

PARTS CATALOG

FOR

BARDONS & OLIVER

No. 22

SADDLE TYPE

UNIVERSAL TURRET LATHE

BARDONS & OLIVER, INC.

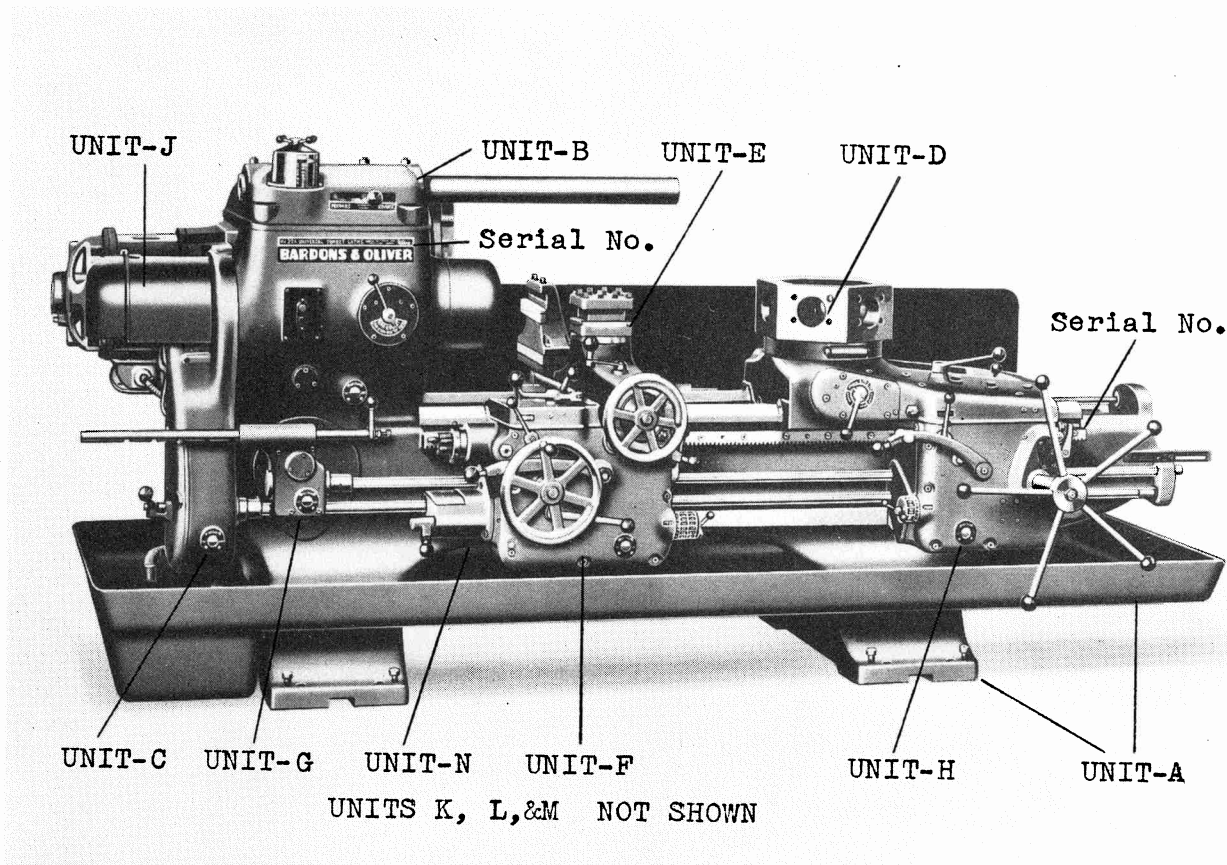
BARDONS & OLIVER, INC.

5800 HARPER ROAD

SOLON, OHIO 44139

440-498-5800 FAX 440-498-2001

NO. 22 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: - Reverse Clutch Gear.

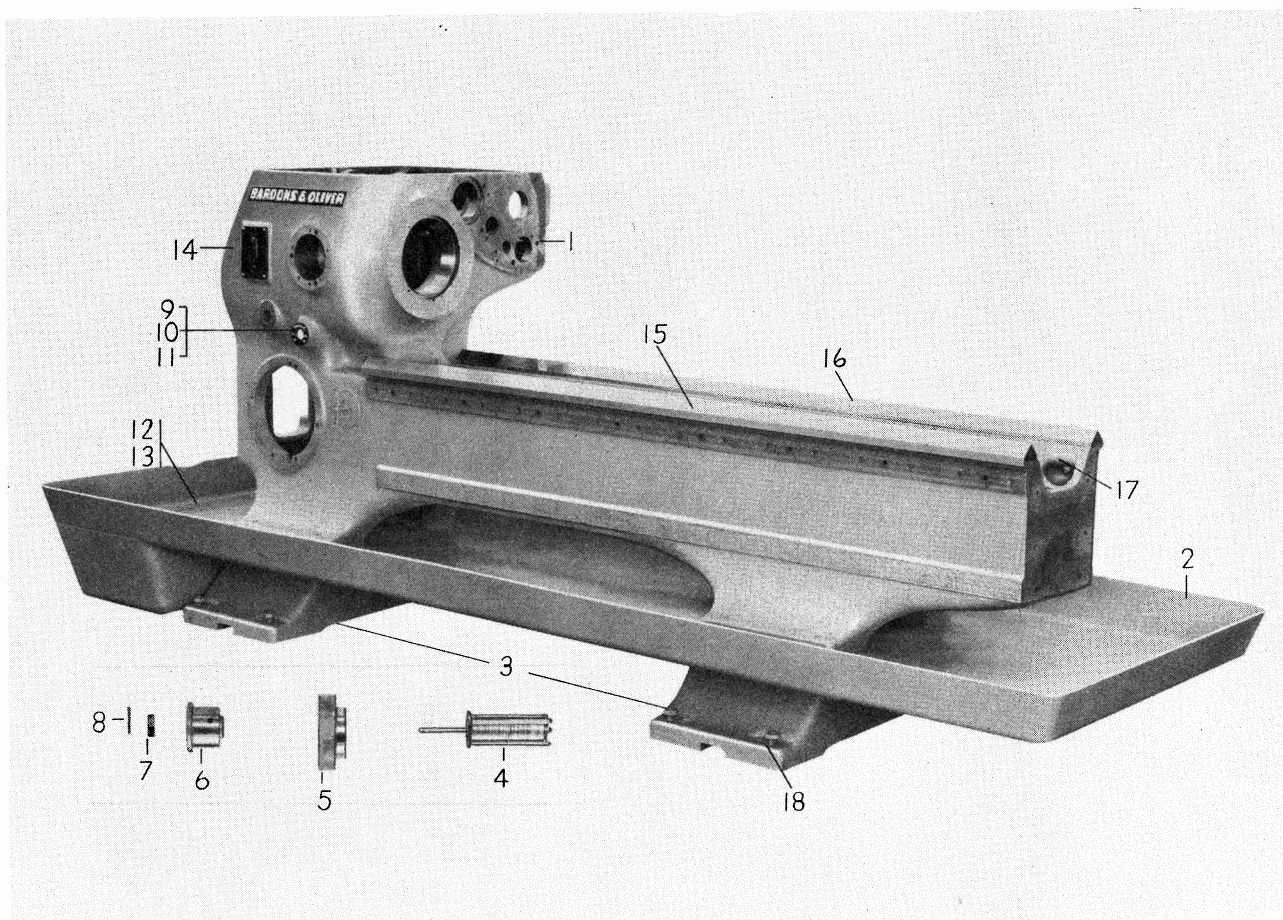
ORDER: -

1. Repair Part for #22 T.L.
Serial #17018
B-31 Reversing Clutch Gear - 58T

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 BED AT RIGHT END OF RACK.

