Rod  
 F-102 Detent Spring

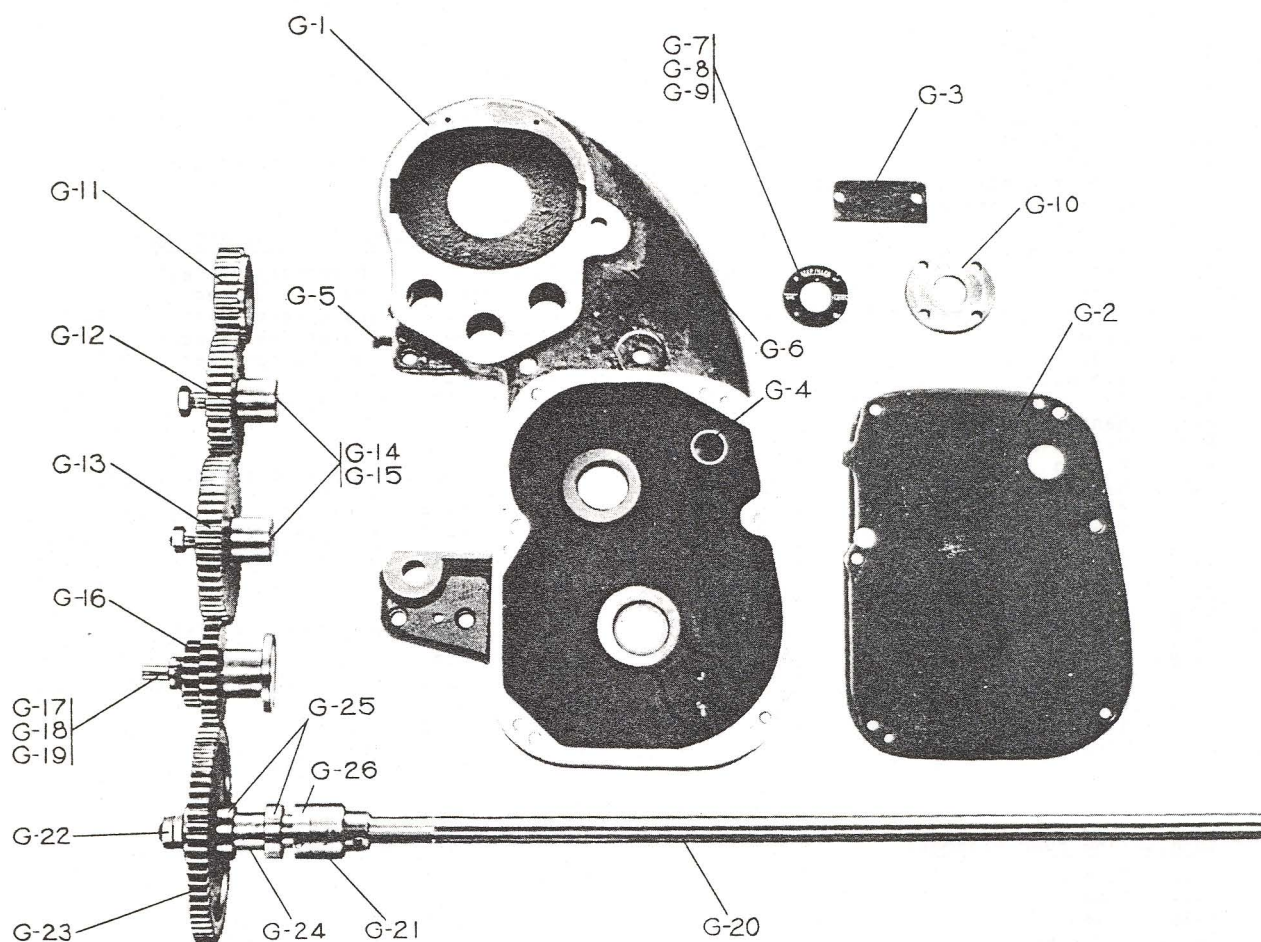
LONGITUDINAL FEED LEVER ASSEMBLY

F-103 Longitudinal Feed Lever  
 F-104 Handle  
 F-105 Plunger  
 F-106 Plunger Spring  
 F-107 Bakelite Ball

