

PARTS LIST

FOR NIAGARA POWER SQUARING SHEARS

SERIES H • I • J • K • L

When ordering parts always give the catalog and serial number of the shear. The serial number is stamped at or near the front left corner of the bed and also on the metal lubrication plate. Be sure to use complete names of parts listed on this page and opposite page for positive identification.

When ordering repair parts give model and serial number. This information is found on the metal lubrication plant. The serial number is also stamped on the hinge plate in the upper left hand corner.

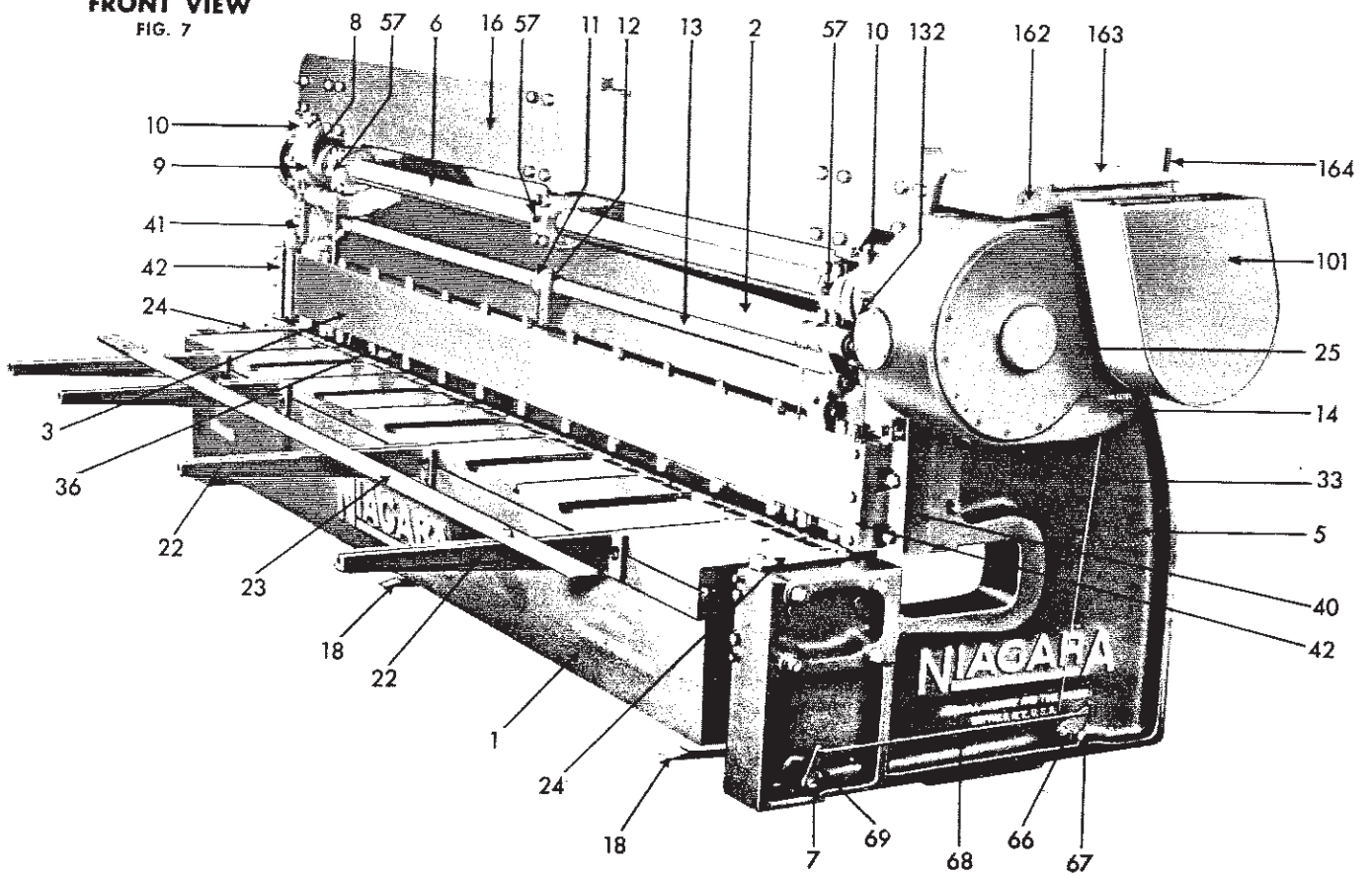
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|-----|--|-----|--|
| 1 | Bed | *37 | Holddown Springs for Feet |
| 2 | Crosshead | 38 | Knife Guard |
| 3 | Holddown | 39 | Knife Guard Bolts |
| 4 | Left Hand Leg | 40 | Right Hand Gib |
| 5 | Right Hand Leg | 41 | Left Hand Gib |
| 6 | Eccentric Shaft | 42 | Holddown Bearing Caps |
| 7 | Treadle Shaft | 43 | Lower Knife |
| 8 | Eccentrics | *44 | Upper Knife |
| 9 | Eccentric Straps | *45 | Knife Plow Bolts |
| 10 | Eccentric Caps | 46 | Crosshead Brace Rod |
| 11 | Locking Sleeve (all except "L" series) | 47 | Crosshead Brace Rod Adjustment Bolt |
| 12 | Sleeve Bracket (all except "L" series) | 48 | Backgage Brace Rod |
| 13 | Adjusting Shaft (all except "L" series) | 49 | Backgage Squaring Shaft |
| 14 | Gear Box | 50 | Backgage Sleeve |
| *15 | Eccentric Wrist Pins | 51 | Locking Sleeve Scale |
| 16 | Crown | 52 | Hand Wheel Scale |
| 17 | Backgage Bar | 53 | Bracket Scale |
| 18 | Treadles | 54 | Backgage Adjusting Screw Indicator Nut |
| 19 | Left Hand Backgage Bracket | 55 | Woodruff Key for Locking Sleeve |
| 20 | Right Hand Backgage Bracket | 56 | Hand Wheel Nut |
| 21 | Backgage Hand Wheel | 57 | Three Center Bearing Caps |
| 22 | Front Bracket | 58 | Bearing Supports for Main Shaft and Counterbalance Spring housings |
| 23 | Front Gage | 59 | Center Bearing Support (used on longer shears) |
| 24 | Side Gage | 60 | Left Hand and Right Hand Counterbalance Rods |
| 25 | Gear Box Cover | 61 | Center Counterbalance Rod (used on longer shears) |
| 26 | Flywheel | *62 | Counterbalance Springs |
| 27 | Drive Shaft | *63 | Counterbalance Spring Washer |
| 28 | Intermediate Shaft | 64 | Screws for Anchoring Counterbalance Rods to Crosshead |
| 29 | Intermediate Gear and Pinion Cluster | 65 | Motor Starter |
| 30 | Clutch Gear | 66 | Treadle Linkage Bell Crank |
| 31 | Cover Bearing | 67 | Treadle Linkage Bell Crank Pin |
| *32 | Motor | 68 | Treadle Connection Rod |
| 33 | Treadle Connection | 69 | Treadle Lever |
| 34 | Extension Squaring Gage (Extra) | | |
| 35 | Extension Squaring Gage Adjustable Stops | | |
| 36 | Holddown Feet | | |