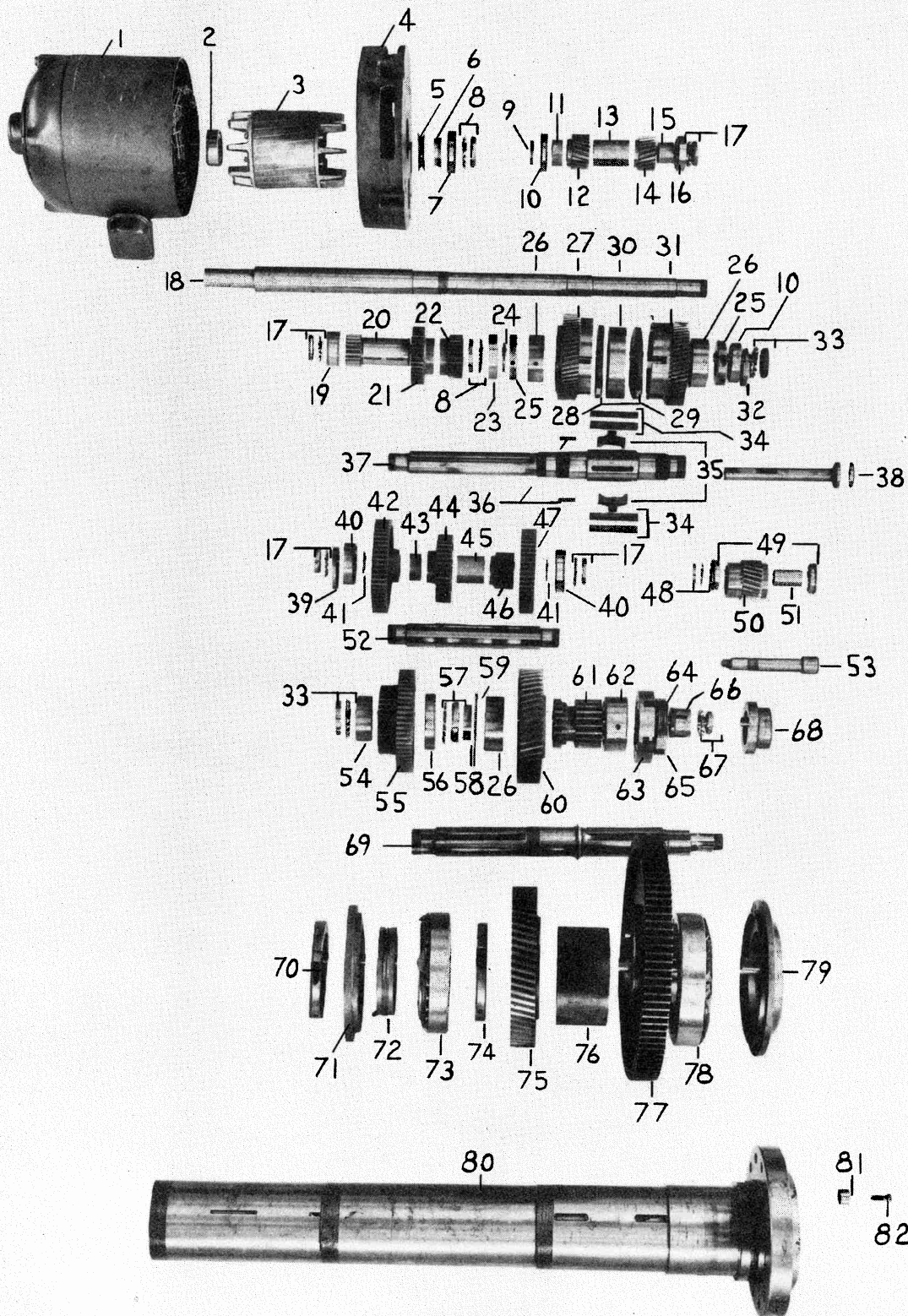
BED, PAN, & LEGS UNIT A



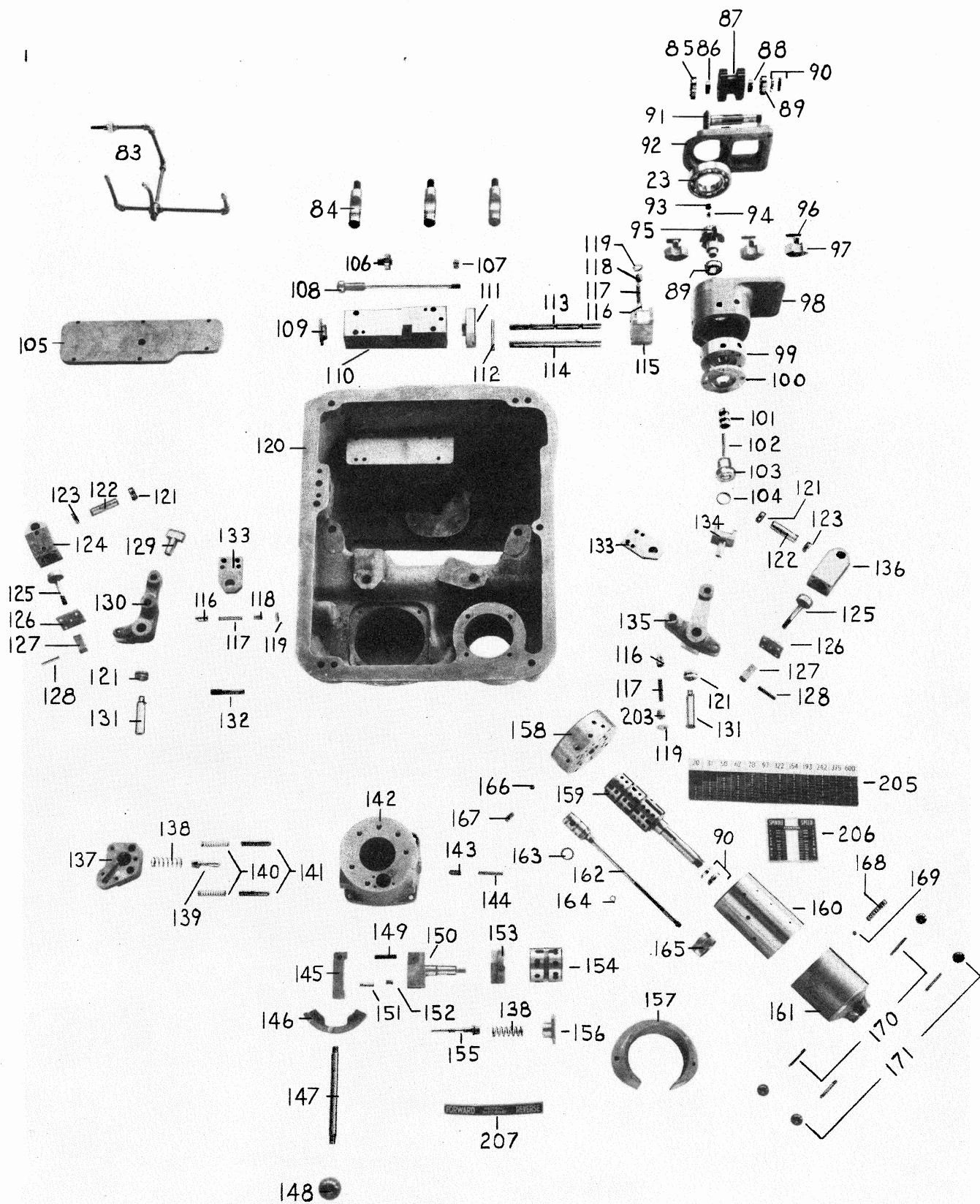
A- 1 Bed
 A- 2 Pan
 A- 3 Leg
 A- 4 Oil Filter - Cuno
 A- 5 Outer Filter Mounting
 A- 6 Inner Filter Mounting
 A- 7 Packing Cover
 A- 8 Filter Handle
 A- 9 Oil Gage Cover
 A-10 Oil Gage Glass
 A-11 Oil Gage Gasket
 A-12 Strainer
 A-13 Pan Plate

A-14 Switch Cover
 A-15 Front Bed Way
 A-16 Rear Bed Way
 A-17 Bed Way Stud
 A-18 Leveling Screw
 A-19 Rack (Not Shown)
 A-20 Cover - Machine Without Collet Chuck (Not Shown)
 A-21 Rear Splash Guard (Not Shown)
 A-22 Side Splash Guard (Not Shown)
 A-23 Start Cover (Not Shown)
 A-24 Reset Button (Not Shown)

HEAD UNIT B



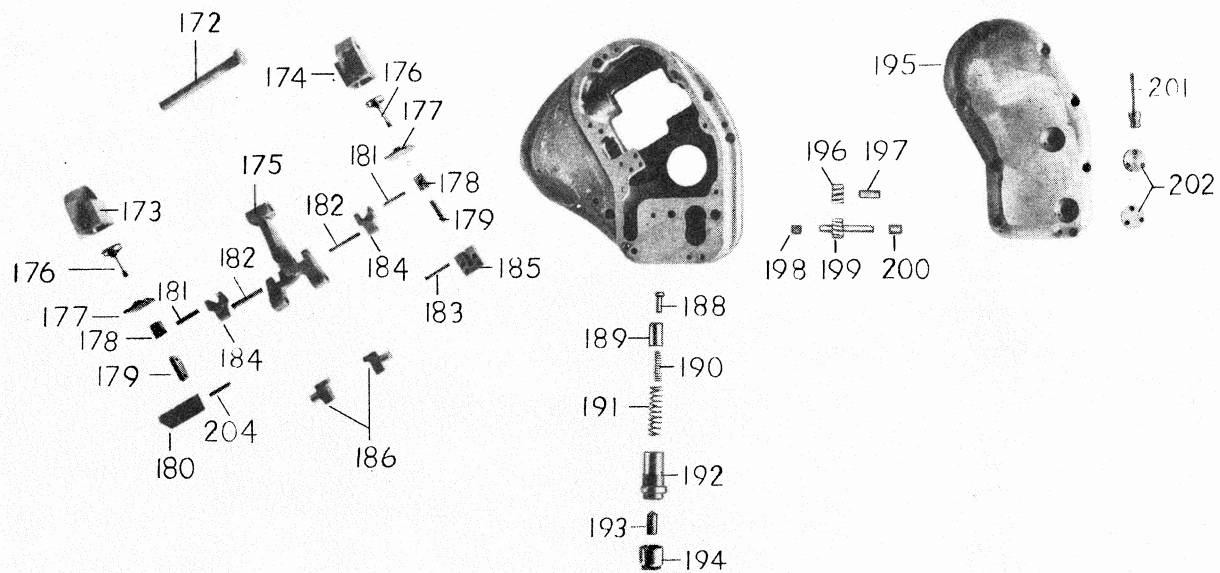
HEAD UNIT B



HEAD UNIT B

B- 1	Motor	B- 78	Spindle Brg. Timken 82572-82950
B- 2	Motor Bearing (Give Motor Specifications)	B- 79	Front Bearing Closer
B- 3	Rotor	B- 80	Spindle
B- 4	Motor Bracket	B- 81	Driving Button
B- 5	Motor Shaft Sheave	B- 82	Driving Button Screw
B- 6	Sheave Spacer	B- 83	Spray Piping
B- 7	Ball Bearing MRC 211SF	B- 84	Pilot Bar Binder
B- 8	Locknut N-11 & Lockwasher W-11	B- 85	Ball Bearing MRC 205S
B- 9	Spacer	B- 86	Spacer
B-10	Ball Bearing MRC 210S	B- 87	Gear 22T
B-11	Spacer	B- 88	Spacer
B-12	Motor Shaft Gear 26T	B- 89	Ball Bearing MRC 204S
B-13	Spacer	B- 90	Locknut N-04 & Lockwasher W-04
B-14	Motor Shaft Gear 24T	B- 91	Bevel Gear
B-15	Spacer	B- 92	Centrifugal Bracket
B-16	Ball Bearing MRC 208S	B- 93	Shoe
B-17	Locknut N-08 & Lockwasher W-08	B- 94	Steel Ball
B-18	Motor Drive Shaft	B- 95	Bevel Gear
B-19	Ball Bearing MRC 5208K	B- 96	Pin
B-20	Sliding Gear 22T	B- 97	Centrifugal Finger
B-21	Gear 39T	B- 98	Centrifugal Valve Housing
B-22	Gear 29T	B- 99	Valve Body
B-23	Ball Bearing MRC 211S	B-100	Plate
B-24	Spacer	B-101	Centrifugal Valve Plunger
B-25	Adjusting Nut	B-102	Spring
B-26	Ball Bearing MRC 5212K	B-103	Centrifugal Valve Sleeve
B-27	Forward Clutch Gear 60T	B-104	Linear-O-Ring 1820-25
B-28	Bronze Clutch Disc	B-105	Gear Shift Cover
B-29	Steel Clutch Disc	B-106	Piston
B-30	Clutch Spacer	B-107	Nut
B-31	Reverse Clutch Gear 58T	B-108	Piston
B-32	Spacer	B-109	Cylinder Closer
B-33	Locknut N-10 & Lockwasher W-10	B-110	Three Position Cylinder
B-34	Clutch Key	B-111	Cylinder Closer
B-35	Clutch Finger	B-112	Pin
B-36	Pin	B-113	Support Rod
B-37	Forward - Reverse Shaft	B-114	Support Rod
B-38	Reverse Clutch Plunger	B-115	Shifter Block
B-39	Bearing Spacer	B-116	Detent
B-40	Ball Bearing MRC 308S	B-117	Detent Spring
B-41	Spacer	B-118	Spring Retainer
B-42	Gear 61T	B-119	Hexagon Nut
B-43	Spacer	B-120	Housing
B-44	Gear 44T	B-121	Cylinder Stud Collar
B-45	Spacer	B-122	Cylinder Stud
B-46	Gear 22T	B-123	Collar
B-47	Gear 54T	B-124	Cylinder
B-48	Locknut N-06 & Lockwasher W-06	B-125	Piston
B-49	Ball Bearing MRC 206SG	B-126	Cylinder Closer
B-50	Idler Gear	B-127	Piston Rod Head
B-51	Spacer	B-128	Pin
B-52	Intermediate Shaft	B-129	Clutch Pinion Fork
B-53	Idler Gear Stud	B-130	Gear Shift Lever
B-54	Ball Bearing MRC 5210K	B-131	Lever Stud
B-55	Gear 4T & 63T	B-132	Chuck Guard Screw
B-56	Ball Bearing MRC 212S	B-133	Detent Plate
B-57	Locknut N-12 & Lockwasher W-12	B-134	Two Gear Fork
B-58	Spacer	B-135	Gear Shift Lever
B-59	Bearing Retainer	B-136	Cylinder
B-60	Clutch Gear 54T & 21T	B-137	Valve Cover
B-61	Gear Clutch Pinion 21T	B-138	Spring
B-62	Ball Bearing MRC 5310	B-139	Valve Plunger
B-63	Brake Disc Cup	B-140	Spring
B-64	Bronze Brake Disc	B-141	Plunger
B-65	Steel Brake Disc	B-142	Valve
B-66	Brake Coupling	B-143	Detent
B-67	Locknut N-07 & Lockwasher W-07	B-144	Spring
B-68	Brake Piston	B-145	Lever
B-69	Hi-Lo Clutch Shaft	B-146	Ring
B-70	Spindle Adjusting Nut	B-147	Lever Handle
B-71	Rear Bearing Closer	B-148	Bakelite Ball
B-72	Bearing Spacer	B-149	Pin
B-73	Spindle Brg. Timken 74525-74850	B-150	Lever Head
B-74	Spindle Adjusting Nut	B-151	Spring
B-75	Small Spindle Gear	B-152	Plunger
B-76	Spindle Gear Spacer	B-153	Detent Plate
B-77	Large Spindle Gear	B-154	Valve Disc
		B-155	Valve Plunger