CROSS FEED LEVER ASSEMBLY

F-108 Cross Feed Lever  
 F-109 Handle  
 F-110 Plunger

# HEAD END BRACKET — UNIT 'G'



### GEAR BOX ASSEMBLY

|      |                        |
|------|------------------------|
| G- 1 | Head End Bracket       |
| G- 2 | End Cover              |
| G- 3 | Top Cover              |
| G- 4 | Sleeve                 |
| G- 5 | Feed Bar Screw - Short |
| G- 6 | Feed Bar Screw - Long  |
| G- 7 | Oil Gage Cover         |
| G- 8 | Gage Glass             |
| G- 9 | Gage Gasket            |
| G-10 | Bearing Closer         |

### GEAR TRAIN ASSEMBLY

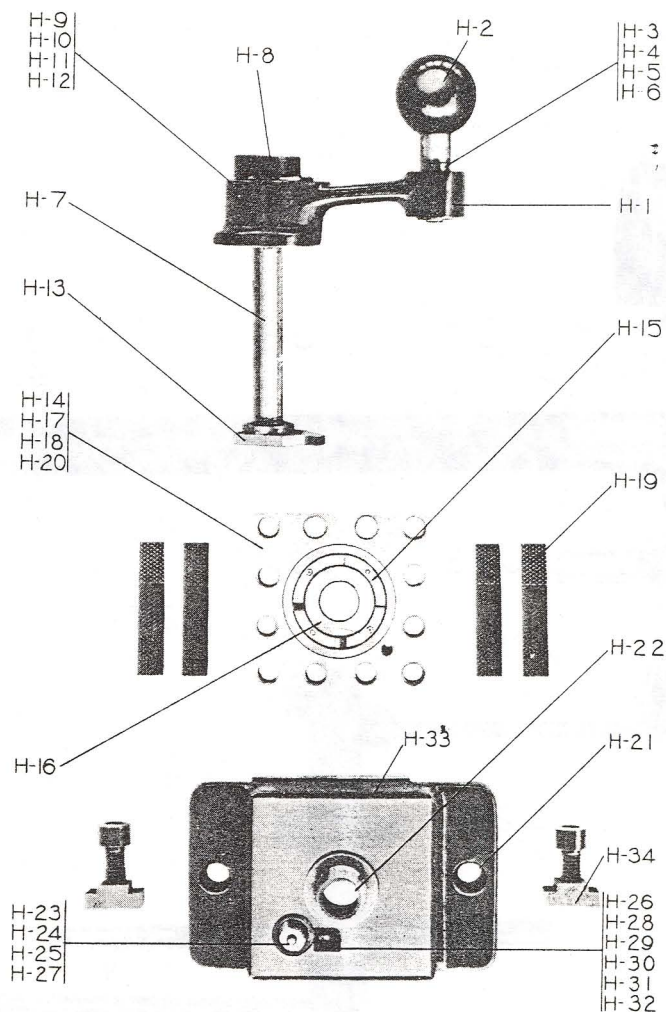
|      |                        |           |
|------|------------------------|-----------|
| G-11 | Spindle Gear           | 30T       |
| G-12 | Intermediate Feed Gear | 37T       |
| G-13 | Intermediate Feed Gear | 48T       |
| G-14 | Ball Bearing           | SKF 5304  |
| G-15 | Feed Gear Stud         |           |
| G-16 | Two Cluster Gear       | 18T-30T   |
| G-17 | Ball Bearing           | MRC 203-S |
| G-18 | Bearing Spacer         |           |
| G-19 | Cluster Gear Stud      |           |

### FEED SHAFT ASSEMBLY

|      |                            |            |
|------|----------------------------|------------|
| G-20 | Feed Shaft                 |            |
| G-21 | Right Hand Safety Coupling |            |
| G-22 | Feed Shaft Extension       |            |
| G-23 | Change Gear                | 60T or 72T |
| G-24 | Bearing Spacer             |            |
| G-25 | Ball Bearing               | MRC 205-S  |
| G-26 | Left Hand Safety Coupling  |            |