*Not Shown

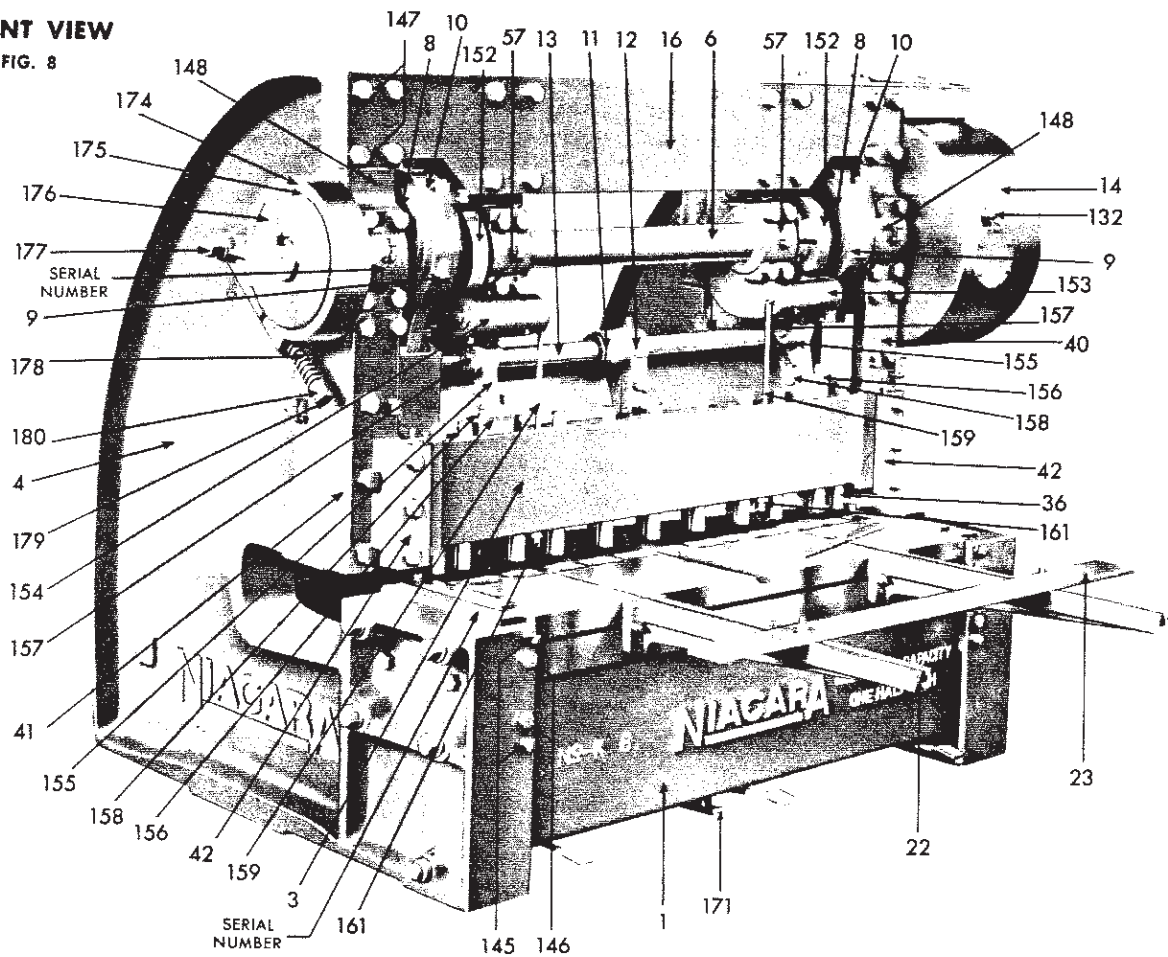
- 70 Right Hand Gear Case
- 71 Left Hand Gear Case
- 72 Slides
- 73 Indicator Nut
- 74 Bracket Dowels
- 75 Right Hand Adjusting Screw
- 76 Left Hand Adjusting Screw
- 77 Shaft for Right Hand Gear Case
- 78 Shaft for Left Hand Gear Case
- 79 Bevel Gears for Gear Case
- 80 Bevel Gears for Adjusting Screws
- 81 Retainer Bushings
- 82 Nuts for Retainer Bushings
- 83 Coupling Gear
- 84 Handle
- 85 Locking Pin
- 86 Knob
- 87 Ring for Left Hand Gear Case
- 88 Spacing Collar for Left Hand Shaft
- 89 Bolt for Connecting Shaft
- 90 Stop Pins
- 91 Spring for Coupling Sleeve
- 92 Double Bearing for Adjusting Screws
- 93 Right Hand Bearing for Right Hand Shaft
- 94 Left Hand Bearing for Right Hand Shaft
- 95 Right Hand Bearing for Left Hand Shaft
- 96 Left Hand Bearing for Left Hand Shaft
- 97 Nut for Left Hand Shaft
- 98 Lockwashers for Adjusting Screws
- 99 Locknuts for Adjusting Screws
- *100 Handle Spring
- 101 Belt Guard
- 102 Cam Roll - Shaft
- 103 Cam Lever
- 104 Cam Lever Pin
- 105 Selector Knob Spring
- 106 Selector Knob
- 107 Throwout Spring
- 108 Throwout Pin
- 109 Latch Hinge Pin
- 110 Treadle Rod Clamp
- 111 Latch
- 112 Throwout Key
- 113 Throwout
- 114 Throwout Bearing Ball
- 115 Throwout Bearing Needle
- 116 Selector Knob Pin
- 117 Sliding Pin
- 118 Throwout Shaft
- 119 Throwout Housing End Cover
- 120 End Cover Cap Screw
- 121 Spacing Collar
- 122 Throwout Shaft End Nut
- 123 Latch Spring Pin
- 124 Bell Crank Pin
- 125 Bell Crank
- 126 Latch Spring
- 127 Lock Washer