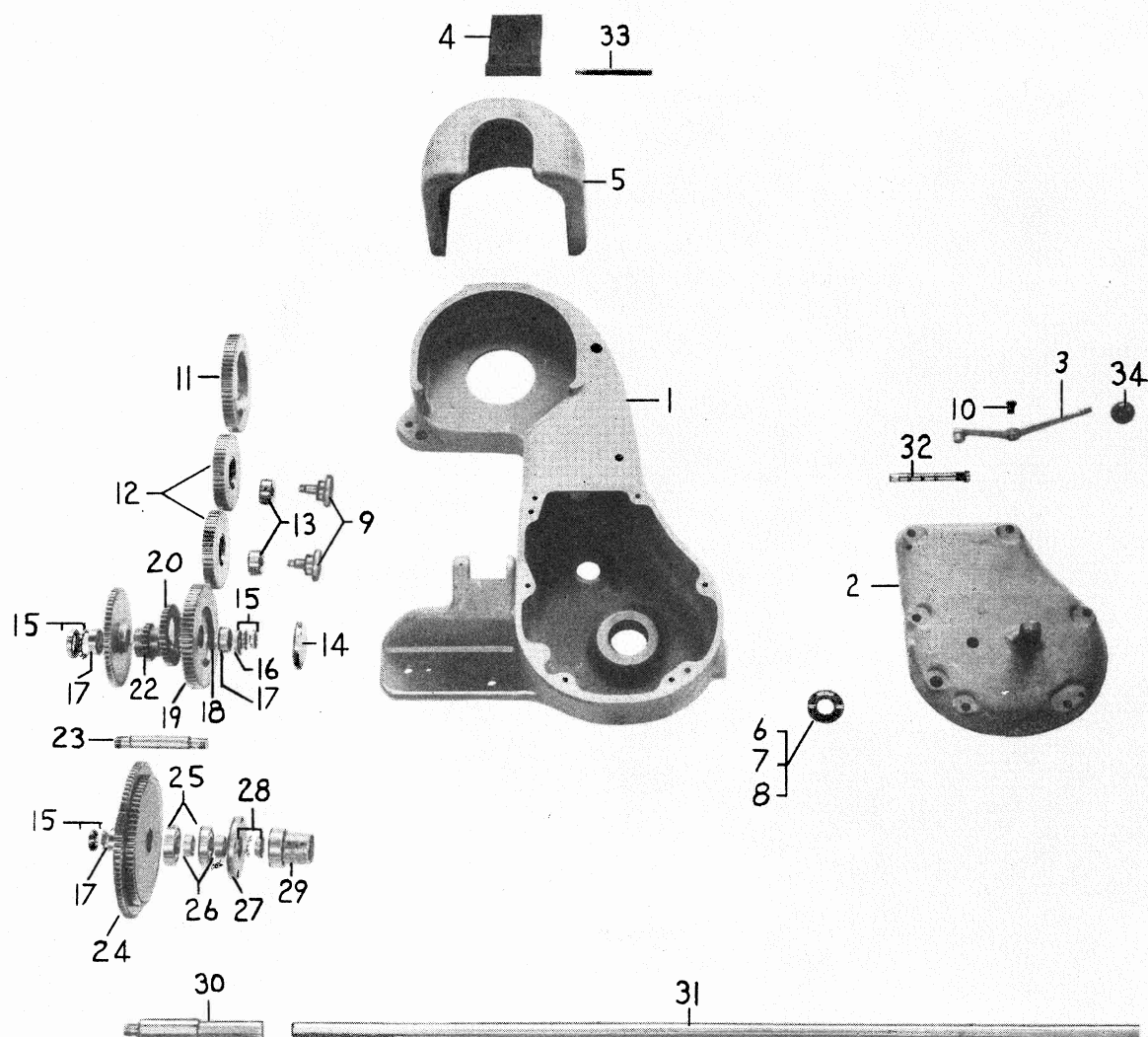
HEAD UNIT B



B-156 Valve Cover
 B-157 Dial Cover
 B-158 Presselect Valve Cover
 B-159 Presselect Valve Drum
 B-160 Presselect Valve Housing
 B-161 Dial Drum
 B-162 Direct & Presselect Valve
 B-163 Linear-O-Ring 1820-17
 B-164 Linear-O-Ring 1820-7
 B-165 Direct & Presselect Dial
 B-166 Steel Ball
 B-167 Spring
 B-168 Spring
 B-169 Steel Ball
 B-170 Spoke
 B-171 Bakelite Ball
 B-172 Bolt
 B-173 Cylinder
 B-174 Cylinder
 B-175 Clutch Lever
 B-176 Piston
 B-177 Cylinder Closer
 B-178 Piston Rod Head
 B-179 Link
 B-180 Block
 B-181 Pin

B-182 Pin
 B-183 Pin
 B-184 Link
 B-185 Block
 B-186 Yoke Shoe
 B-187 Pump Bracket
 B-188 Valve Plunger
 B-189 Valve Plunger
 B-190 Relief Valve Spring
 B-191 Relief Valve Spring
 B-192 Relief Valve Body
 B-193 Relief Valve Screw
 B-194 Relief Valve Cap
 B-195 Pump Bracket Cover
 B-196 Oil Pump Gear
 B-197 Oil Pump Gear Stud
 B-198 Bushing
 B-199 Oil Pump Pinion
 B-200 Bushing
 B-201 Oiler Stud
 B-202 Oiler Stud Cover
 B-203 Spring Retainer
 B-204 Pin
 B-205 Drum Chart Plate
 B-206 Cover Chart Plate
 B-207 Lever Position Plate

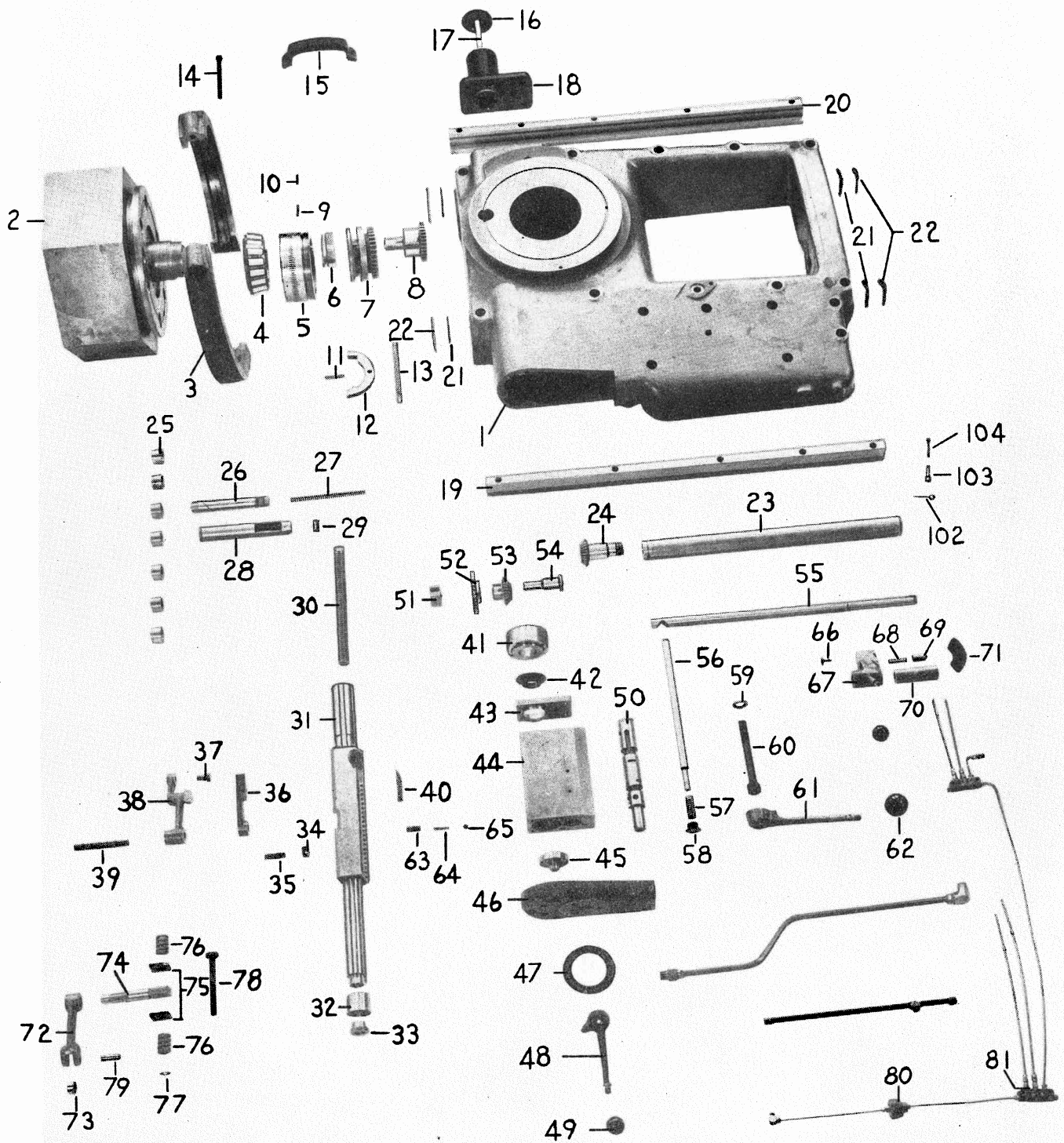
HEAD END BRACKET UNIT C



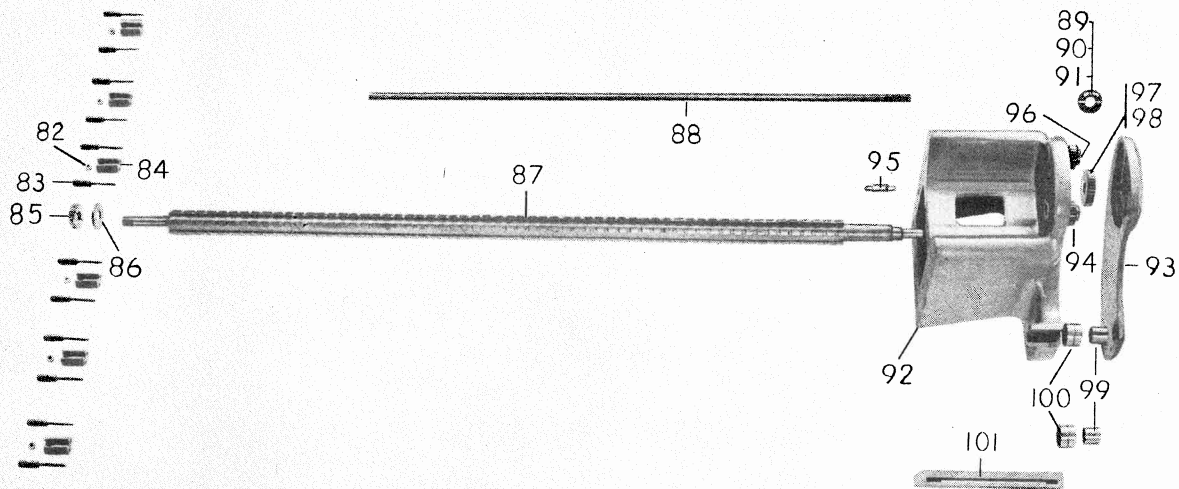
- C- 1 Head End Bracket
- C- 2 Head End Bracket Cover
- C- 3 Shift Lever
- C- 4 Spindle Guard Hinge
- C- 5 Spindle Guard
- C- 6 Oil Gage Cover
- C- 7 Oil Gage Glass
- C- 8 Oil Gage Gasket
- C- 9 Stud
- C-10 Lever Stud
- C-11 Gear 60T
- C-12 Gear 46T
- C-13 Ball Bearing MRC 5304
- C-14 Bearing Closer
- C-15 Locknut N-05 & Lockwasher W-05
- C-16 Spacer
- C-17 Ball Bearing MRC 205-S

- C-18 Spacer
- C-19 Gear 60T
- C-20 Gear 35T
- C-21 Non Sliding Gear 21T
- C-22 Gear 57T
- C-23 Shaft
- C-24 Triple Cluster Gear
- C-25 Ball Bearing MRC 207-S
- C-26 Spacer
- C-27 Bearing Closer
- C-28 Locknut N-07 & Lockwasher W-07
- C-29 Coupling
- C-30 Shaft
- C-31 Feed Shaft
- C-32 Shift Rod
- C-33 Hinge Pin
- C-34 Bakelite Ball