# SQUARE TURRET — UNIT 'H'



## INDEXING LEVER ASSEMBLY

|      |                       |
|------|-----------------------|
| H- 1 | Indexing Lever        |
| H- 2 | Bakelite Ball         |
| H- 3 | Ball Stud             |
| H- 4 | Ball Collar           |
| H- 5 | Ball Sleeve           |
| H- 6 | Screw Collar          |
| H- 7 | Center Stud           |
| H- 8 | Stud Collar           |
| H- 9 | Collar Plunger        |
| H-10 | Collar Plunger Spring |
| H-11 | Index Plunger         |
| H-12 | Index Plunger Spring  |
| H-13 | Lockbolt Cam          |
| H-14 | Square Tunet          |
| H-15 | Index Plate           |
| H-16 | Adjusting Sleeve      |
| H-17 | Detent Pin            |
| H-18 | Detent Pin Spring     |
| H-19 | Tool Rocker           |

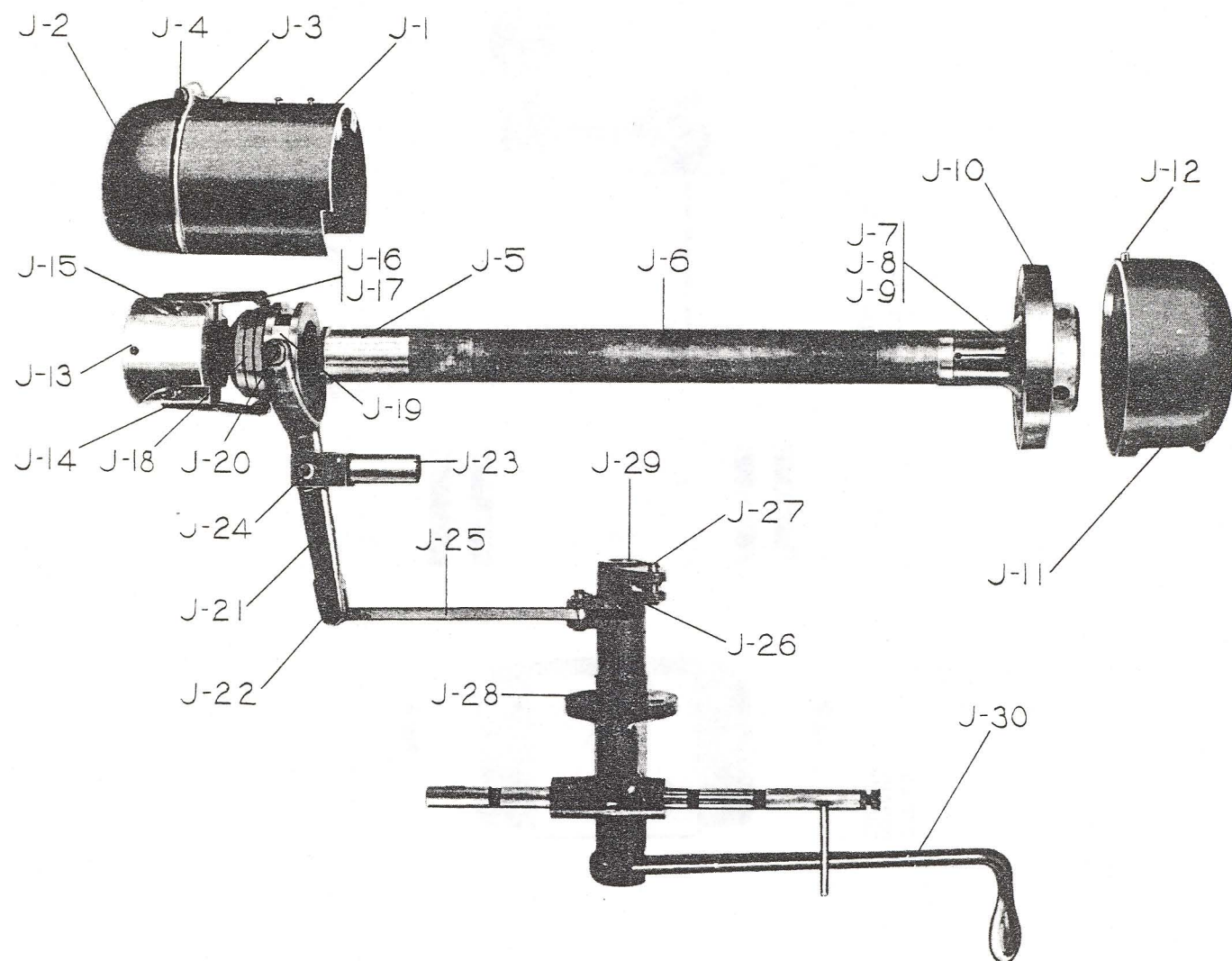
## INDEXING LEVER ASSEMBLY--Continued

|      |                  |
|------|------------------|
| H-20 | Lockbolt Bushing |
|------|------------------|