- 128 Throwout Shaft Collar Nuts
- 129 Treadle Spring Plunger
- 130 Treadle Spring
- 131 Indicator Collar
- 132 Locking Bar Handle
- 133 Throwout Housing Cap Screw
- 134 Throwout Housing
- 135 Locking Bar
- 136 Locking Bar Spring
- 137 Locking Bar End Collar
- 138 Cam Roller
- 139 Key for Bed and Leg
- 140 Single Stroke Cam
- 141 Clutch Sleeve
- 142 Clutch Gear Bearing
- 143 Locknut
- 144 Clutch Sleeve Spring
- 145 Set Screws for Adjusting Bed In
- 146 Cap Screws for Adjusting Bed Out
- 147 Crown Dowel Pins for Leg
- 148 Main Bearing Caps
- 149 Main Bearing Dowel Pin (used on larger shears)
- 150 Clutch Wheel Face
- 151 Wheel Face Bolt and Nut
- 152 Cams
- 153 Right Hand Cam Lever
- 154 Left Hand Cam Lever
- 155 Two Holddown Links
- 156 Holddown Link Bracket
- 157 Toggle Pins
- 158 Holddown Link Pins
- 159 Holddown Counterbalance Rods
- *160 Holddown Counterbalance Spring
- 161 Holddown Counterbalance Rod Spring Washers
- 162 Pin for Motor Plate
- 163 Motor Plate
- 164 Motor Plate Adjusting Screw
- 165 Block for Adjusting Screw
- 166 Yoke for Motor Adjusting Screw
- 167 Yoke Pin
- 168 Spacing Collar for Outer Lever Shaft
- 169 Shaft for Outer Lever
- 170 Outer Lever
- 171 Center Treadle Bearing Support
- 172 Turn Buckle for Crosshead Brace Rod
- 173 Center Backgage Bracket (used only on longer shears)
- 174 Brake Strap
- 175 Brake Lining and 1 x 1/4 Tubular Rivets
- 176 Brake Collar
- 177 Brake Strap Stud
- 178 Brake Spring
- 179 Brake Spring Stud
- 180 Standard Hex Nut and Jam Nut
- 181 Slitting Gage (extra)
- 182 Guide Piece for Slitting