TURRET & SADDLE UNIT D



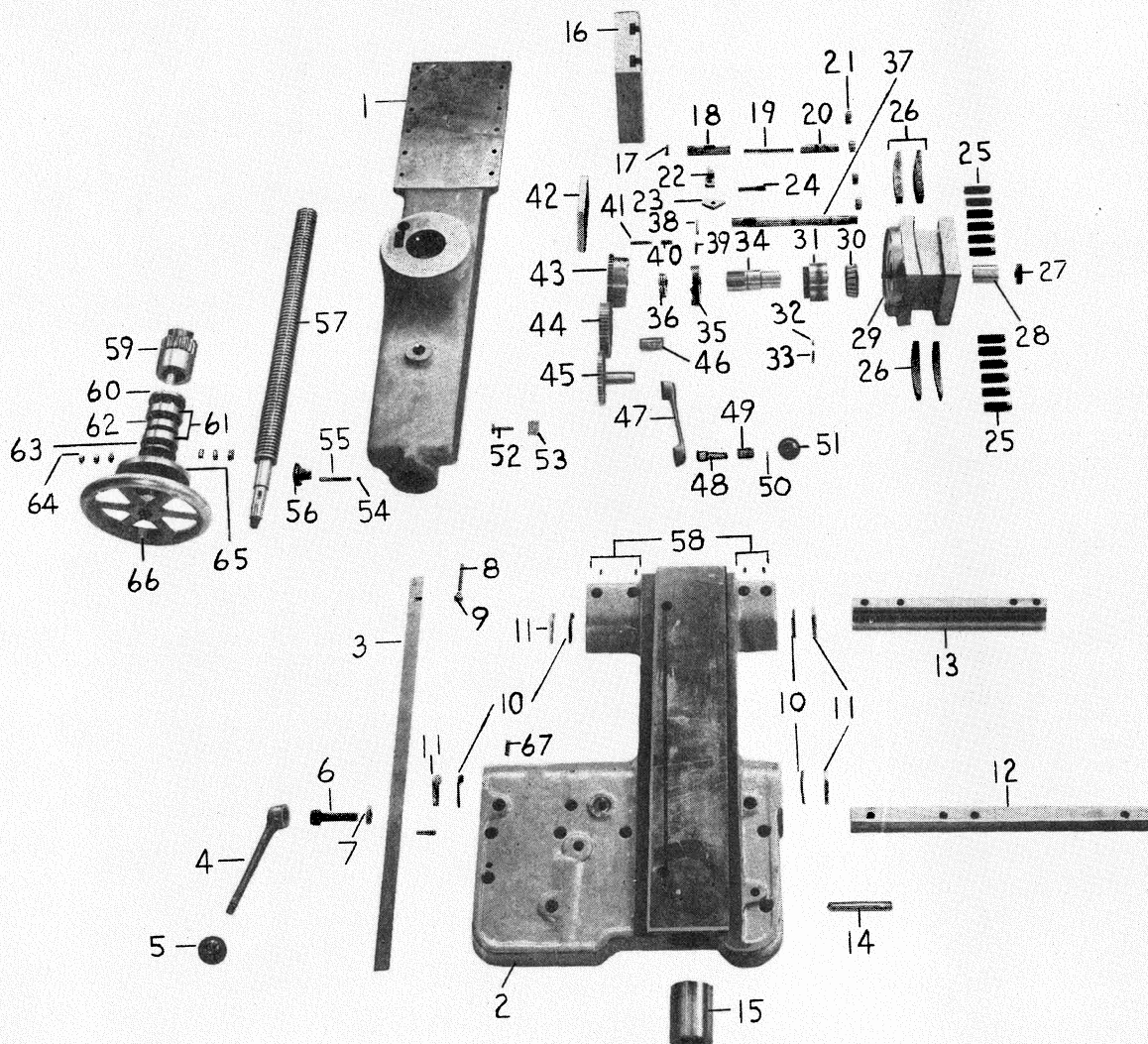
TURRET & SADDLE UNIT D



PAGE 9

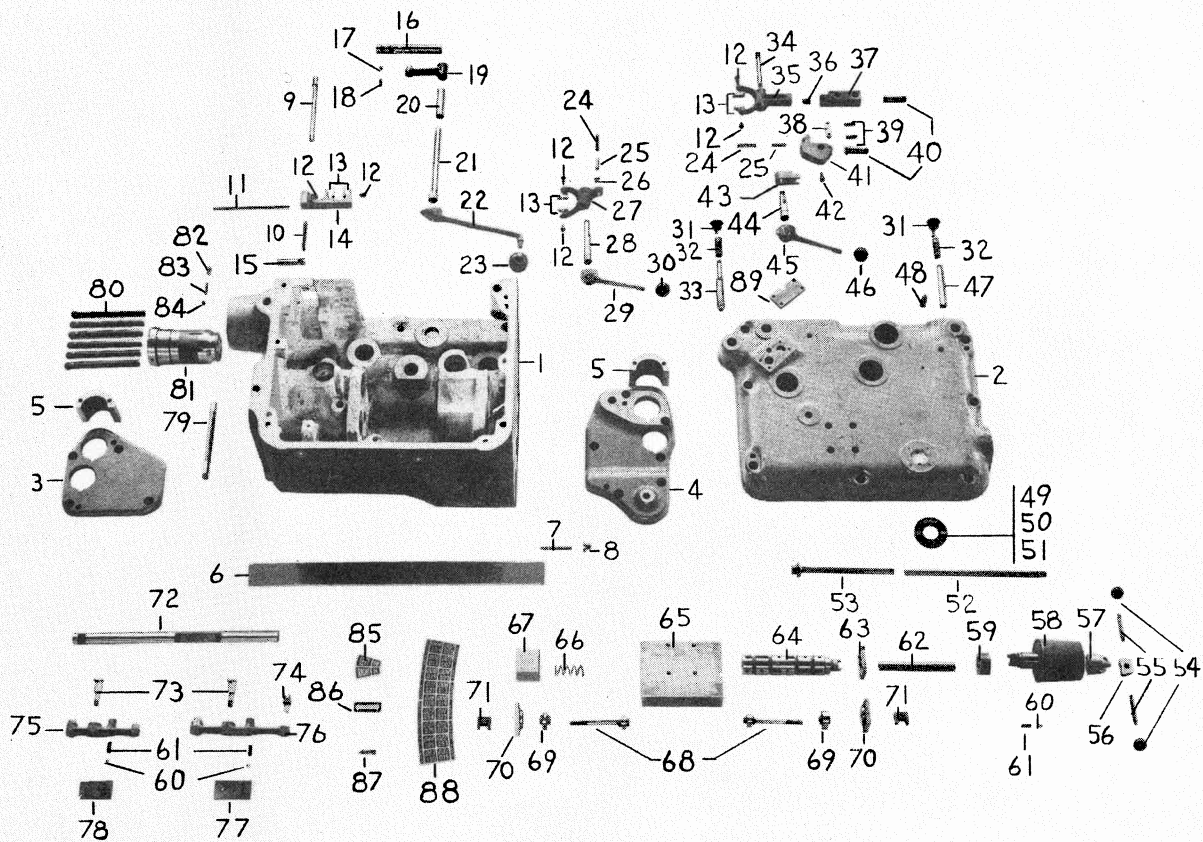
- | | | | |
|-------|-----------------------------|-------|------------------------------|
| D- 1 | Saddle | D- 53 | Turret Bevel Gear |
| D- 2 | Hexagon Turret | D- 54 | Index Gear Stud |
| D- 3 | Turret Clamp | D- 55 | Stop Rod |
| D- 4 | Roller Bearing - Timken 760 | D- 56 | Knock Out Rod |
| D- 5 | Turret Locating Ring | D- 57 | Knock Out Spring |
| D- 6 | Ratchet | D- 58 | Knock Out Rod Plug |
| D- 7 | Indexing Gear | D- 59 | Binder Stud Washer |
| D- 8 | Indexing Gear | D- 60 | Binder Stud |
| D- 9 | Locating Pin | D- 61 | Binder Lever |
| D- 10 | Locating Spring | D- 62 | Bakelite Ball |
| D- 11 | Pawl Pivot Pin | D- 63 | Spring Retainer |
| D- 12 | Pawl | D- 64 | Spring |
| D- 13 | Pawl Spring | D- 65 | Steel Ball |
| D- 14 | Clamp Ring Bolt | D- 66 | Stop Lever Pin |
| D- 15 | Clamp Guard | D- 67 | Stop Lever |
| D- 16 | Bracket Cover | D- 68 | Detent Spring |
| D- 17 | Spring Guide Pin | D- 69 | Stop Detent Pin |
| D- 18 | Bracket | D- 70 | Stop Rod Sleeve |
| D- 19 | Front Saddle Cap | D- 71 | Detent Plate |
| D- 20 | Rear Saddle Cap | D- 72 | Clamp Lever |
| D- 21 | Wiper | D- 73 | Clamp Roller |
| D- 22 | Wiper Cover | D- 74 | Clamp Spreader |
| D- 23 | Index Tube | D- 75 | Clamp Plates |
| D- 24 | Bevel Gear | D- 76 | Clamp Spring |
| D- 25 | Lock Bolt Bushing | D- 77 | Clamp Spring Washer |
| D- 26 | Lock Bolt | D- 78 | Clamp Bolt |
| D- 27 | Lock Bolt Spring | D- 79 | Clamp Roller Pin |
| D- 28 | Lock Bolt Sleeve | D- 80 | Line Filter |
| D- 29 | Lock Bolt Sleeve Screw | D- 81 | Meter Unit (Give Style No.) |
| D- 30 | Spring | D- 82 | Stop Dog Shoe |
| D- 31 | Control Bar | D- 83 | Stop Dog Screw |
| D- 32 | Piston | D- 84 | Stop Dog |
| D- 33 | Piston Rod Cap | D- 85 | Carrier Shaft Nut |
| D- 34 | Roller | D- 86 | Carrier Shaft Washer |
| D- 35 | Roller Stud | D- 87 | Stop Dog Carrier Shaft |
| D- 36 | Finger | D- 88 | Index Rod |
| D- 37 | Lever Pin | D- 89 | Oil Gage Cover |
| D- 38 | Lock Bolt Lever | D- 90 | Oil Gage Glass |
| D- 39 | Lever Pivot Pin | D- 91 | Oil Gage Gasket |
| D- 40 | Cam Block | D- 92 | Tail End Bracket |
| D- 41 | Control Bar Bushing | D- 93 | Tail End Bracket Cover |
| D- 42 | Hat Seal J.M. #1167 | D- 94 | Tail End Bracket Gear |
| D- 43 | Cylinder Cover | D- 95 | Tail End Bracket Shaft |
| D- 44 | Cylinder | D- 96 | Tail End Bracket Gear |
| D- 45 | Cylinder Pilot | D- 97 | Tail End Bracket Bushing |
| D- 46 | Cover | D- 98 | Tail End Bracket Idler Gear |
| D- 47 | Control Plate | D- 99 | Bearing Inner Bushing |
| D- 48 | Control Lever | D-100 | Roller Bearing MC GILL MO-24 |
| D- 49 | Bakelite Ball | D-101 | Adjusting Trip Bar |
| D- 50 | Valve | D-102 | Valve Handle |
| D- 51 | Pawl Cam | D-103 | Valve Body |
| D- 52 | Index Gear | D-104 | Valve |

CROSS SLIDE & CARRIAGE UNIT E



E- 1	Cross Slide	E-24	Pivot Screw	E-46	Bushing
E- 2	Carriage	E-25	Square Head Set Screw	E-47	Binder Lever
E- 3	Gib	E-26	Rocker	E-48	Lever Shaft
E- 4	Lever	E-27	Friction Bolt Nut	E-49	Lever Bushing
E- 5	Bakelite Ball	E-28	Stud Spacer	E-50	Lever Collar
E- 6	Binder Stud	E-29	Square Turret	E-51	Lever Ball
E- 7	Washer	E-30	Ball Brg. Timken 25581	E-52	Trip Stud
E- 8	Adjusting Stud	E-31	Locating Ring	E-53	Trip
E- 9	Adjusting Nut	E-32	Detent	E-54	Shoe
E-10	Wiper	E-33	Detent Spring	E-55	Binder Screw
E-11	Wiper Cover	E-34	Center Sleeve	E-56	Binder Screw Knob
E-12	Front Carriage Cap	E-35	Indexing Plate	E-57	Feed Screw
E-13	Rear Carriage Cap	E-36	Thrust Brg. SKF 51108	E-58	Shoe
E-14	Trip Pin	E-37	Center Stud	E-59	Feed Screw Gear
E-15	Feed Screw Nut	E-38	Tumbler Plunger	E-60	Bearing Spacer
E-16	Tool Block	E-39	Tumbler Plunger Spring	E-61	Ball Brg. MRC 7306
E-17	Lock Bolt Sleeve Screw	E-40	Index Plunger	E-62	Bearing Spacer
E-18	Lock Bolt Sleeve	E-41	Index Plunger Spring	E-63	Bearing Spacer
E-19	Lock Bolt Spring	E-42	Plate	E-64	Clip
E-20	Lock Bolt	E-43	Cam	E-65	Dial
E-21	Lock Bolt Bushing	E-44	Gear 45T	E-66	Handwheel
E-22	Lock Bolt Lever	E-45	Gear Stud 45T	E-67	Shoe
E-23	Tumbler				