## BASE ASSEMBLY

|      |                     |
|------|---------------------|
| H-21 | Base                |
| H-22 | Sleeve              |
| H-23 | Lockbolt            |
| H-24 | Lockbolt Spring     |
| H-25 | Lockbolt Sleeve     |
| H-26 | Lockbolt Lever      |
| H-27 | Screw Plug          |
| H-28 | Tumbler             |
| H-29 | Tumbler Pin         |
| H-30 | Tumbler Plunger     |
| H-31 | Spring              |
| H-32 | Tumbler Pivot Screw |
| H-33 | Bottom Plate        |
| H-34 | Tee Nut             |

# AUTOMATIC CHUCK — UNIT 'J'



## MASTER COLLET ASSEMBLY

|      |                   |
|------|-------------------|
| J- 1 | Spindle Guard     |
| J- 2 | Guard Cap         |
| J- 3 | Hinge             |
| J- 4 | Hinge Pin         |
| J- 5 | Abutment Sleeve   |
| J- 6 | Plunger           |
| J- 7 | Master Collet     |
| J- 8 | False Jaw         |
| J- 9 | False Jaw Screw   |
| J-10 | Collet Hood       |
| J-11 | Collet Hood Guard |
| J-12 | Guard Pin         |

## WEDGE ASSEMBLY

|      |                  |
|------|------------------|
| J-13 | Finger Holder    |
| J-14 | Finger           |
| J-15 | Finger Pivot Pin |

## WEDGE ASSEMBLY --Continued

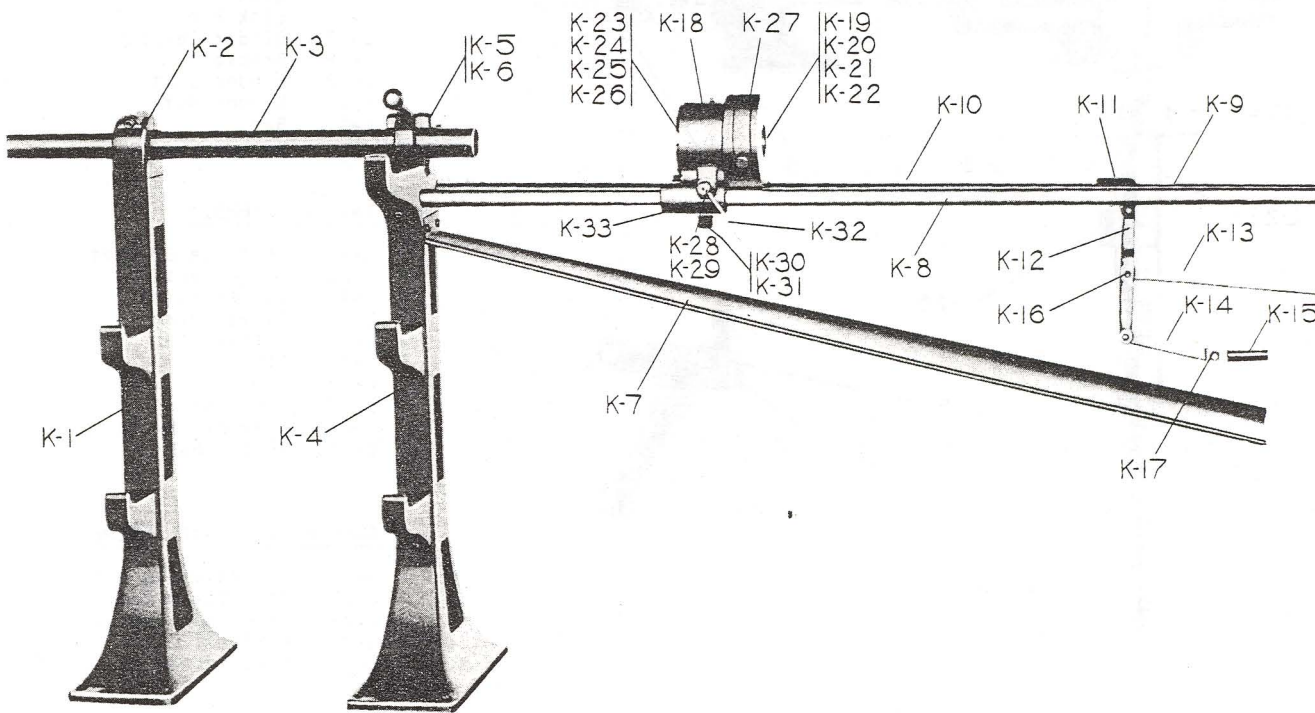
|      |               |
|------|---------------|
| J-16 | Finger Roller |
| J-17 | Roller Pin    |
| J-18 | Wedge         |