*Not Shown

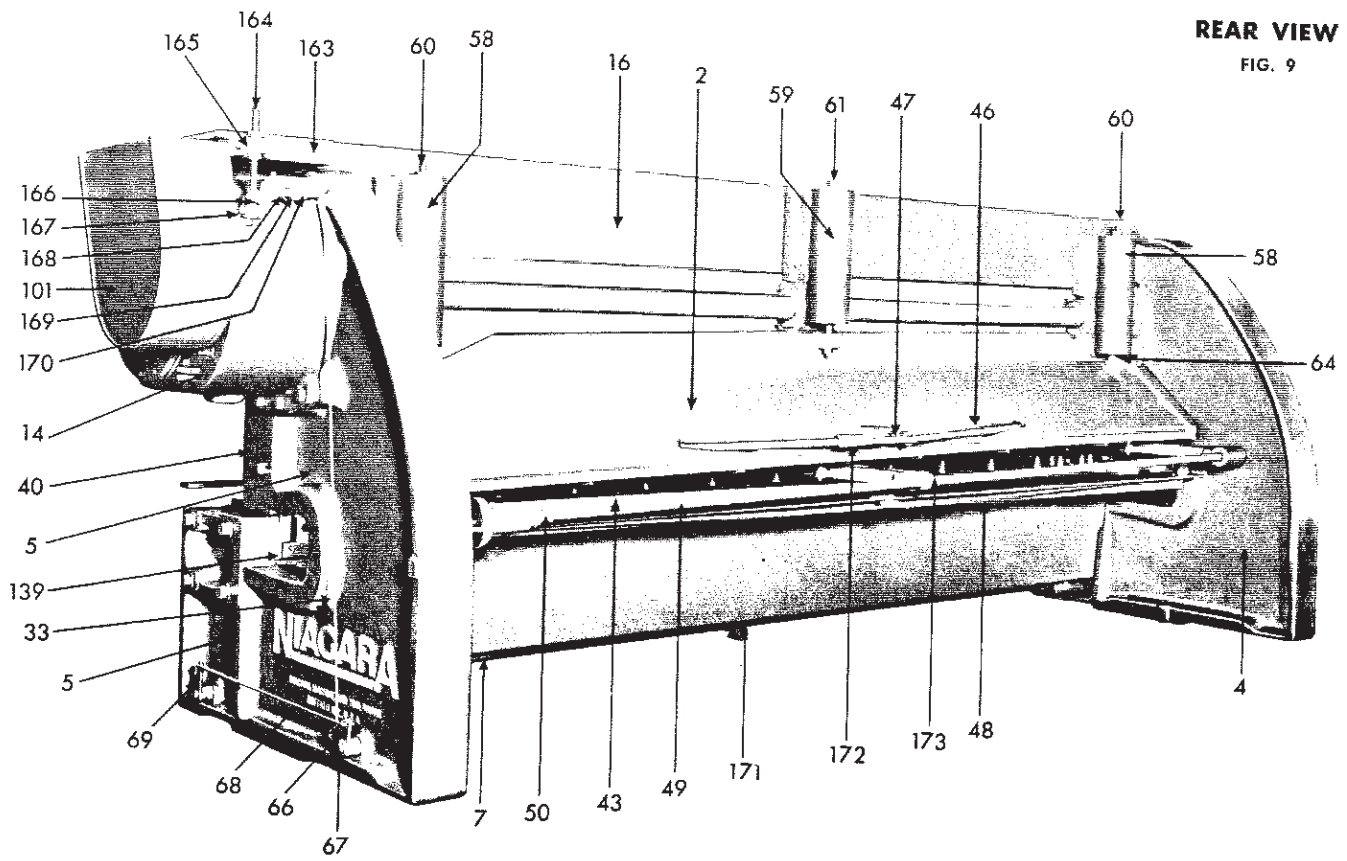
FRONT VIEW
FIG. 7



FRONT VIEW
FIG. 8