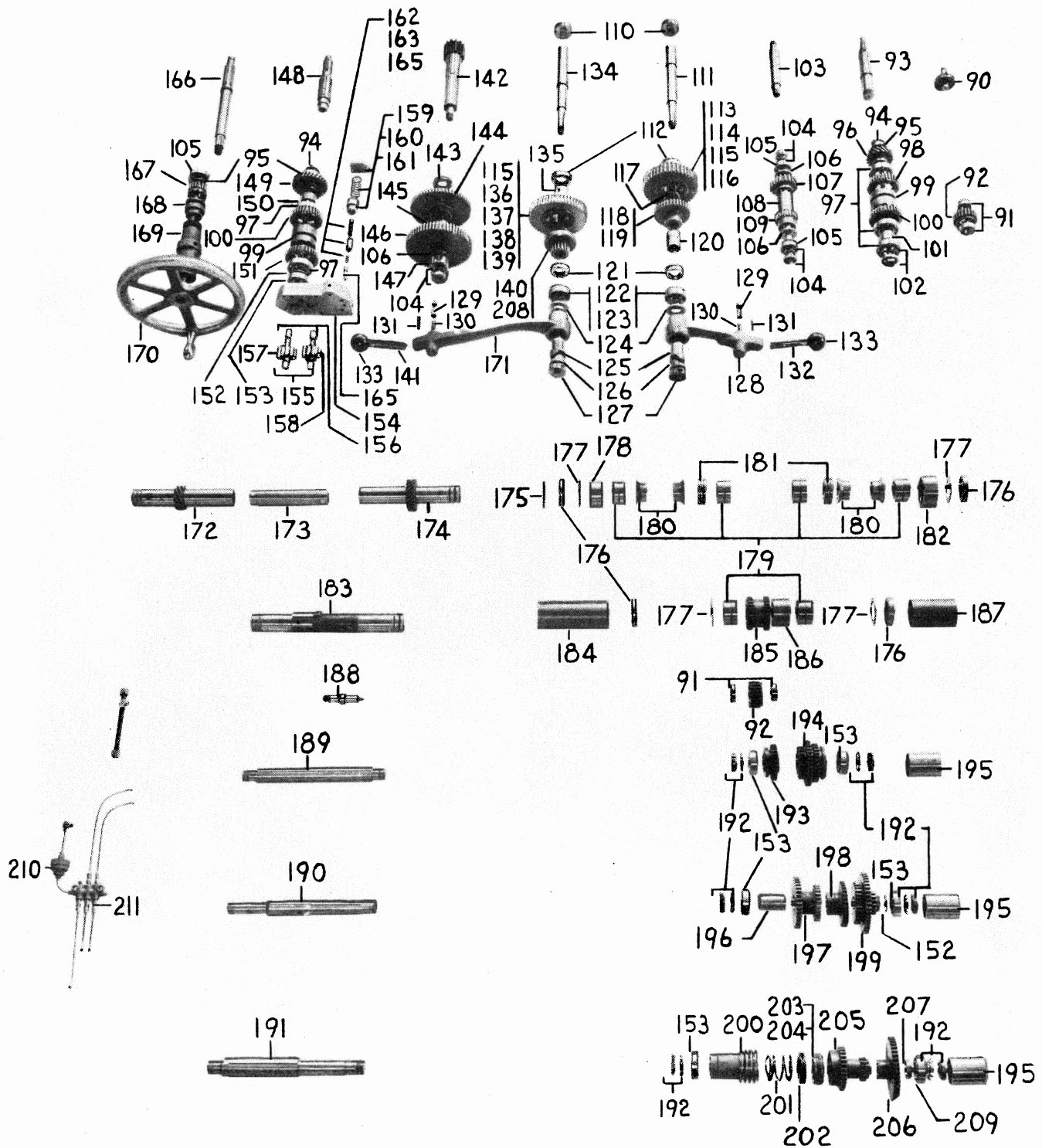
CARRIAGE APRON UNIT F



- F- 1 Carriage Apron
- F- 2 Carriage Apron Cover
- F- 3 Left End Cover
- F- 4 Right End Cover
- F- 5 Cover
- F- 6 Gib
- F- 7 Gib Adjusting Stud
- F- 8 Gib Adjusting Nut
- F- 9 Clutch Rod
- F- 10 Knock Out Spring
- F- 11 Yoke Pin
- F- 12 Yoke Shoe Stud
- F- 13 Yoke Shoe
- F- 14 Yoke
- F- 15 Pin
- F- 16 Gear Shift Rod
- F- 17 Steel Ball
- F- 18 Spring
- F- 19 Forward-Reverse Lever
- F- 20 Lever Spacer
- F- 21 Lever Stud
- F- 22 Reverse Lever
- F- 23 Bakelite Ball
- F- 24 Spring
- F- 25 Detent Pin
- F- 26 Detent Plug
- F- 27 Yoke
- F- 28 Rapid Traverse Lever Stud

- F- 29 Rapid Traverse Lever
- F- 30 Bakelite Ball
- F- 31 Knockout Rod Plug
- F- 32 Knockout Spring
- F- 33 Knockout
- F- 34 Yoke Screw
- F- 35 Yoke
- F- 36 Shift Pin
- F- 37 Lever
- F- 38 Link
- F- 39 Link Pin
- F- 40 Lever Stud
- F- 41 Lever
- F- 42 Shift Pin
- F- 43 Lever
- F- 44 Lever Stud
- F- 45 Rapid Traverse Lever
- F- 46 Bakelite Ball
- F- 47 Knockout
- F- 48 Stop Pin
- F- 49 Oil Gage Cover
- F- 50 Oil Gage Glass
- F- 51 Oil Gage Gasket
- F- 52 Extension
- F- 53 Valve Plunger
- F- 54 Bakelite Ball
- F- 55 Spoke

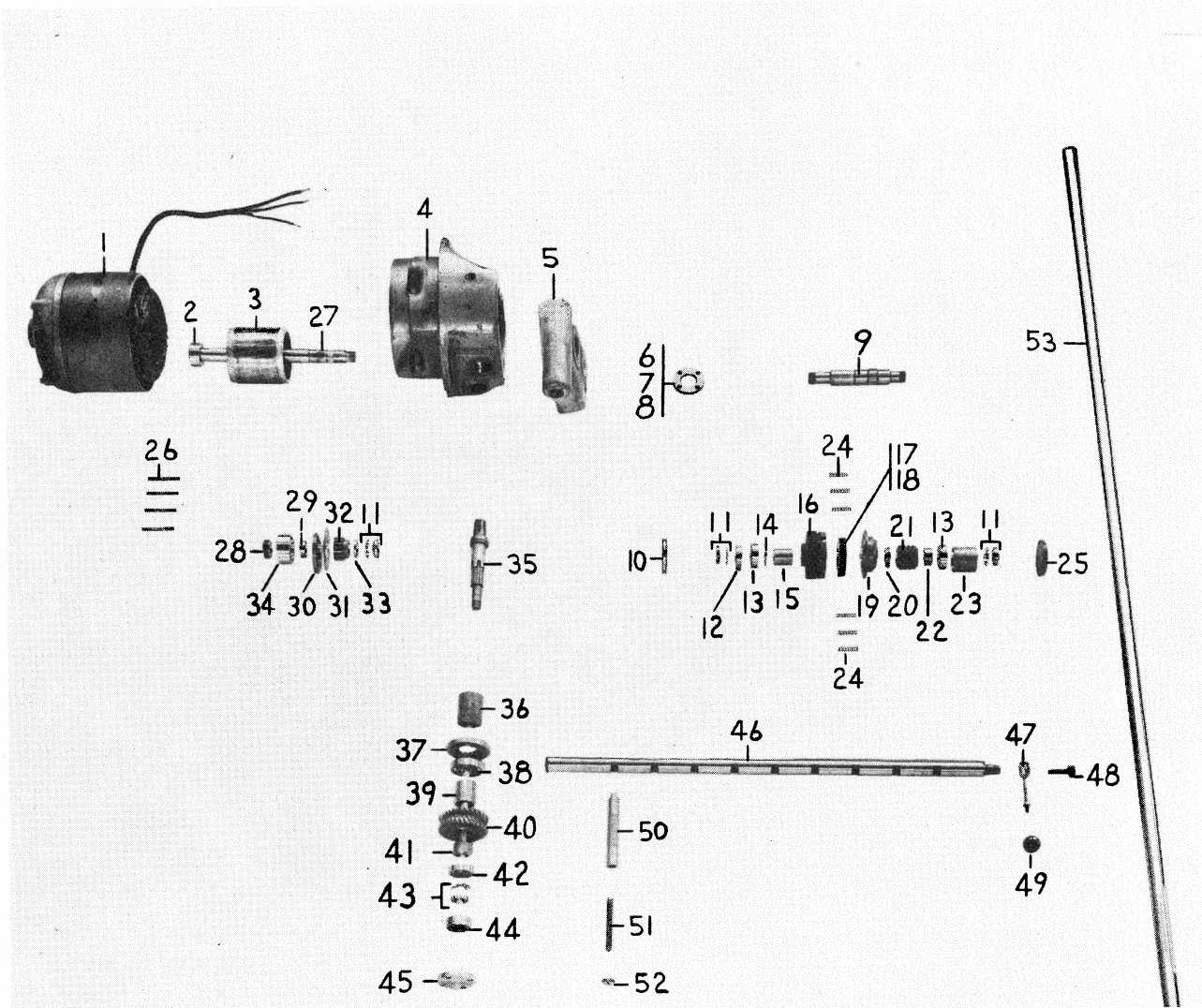
CARRIAGE APRON UNIT F



CARRIAGE APRON UNIT F

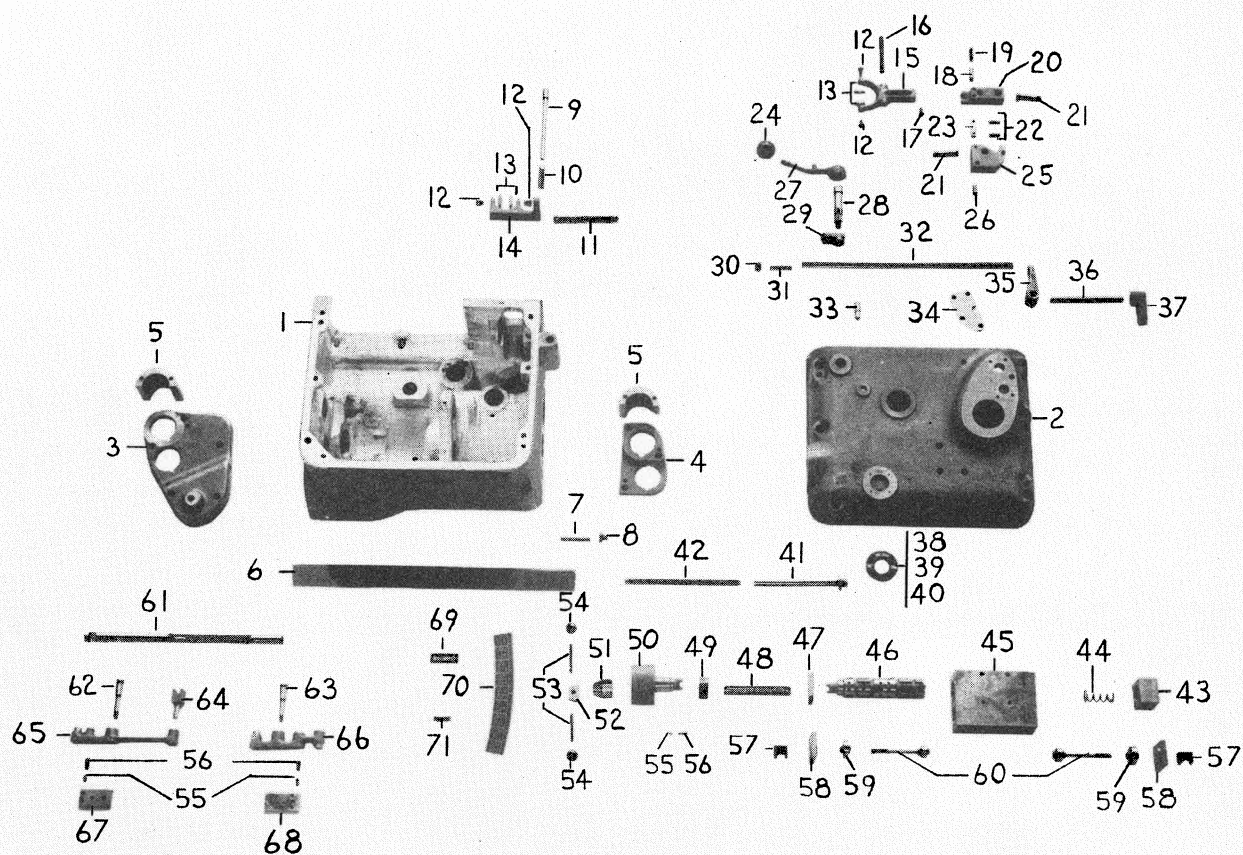
F- 56	Plunger Cam	F-134	Clutch Shaft
F- 57	Cam Support	F-135	Spacer
F- 58	Dial Drum	F-136	Tooth Clutch Gear
F- 59	Dial Drum Collar	F-137	Tooth Clutch Bushing
F- 60	Steel Ball	F-138	Worm Gear
F- 61	Detent Spring	F-139	Pin
F- 62	Extension Tube	F-140	Tooth Clutch
F- 63	Valve Closer	F-141	Feed Lever Handle
F- 64	Valve Disc	F-142	Pinion Shaft
F- 65	Valve Housing	F-143	Spacer
F- 66	Valve Spring	F-144	Gear 58T
F- 67	Valve Closer	F-145	Spacer
F- 68	Piston	F-146	Gear 62T
F- 69	Piston	F-147	Ball Bearing MRC 5204-K
F- 70	Closer	F-148	Shaft
F- 71	Shifter Block	F-149	Longitudinal Traverse Gear 30T
F- 72	Gear Shift Rod	F-150	Spacer
F- 73	Lever Stud	F-151	Clutch Gear
F- 74	Shifter Block	F-152	Spacer
F- 75	Shifter Lever	F-153	Ball Bearing MRC 205-S
F- 76	Shifter Lever	F-154	Pump Body
F- 77	Detent Plate	F-155	Bronze Bushing
F- 78	Detent Plate	F-156	Bronze Bushing
F- 79	Knockout Rod	F-157	Pump Gear
F- 80	Stop Screw	F-158	Pump Gear
F- 81	Stop Screw Roll	F-159	Pump Cover
F- 82	Detent Screw	F-160	Pump Spring
F- 83	Detent Spring	F-161	Valve Plunger
F- 84	Steel Ball	F-162	Pump Spring
F- 85	Forward & Reverse Lever Plate	F-163	Valve Plunger
F- 86	Rapid Traverse Plate	F-164	Pump Spring
F- 87	Feed Arrow	F-165	Valve Plunger
F- 88	Feed Plate	F-166	Shaft
F- 89	Cover	F-167	Clutch Gear
F- 90	Idler Stud	F-168	Tooth Clutch
F- 91	Ball Bearing MRC 203-S	F-169	Sleeve
F- 92	Idler Gear 22T	F-170	Handwheel
F- 93	Shaft	F-171	Longitudinal Feed Lever
F- 94	Ball Bearing MRC 7204	F-172	Long. Trav. Hollow Shaft
F- 95	Spacer	F-173	Extension
F- 96	Cross Traverse Gear 18T	F-174	Cross Traverse Hollow Shaft
F- 97	Ball Bearing MRC 206-S	F-175	Spacer
F- 98	Clutch Gear 25T	F-176	Oil Seal Victoprene
F- 99	Tooth Clutch	F-177	Bearing Spacer
F-100	Clutch Gear 31T	F-178	Bearing Sleeve
F-101	Spacer	F-179	Roller Bearing McGill MO-26
F-102	Locknut N-06 & Lockwasher W-06	F-180	Bearing Spacer
F-103	Shaft	F-181	Thrust Bearing MRC 10B
F-104	Locknut N-04 & Lockwasher W-04	F-182	Bearing Sleeve
F-105	Ball Bearing MRC 204-S	F-183	Hollow Feed Shaft
F-106	Spacer	F-184	Spacer
F-107	Gear 20T	F-185	Gear 28T
F-108	Spacer	F-186	Bearing Sleeve
F-109	Gear 21T	F-187	Bearing Spacer
F-110	Clutch Shaft Cover	F-188	Idler Stud
F-111	Clutch Shaft	F-189	Spline Shaft
F-112	Thrust Bearing MRC 7B	F-190	Spline Shaft
F-113	Tooth Clutch	F-191	Spline Shaft
F-114	Tooth Clutch Bushing	F-192	Locknut N-05 & Lockwasher W-05
F-115	Feed Clutch Spring	F-193	Gear 28T
F-116	Feed Clutch Pin	F-194	Sliding Cluster Gear
F-117	Spacer	F-195	Bearing Spacer
F-118	Tooth Clutch	F-196	Spacer
F-119	Tooth Clutch Bushing	F-197	Gear 27T & 38T
F-120	Spacer	F-198	Gear 33T
F-121	Thrust Bearing MRC 6B	F-199	Sliding Cluster Gear
F-122	Plug	F-200	Worm
F-123	Pin	F-201	Worm Spring
F-124	Washer	F-202	Clutch Ring
F-125	Feed Lever Cam	F-203	Bronze Clutch Plate
F-126	Feed Cam	F-204	Steel Clutch Plate
F-127	Friction Bolt Nut	F-205	Gear 16T & 30T
F-128	Cross Feed Lever	F-206	Gear 45T
F-129	Feed Plunger	F-207	Spacer
F-130	Feed Plunger Spring	F-208	Tooth Clutch Bushing
F-131	Pin	F-209	Ball Bearing MRC 7205
F-132	Feed Lever Handle	F-210	Line Filter
F-133	Bakelite Ball	F-211	Meter Unit (Give Style No.)