## YOKE ASSEMBLY

|      |                 |
|------|-----------------|
| J-19 | Yoke Shoe       |
| J-20 | Yoke Shoe Stud  |
| J-21 | Yoke            |
| J-22 | Link Pin        |
| J-23 | Yoke Pivot Stud |
| J-24 | Yoke Pivot Pin  |
| J-25 | Link            |
| J-26 | Crank Lever     |
| J-27 | Link Pin        |
| J-28 | Sleeve          |
| J-29 | Lever Shaft     |
| J-30 | Lever           |



# RATCHET BAR FEED - UNIT 'K'



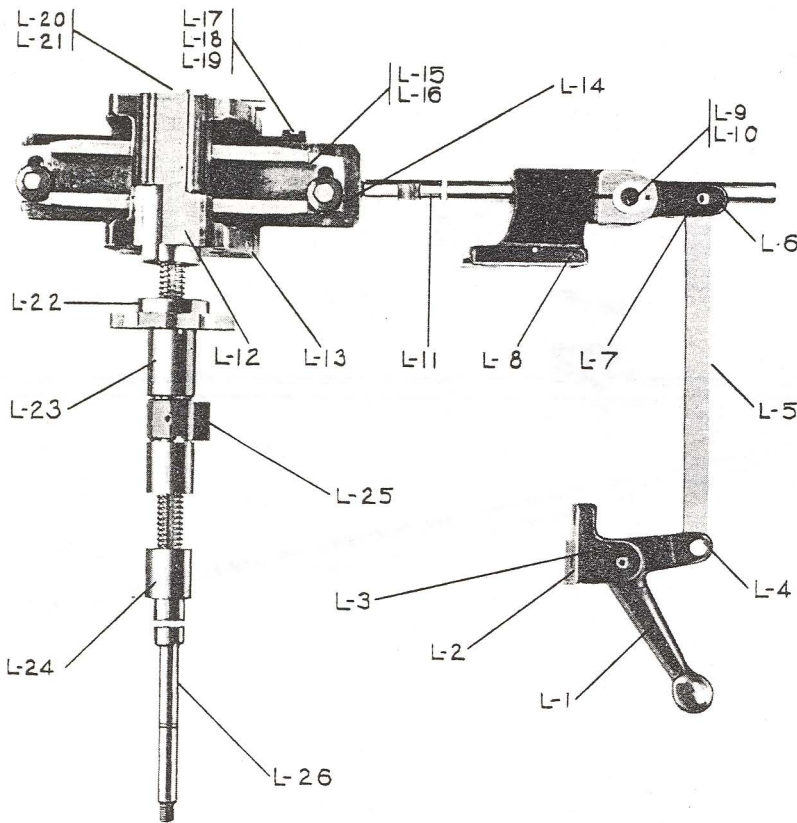
## BAR FEED STAND ASSEMBLY

|      |                     |
|------|---------------------|
| K- 1 | Rear Bar Stand      |
| K- 2 | Stand Head          |
| K- 3 | Support Tube        |
| K- 4 | Front Bar Stand     |
| K- 5 | Lever               |
| K- 6 | Lever Pin           |
| K- 7 | Drip Trough         |
| K- 8 | Support Bar         |
| K- 9 | Ratchet Support Bar |
| K-10 | Ratchet             |
| K-11 | Ratchet Pusher      |
| K-12 | Feed Bar Lever      |
| K-13 | Link                |
| K-14 | Pivot Link          |
| K-15 | Pivot Fork          |
| K-16 | Link Pin            |
| K-17 | Fork Pin            |