REAR VIEW
FIG. 9



PARTS ON "L" SERIES ONLY

FRONT VIEW
FIG. 10

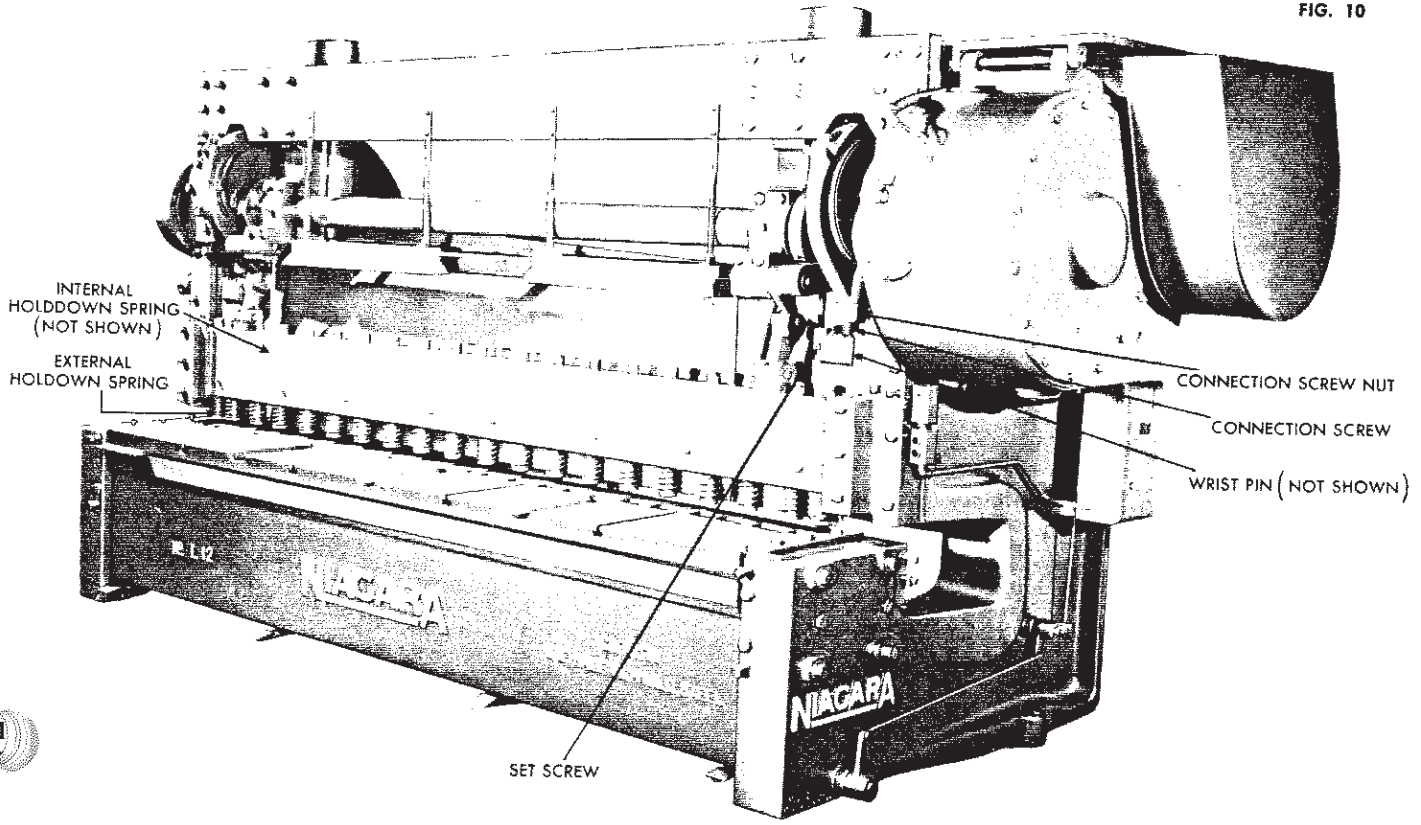