RAPID TRAVERSE DRIVE UNIT G



- | | | | |
|------|--|------|--------------------------------|
| G- 1 | Motor | G-27 | Motor Shaft |
| G- 2 | Motor Bearing
(Give Motor Specifications) | G-28 | Oil Thrower |
| G- 3 | Rotor | G-29 | Bearing Spacer |
| G- 4 | Bracket | G-30 | Bearing Closer |
| G- 5 | Cover | G-31 | Oil Slinger |
| G- 6 | Oil Gage Cover | G-32 | Gear 18T |
| G- 7 | Oil Gage Glass | G-33 | Motor Shaft Spacer |
| G- 8 | Oil Gage Gasket | G-34 | Ball Bearing MRC 5206-K |
| G- 9 | Clutch Shaft | G-35 | Shaft |
| G-10 | Cover | G-36 | Coupling |
| G-11 | Locknut N-05 & Lockwasher W-05 | G-37 | Bearing Closer |
| G-12 | Bearing Spacer | G-38 | Ball Bearing MRC 206-MF |
| G-13 | Ball Bearing MRC 205-S | G-39 | Gear Spacer |
| G-14 | Shaft Spacer | G-40 | Worm Gear |
| G-15 | Bronze Bushing | G-41 | Gear Spacer |
| G-16 | Clutch Gear | G-42 | Ball Bearing MRC 204-S |
| G-17 | Bronze Clutch Plate | G-43 | Locknut N-04 & Lockwasher W-04 |
| G-18 | Steel Clutch Plate | G-44 | Bearing Spacer |
| G-19 | Clutch Cover | G-45 | Cover |
| G-20 | Spacer | G-46 | Stop Rod |
| G-21 | Worm | G-47 | Stop Rod Lever |
| G-22 | Gear Spacer | G-48 | Stop Rod Screw |
| G-23 | Spacer | G-49 | Bakelite Ball |
| G-24 | Friction Spring | G-50 | Stop Rod Plunger |
| G-25 | Cover | G-51 | Plunger Spring |
| G-26 | Motor Stud | G-52 | Screw Plug |
| | | G-53 | Feed Shaft |

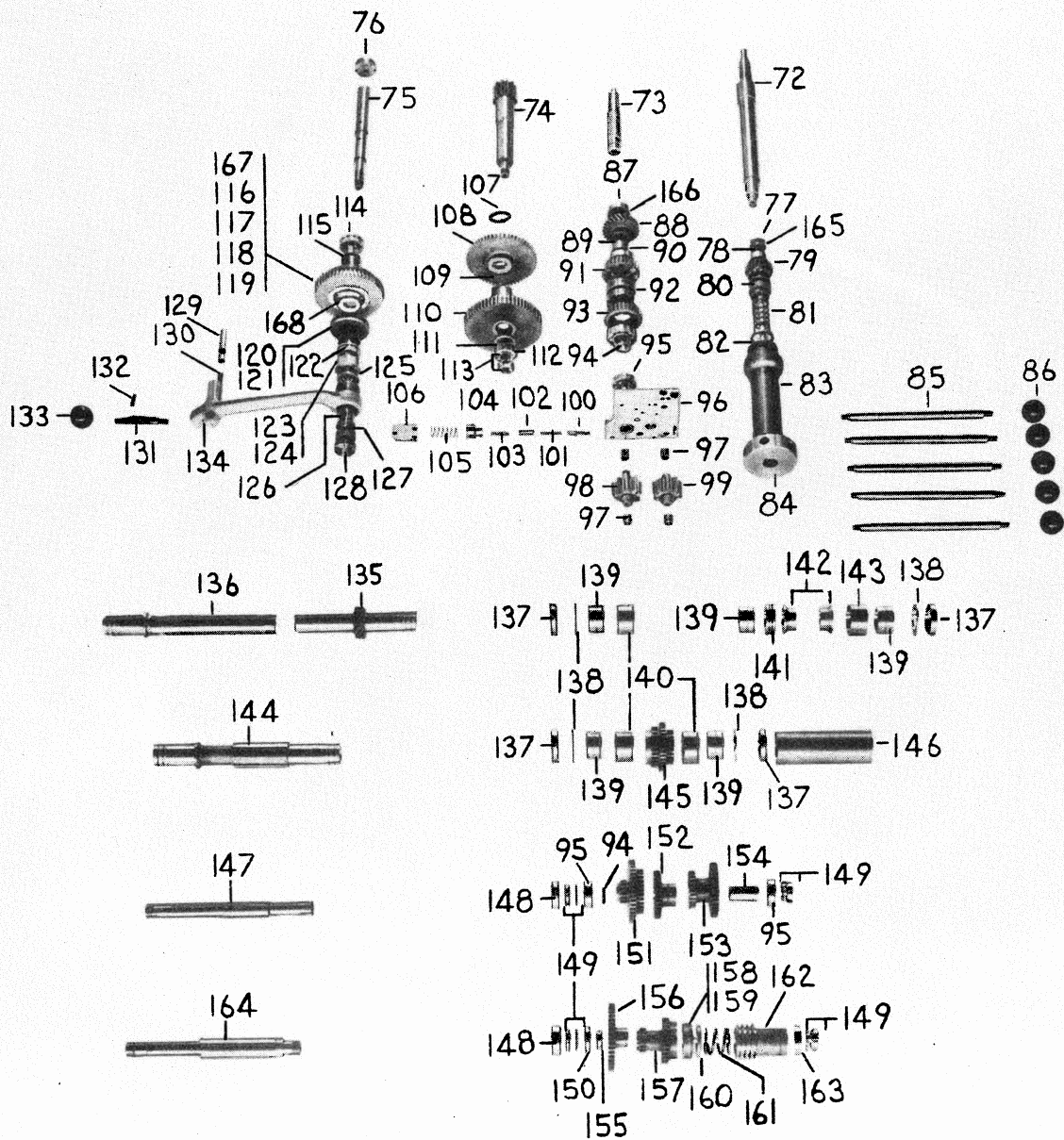
SADDLE APRON UNIT H



- H- 1 Saddle Apron
- H- 2 Saddle Apron Cover
- H- 3 Left End Cover
- H- 4 Right End Cover
- H- 5 Cover
- H- 6 Gib

- H- 7 Gib Adjusting Stud
- H- 8 Gib Adjusting Nut
- H- 9 Clutch Rod
- H- 10 Clutch Rod Spring
- H- 11 Yoke Pin
- H- 12 Yoke Shoe Stud