## SLIDING HEAD ASSEMBLY

|      |                         |
|------|-------------------------|
| K-18 | Sliding Head            |
| K-19 | Revolving Head          |
| K-20 | Chuck Jaw               |
| K-21 | Chuck Screw             |
| K-22 | Chuck Plate             |
| K-23 | Ball Bearing MRC 214-MF |
| K-24 | Bearing Spacer          |
| K-25 | Front Bearing Closer    |
| K-26 | Rear Bearing Closer     |
| K-27 | Chuck Guard             |
| K-28 | Latch                   |
| K-29 | Latch Spring            |
| K-30 | Brass Shoe              |
| K-31 | Friction Spring         |
| K-32 | Handle                  |
| K-33 | Stop Pin                |

## CARRIAGE TAPER ATTACHMENT — UNIT 'L'



### BINDER LEVER ASSEMBLY

- L- 1 Lever
- L- 2 Lever Hinge
- L- 3 Hinge Bushing
- L- 4 Link Pin
- L- 5 Link
- L- 6 Link Pin
- L- 7 Binder Lever
- L- 8 Bracket
- L- 9 Binder Bolt
- L-10 Binder Nut
- L-11 Bar

### SWIVEL ASSEMBLY

- L-12 Carriage Bracket
- L-13 Swivel Bracket
- L-14 Swivel Slide
- L-15 Swivel Plate
- L-16 Swivel Stud
- L-17 Gib
- L-18 Gib Nut
- L-19 Gib Stud
- L-20 Dovetail Binder
- L-21 Binder Nut

### COMPENSATING NUT ASSEMBLY

- L-22 Compensating Nut
- L-23 Feed Screw Nut
- L-24 Feed Gear Spacer
- L-25 Follower
- L-26 Feed Screw

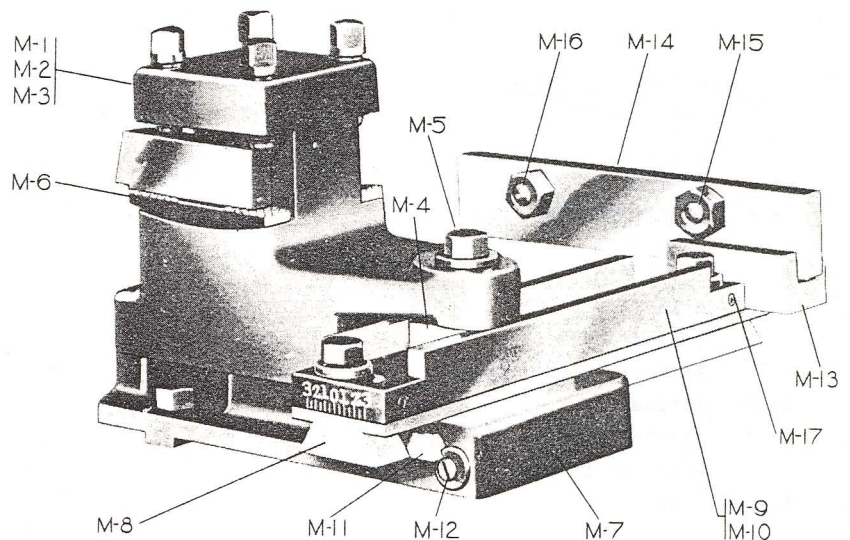
## CROSS SLIDE TAPER ATTACHMENT — UNIT 'M'