FIG. 11

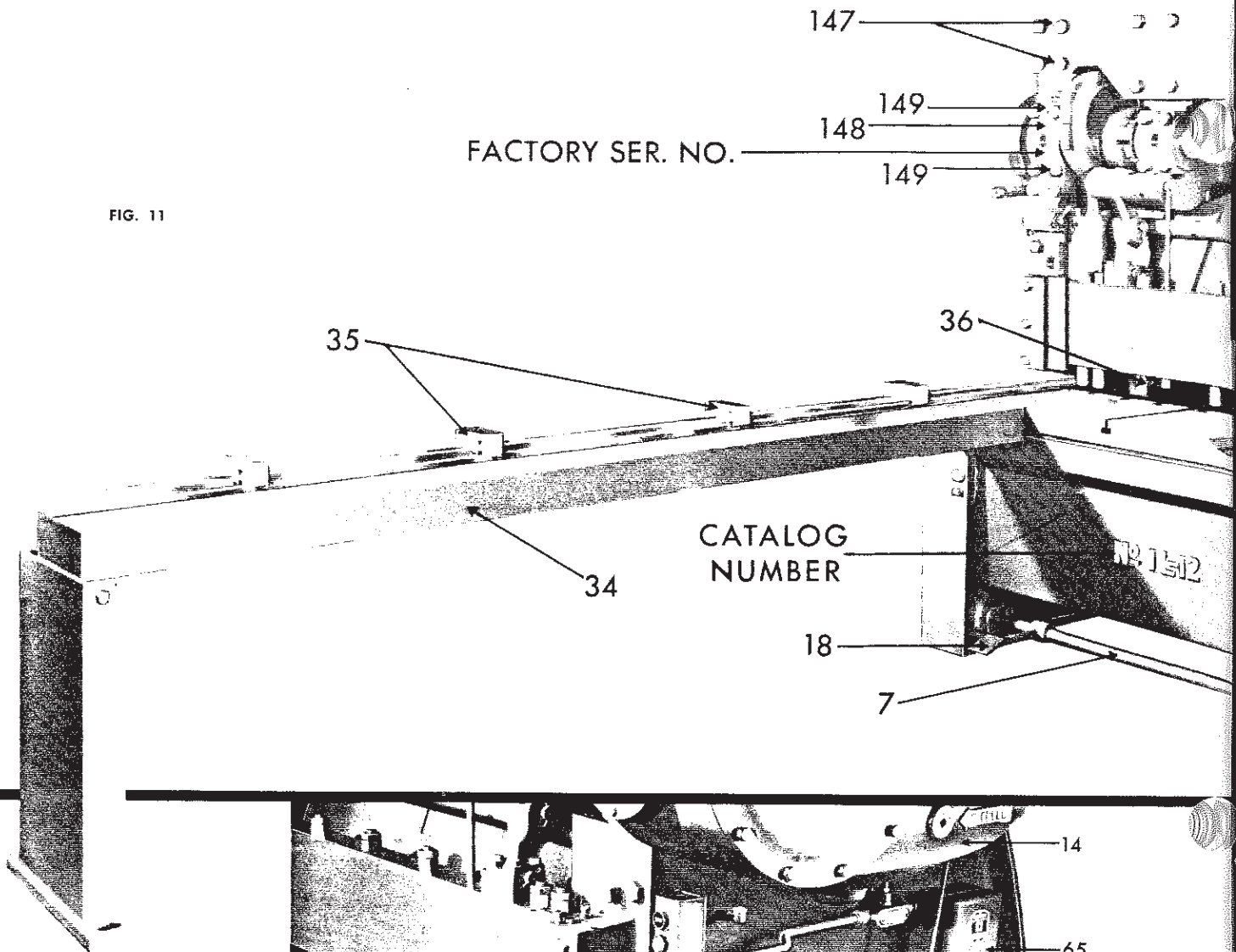
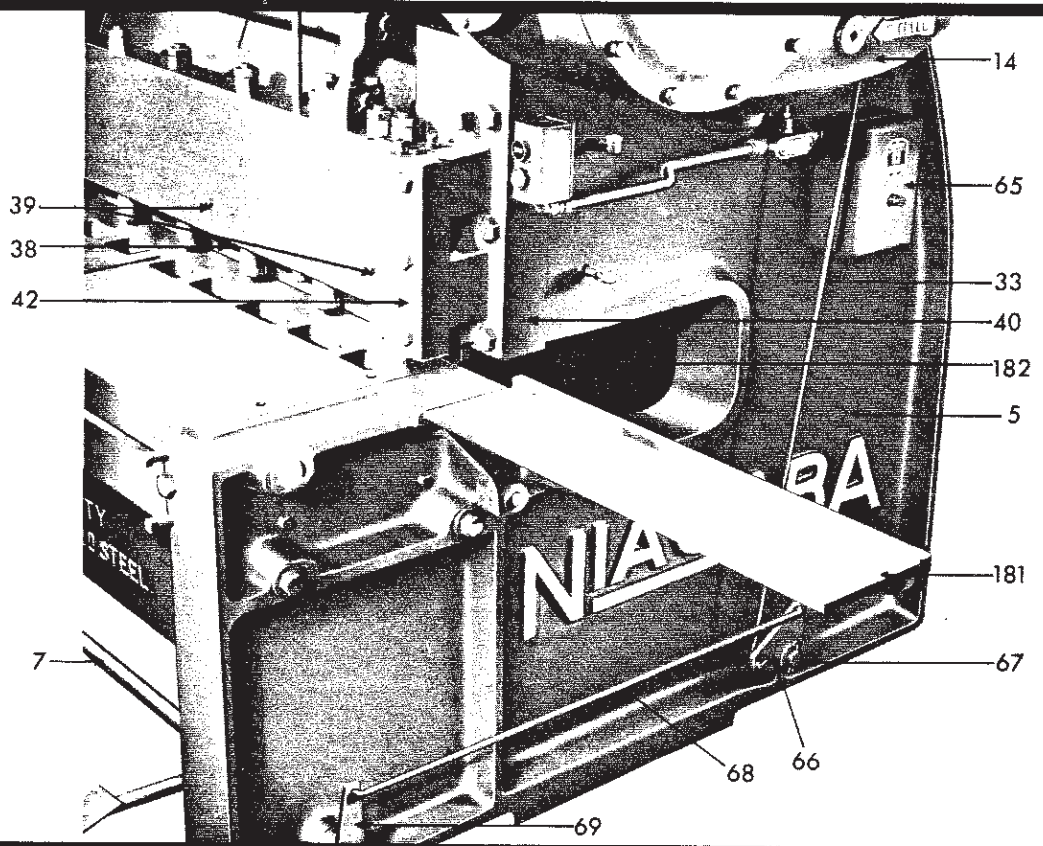