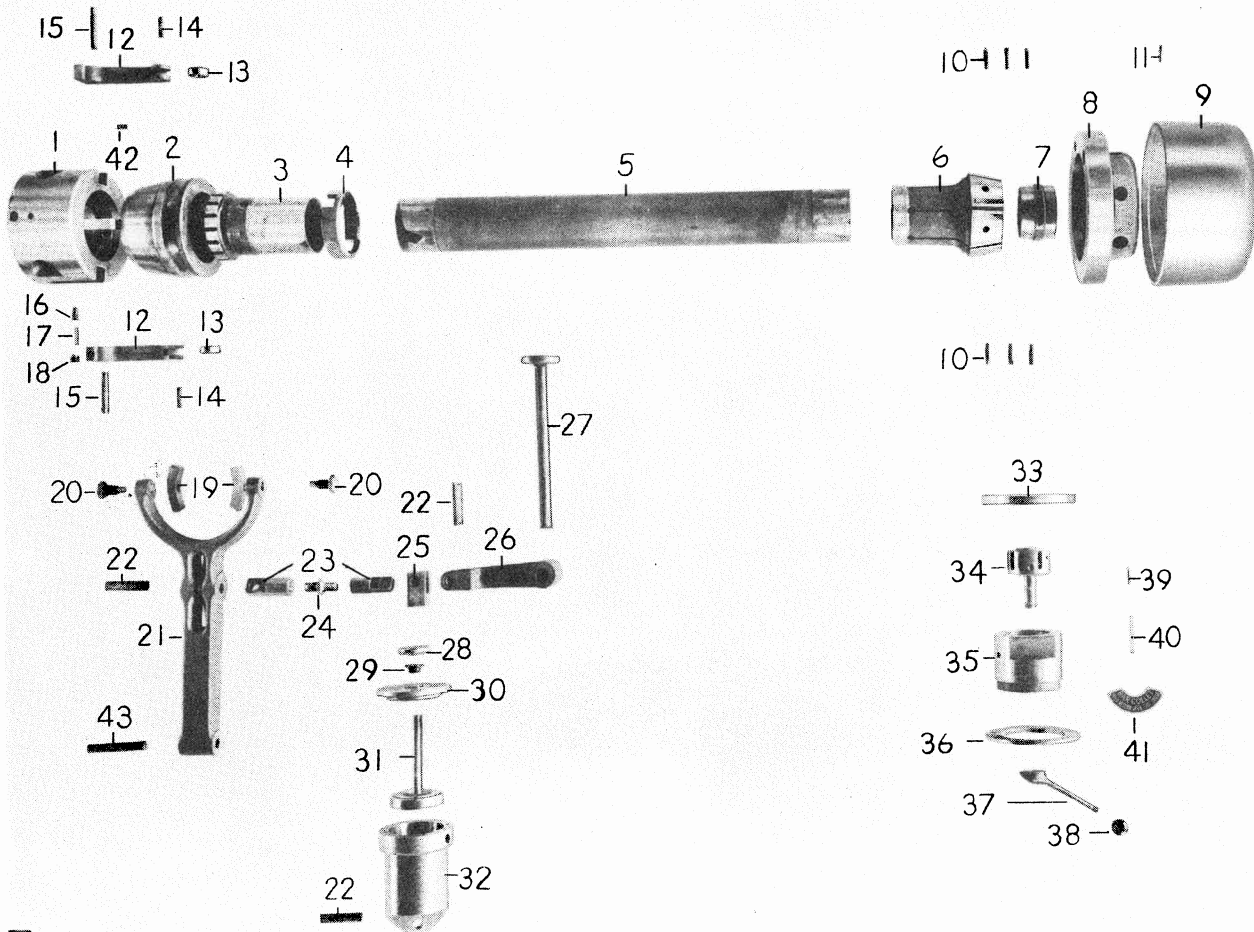
SADDLE APRON UNIT H



SADDLE APRON UNIT H

H- 13	Yoke Shoe	H- 91	Clutch Gear
H- 14	Yoke	H- 92	Tooth Clutch
H- 15	Yoke	H- 93	Clutch Gear
H- 16	Yoke Pin	H- 94	Spacer
H- 17	Shift Pin	H- 95	Ball Bearing MRC 205-S
H- 18	Detent	H- 96	Pump Body
H- 19	Detent Spring	H- 97	Bronze Bushing
H- 20	Lever	H- 98	Pump Gear
H- 21	Lever Stud	H- 99	Pump Gear
H- 22	Link Pin	H-100	Valve Plunger
H- 23	Link	H-101	Pump Spring
H- 24	Bakelite Ball	H-102	Valve Plunger
H- 25	Lever	H-103	Pump Spring
H- 26	Shift Pin	H-104	Valve Plunger
H- 27	Rapid Traverse Lever	H-105	Pump Spring
H- 28	Lever Stud	H-106	Cover
H- 29	Lever	H-107	Spacer
H- 30	Spring Retainer	H-108	Gear 58T
H- 31	Knockout Spring	H-109	Spacer
H- 32	Shift Rod	H-110	Gear 62T
H- 33	Lever Stop Pin	H-111	Spacer
H- 34	Cover	H-112	Ball Bearing MRC 5204-K
H- 35	Knockout Lever	H-113	Locknut N-04 & Lockwasher W-04
H- 36	Knockout Shaft	H-114	Thrust Bearing MRC 7B
H- 37	Lever	H-115	Spacer
H- 38	Oil Gage Cover	H-116	Tooth Clutch Gear
H- 39	Oil Gage Glass	H-117	Worm Gear
H- 40	Oil Gage Gaskets	H-118	Spring
H- 41	Valve Plunger	H-119	Pin
H- 42	Extension	H-120	Bronze Bushing
H- 43	Valve Closer	H-121	Tooth Clutch
H- 44	Valve Spring	H-122	Thrust Bearing MRC 6B
H- 45	Valve Housing	H-123	Plug
H- 46	Valve Disc	H-124	Pin
H- 47	Valve Closer	H-125	Washer
H- 48	Extension Tube	H-126	Feed Lever Cam
H- 49	Dial Drum Collar	H-127	Feed Cam
H- 50	Dial Drum	H-128	Friction Bolt Nut
H- 51	Cam Support	H-129	Plunger
H- 52	Plunger Cam	H-130	Feed Lever Spring
H- 53	Spoke	H-131	Feed Lever Handle
H- 54	Bakelite Ball	H-132	Pin
H- 55	Steel Ball	H-133	Bakelite Ball
H- 56	Spring	H-134	Longitudinal Feed Lever
H- 57	Shifter Block	H-135	Rapid Traverse Hollow Shaft
H- 58	Closer	H-136	Rapid Traverse Extension
H- 59	Piston	H-137	Oil Seal - Victoprene
H- 60	Piston	H-138	Bearing Spacer
H- 61	Gear Shift Rod	H-139	Roller Bearing - McGill MO-26
H- 62	Lever Stud	H-140	Bearing Sleeve
H- 63	Lever Stud	H-141	Thrust Bearing MRC 10-B
H- 64	Shifter Block	H-142	Bearing Spacer
H- 65	Shifter Lever	H-143	Bearing Sleeve
H- 66	Shifter Lever	H-144	Hollow Feed Shaft
H- 67	Detent Plate	H-145	Sliding Cluster Gear
H- 68	Detent Plate	H-146	Spacer
H- 69	Rapid Traverse Plate	H-147	Spline Shaft
H- 70	Feed Plate	H-148	Bearing Spacer
H- 71	Feed Arrow	H-149	Locknut N-05 & Lockwasher W-05
H- 72	Turnstile Shaft	H-150	Ball Bearing MRC 7205
H- 73	Shaft	H-151	Sliding Cluster Gear
H- 74	Pinion Shaft	H-152	Gear 33T
H- 75	Clutch Shaft	H-153	Gear 27T & 38T
H- 76	Clutch Shaft Cover	H-154	Spacer
H- 77	Ball Bearing MRC 203-S	H-155	Spacer
H- 78	Ball Bearing MRC 5203-S	H-156	Gear 45T
H- 79	Clutch Gear	H-157	Gear 16T & 30T
H- 80	Tooth Clutch	H-158	Bronze Clutch Plate
H- 81	Turnstile Spring	H-159	Steel Clutch Plate
H- 82	Turnstile	H-160	Clutch Ring
H- 83	Sleeve	H-161	Clutch Spring
H- 84	Turnstile Hub	H-162	Worm
H- 85	Turnstile Handle	H-163	Ball Bearing MCR 205-SG
H- 86	Bakelite Ball	H-164	Spline Shaft
H- 87	Ball Bearing MRC 7204	H-165	Spacer
H- 88	Longitudinal Traverse Gear	H-166	Spacer
H- 89	Spacer	H-167	Bronze Bushing
H- 90	Ball Bearing MRC 206-S	H-168	Spacer

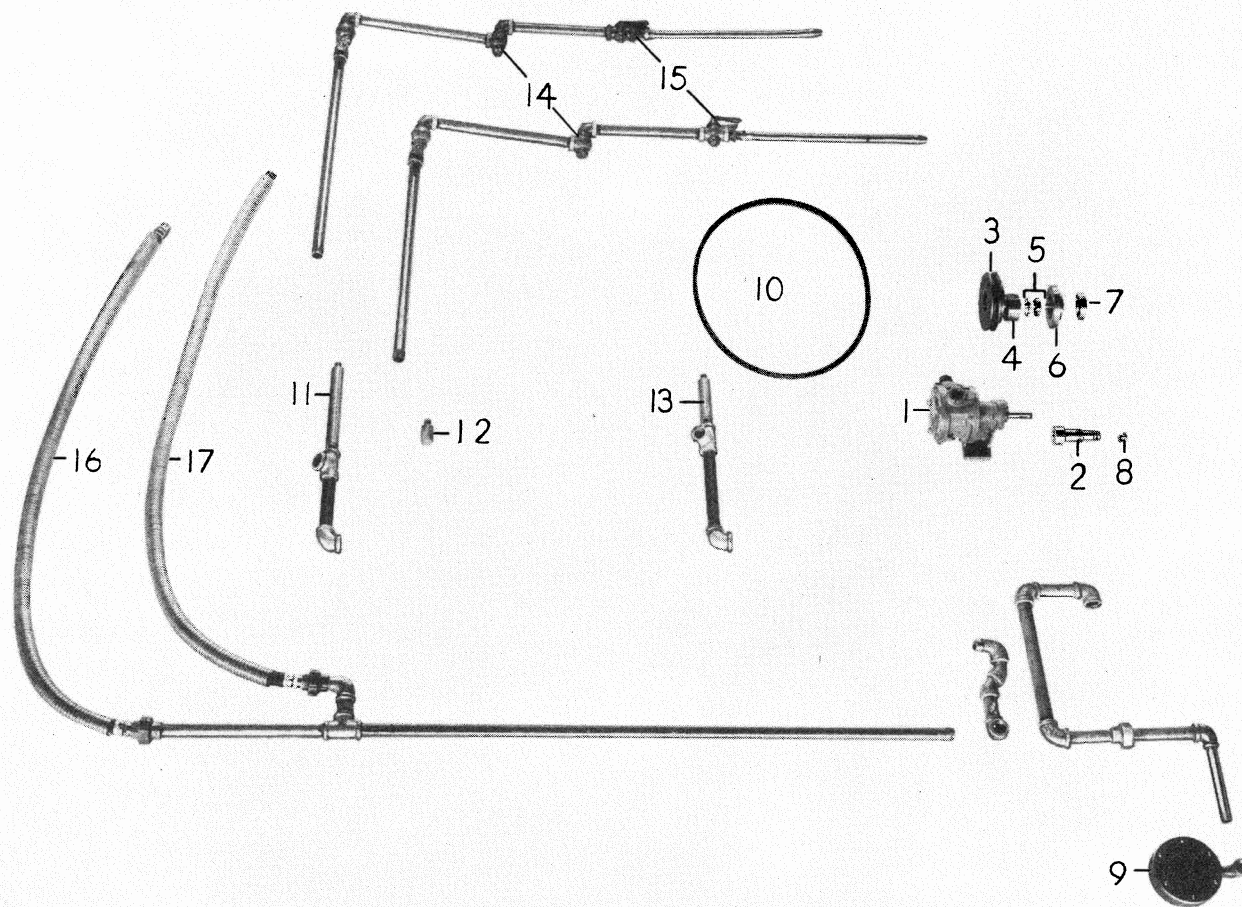
COLLET CHUCK UNIT J



- J- 1 Finger Holder
- J- 2 Wedge
- J- 3 Adjusting Sleeve
- J- 4 Abutment Ring
- J- 5 Plunger
- J- 6 Collet
- J- 7 Collet Pads
- J- 8 Collet Hood
- J- 9 Collet Hood Guard
- J-10 Collet Pad Screw
- J-11 Collet Hood Guard Pin
- J-12 Finger
- J-13 Finger Roller
- J-14 Finger Roller Pin
- J-15 Finger Pivot Pin
- J-16 Finger Holder Detent
- J-17 Detent Spring
- J-18 Detent Plug
- J-19 Wedge Shoe
- J-20 Wedge Shoe Stud
- J-21 Yoke
- J-22 Link Pin

- J-23 Adjusting Link Ends
- J-24 Adjusting Link Screw
- J-25 Link Connector
- J-26 Yoke Lever Link
- J-27 Pivot
- J-28 Seal Closer
- J-29 Hat Seal JM 422
- J-30 Cylinder Cover
- J-31 Piston
- J-32 Cylinder
- J-33 Valve Cover
- J-34 Control Valve Disc
- J-35 Control Valve Housing
- J-36 Cover Plate
- J-37 Valve Handle
- J-38 Bakelite Ball
- J-39 Control Valve Detent
- J-40 Control Valve Spring
- J-41 Control Plate
- J-42 Finger Holder Friction
- J-43 Yoke Pin

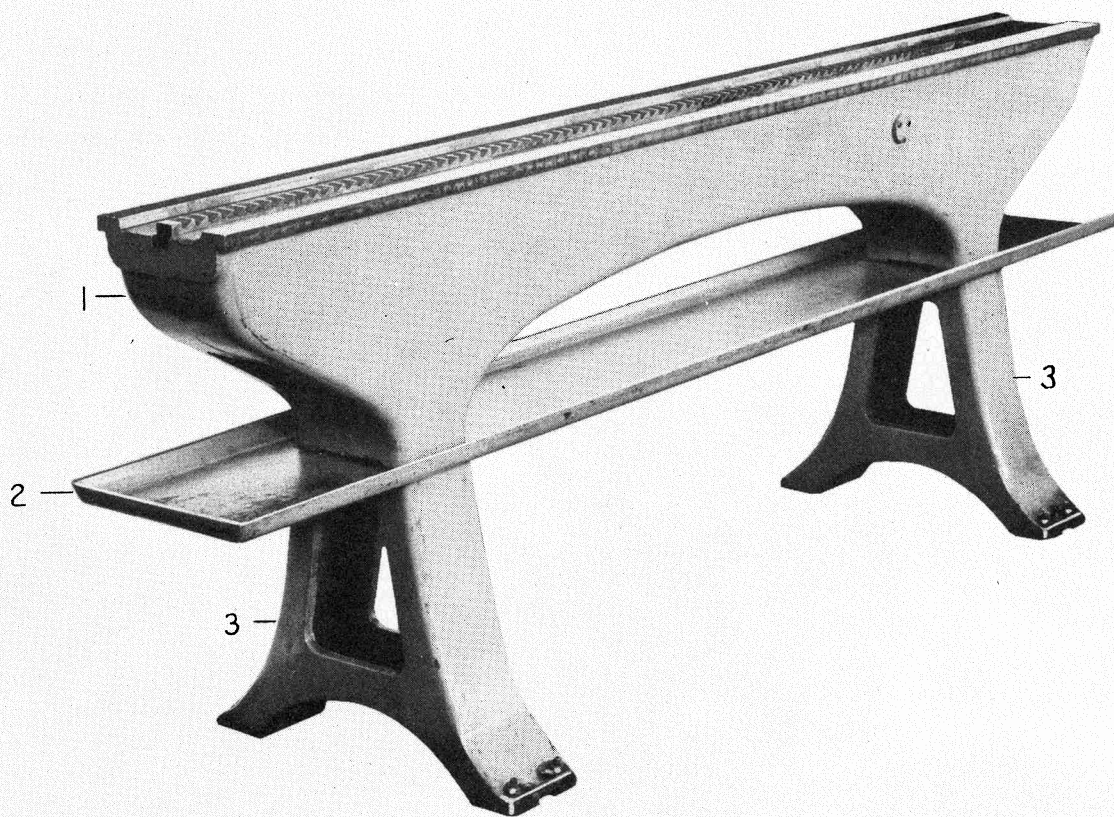
COOLANT PUMP & PIPING UNIT K



- K- 1 Coolant Pump - Viking
- K- 2 Pump Shaft
- K- 3 Sheave
- K- 4 Ball Bearing MRC 5206-F
- K- 5 Locknut N-06 & Lockwasher W-06
- K- 6 Driving Clutch
- K- 7 Driven Clutch
- K- 8 Stop Screw
- K- 9 Strainer