### TOOL SLIDE ASSEMBLY

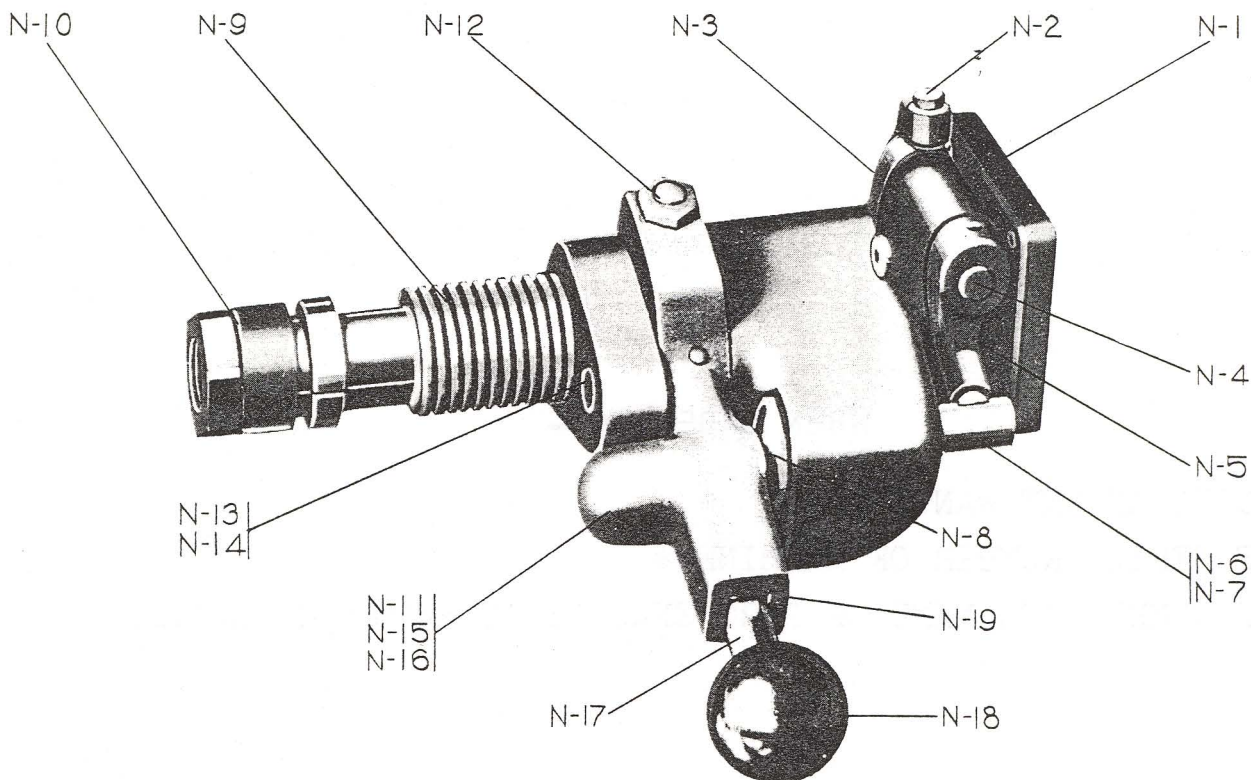
- M- 1 Tool Slide
- M- 2 Gib
- M- 3 Gib Screw
- M- 4 Follower
- M- 5 Follower Stud
- M- 6 Rocker

### SWIVEL ASSEMBLY

- M- 7 Base
- M- 8 Swivel Slide
- M- 9 Swivel Plate
- M-10 Swivel Stud
- M-11 Gib
- M-12 Gib Screw
- M-13 Yoke
- M-14 Bracket
- M-15 Short Bracket Stud
- M-16 Long Bracket Stud
- M-17 Adjusting Screw







BRACKET ASSEMBLY

|      |                     |
|------|---------------------|
| N- 1 | Bracket             |
| N- 2 | Trip Pin            |
| N- 3 | Trip Pin Lever      |
| N- 4 | Trip Lever Shaft    |
| N- 5 | Trip Lever          |
| N- 6 | Knockout Rod        |
| N- 7 | Knockout Rod Spring |
| N- 8 | Knockout Plug       |
| N- 9 | Leader              |
| N-10 | Leader Nut          |

FOLLOWER ASSEMBLY

|      |                  |
|------|------------------|
| N-11 | Power Feed Lever |
| N-12 | Follower         |
| N-13 | Pivot Pin        |
| N-14 | Pivot Pin Spring |
| N-15 | Plunger          |
| N-16 | Plunger Spring   |
| N-17 | Handle           |
| N-18 | Bakelite Ball    |
| N-19 | Stop Pin         |

WHEN ORDERING:-

1. SPECIFY AMOUNT WANTED
2. GIVE SERIAL NUMBER OF MACHINE \*
3. GIVE NUMBER AND NAME OF PART EXACTLY AS SHOWN IN CATALOG

\* THE SERIAL NUMBER OF EACH MACHINE IS STAMPED ON THE NAME PLATE AND ON THE END OF THE REAR BED WAY.