FIG. 12



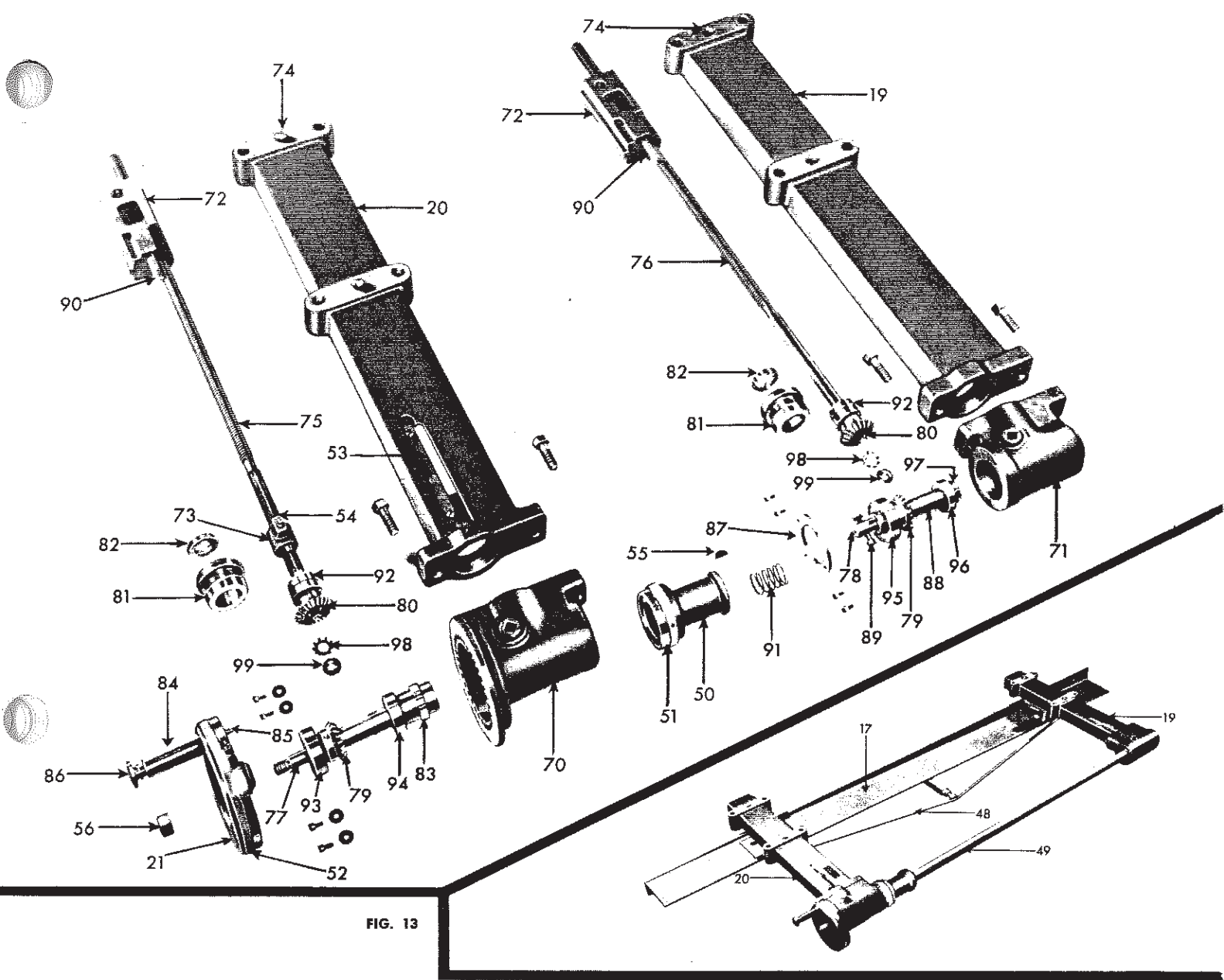


FIG. 13