- K-10 'V' Belt - Dayton
- K-11 Pipe Support
- K-12 Pipe Support Used With Carriage Taper Attachment
- K-13 Pipe Support
- K-14 Swing Joint
- K-15 Stop Cock
- K-16 Hose (Long)
- K-17 Hose (Short)

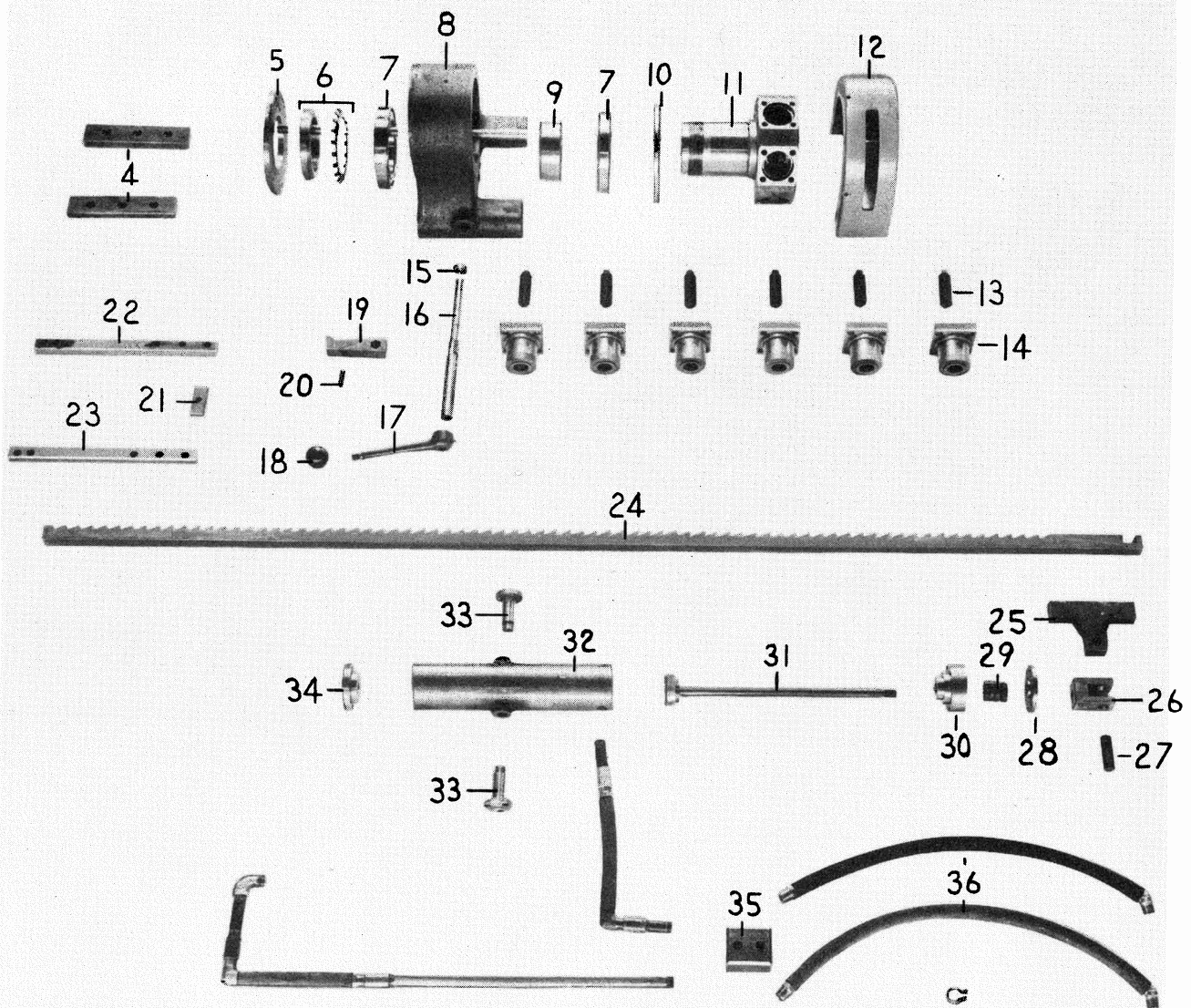
BAR FEED UNIT L



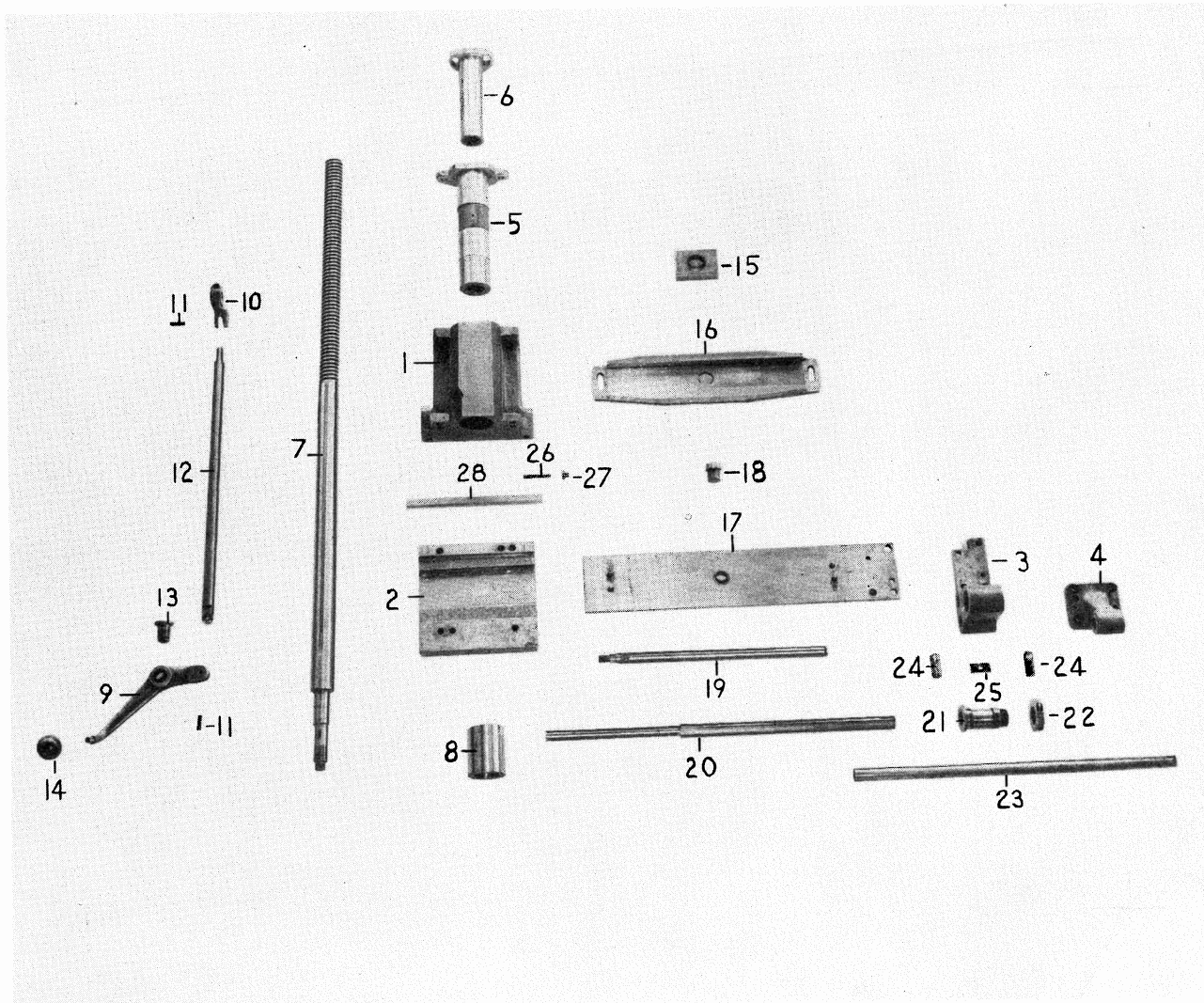
L- 1 Bed
 L- 2 Pan
 L- 3 Leg
 L- 4 Cap
 L- 5 Rear Bearing Closer
 L- 6 Locknut AN-24 & Lockwasher W-24
 L- 7 Ball Bearing SKF 7024
 L- 8 Sliding Head
 L- 9 Bearing Spacer
 L-10 Front Bearing Closer
 L-11 Chuck
 L-12 Guard
 L-13 Screw
 L-14 Nut
 L-15 Collar
 L-16 Shaft
 L-17 Lever
 L-18 Bakelite Ball
 L-19 Pawl

L-20 Pawl Spring
 L-21 Block
 L-22 Rack Cap
 L-23 Rack Cap
 L-24 * Rack
 L-25 Rack Pusher
 L-26 Piston Connector
 L-27 Link Pin
 L-28 Cylinder Cover
 L-29 Piston Rod Packing
 L-30 Cylinder Closer
 L-31 Piston
 L-32 Cylinder
 L-33 Cylinder Support
 L-34 Cylinder Closer
 L-35 Pipe Support
 L-36 Oil Hose

BAR FEED UNIT L



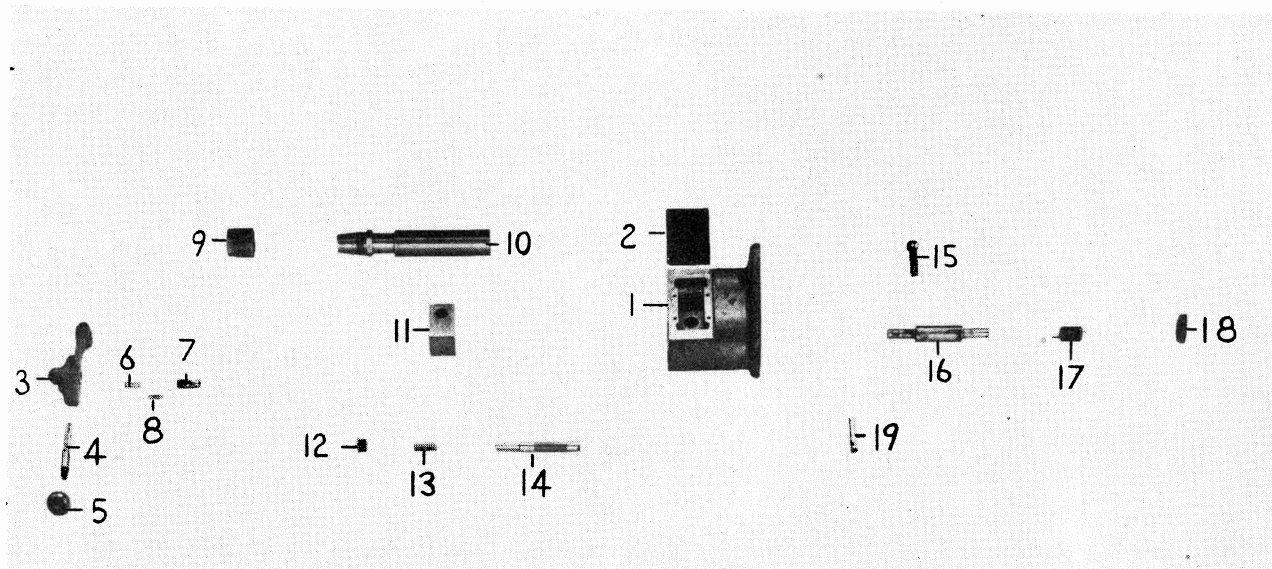
CARRIAGE TAPER ATTACHMENT UNIT M



M- 1 Carriage Bracket
 M- 2 Swivel Slide Bracket
 M- 3 Clamp Bracket
 M- 4 Bar Support Bracket
 M- 5 Feed Screw Nut
 M- 6 Compensating Nut
 M- 7 Feed Screw Used With
 Carriage Taper Attachment
 M- 8 Spacer
 M- 9 Lever
 M-10 Lever
 M-11 Link Pin
 M-12 Link
 M-13 Lever Nut

M-14 Bakelite Ball
 M-15 Follower
 M-16 Swivel Plate
 M-17 Swivel Slide
 M-18 Swivel Stud
 M-19 Shaft
 M-20 Rod
 M-21 Cam
 M-22 Nut
 M-23 Shaft
 M-24 Brass Shoe
 M-25 Shoe Guard
 M-26 Adjusting Stud
 M-27 Adjusting Nut
 M-28 Taper Gib

SCREW CUTTING ATTACHMENT UNIT N



- N- 1 Bracket
- N- 2 Cover
- N- 3 Lever
- N- 4 Lever Handle
- N- 5 Bakelite Ball
- N- 6 Feed Lever Spring
- N- 7 Lever Plunger
- N- 8 Pin
- N- 9 Leader Nut
- N-10 Leader
- N-11 Follower
- N-12 Knock Out Plug
- N-13 Knock Out Spring
- N-14 Knock Out Rod
- N-15 Ball Stud
- N-16 Lever Shaft
- N-17 Lever Spring
- N-18 Shaft Cover
- N-19 Knock Out Rod

WHEN ORDERING: -

1. SPECIFY AMOUNT WANTED
2. GIVE SERIAL NUMBER OF MACHINE *
3. 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.