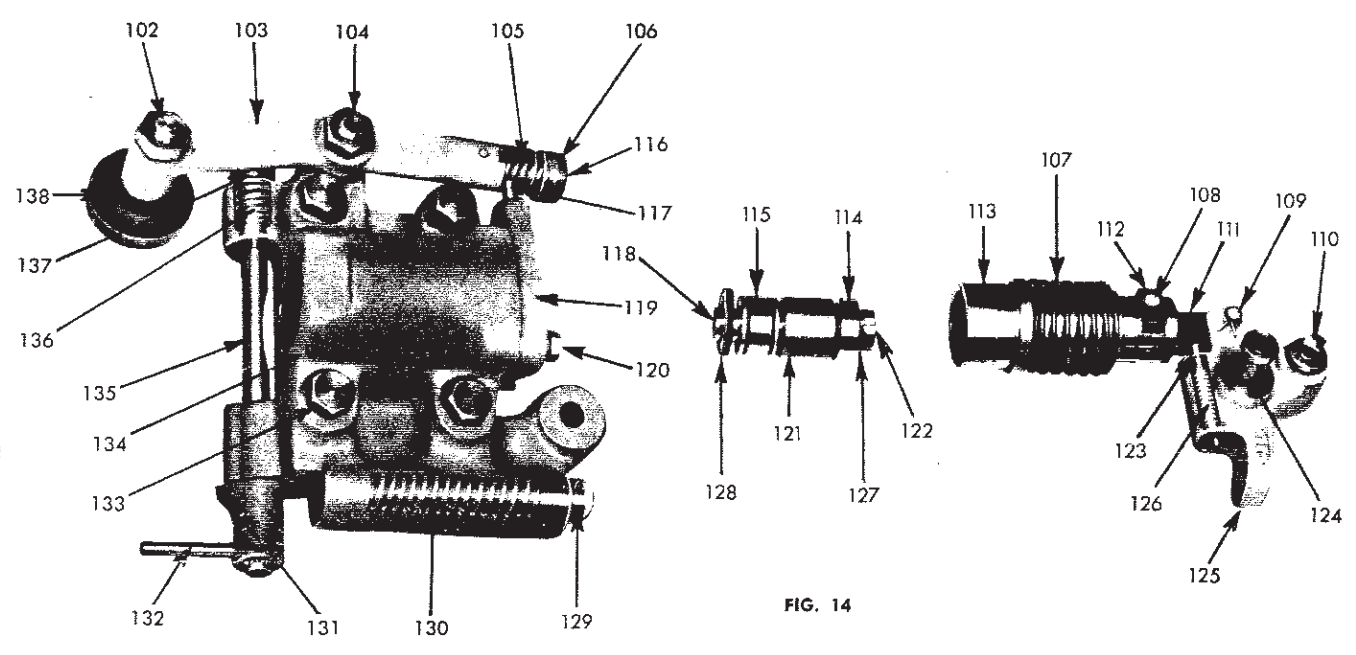
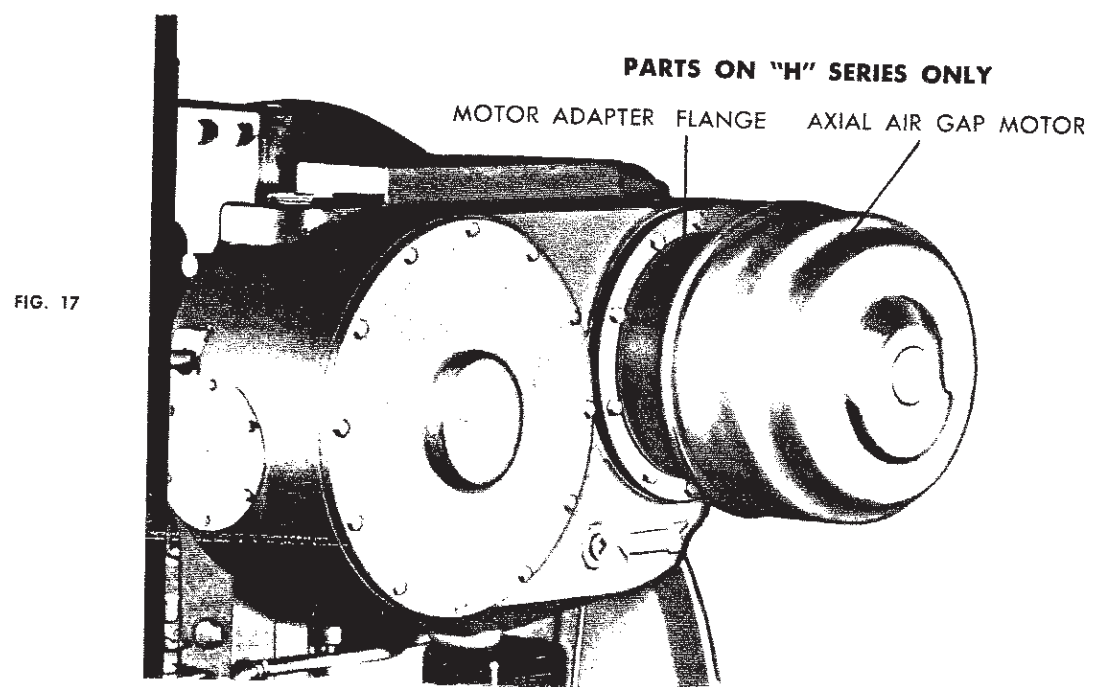
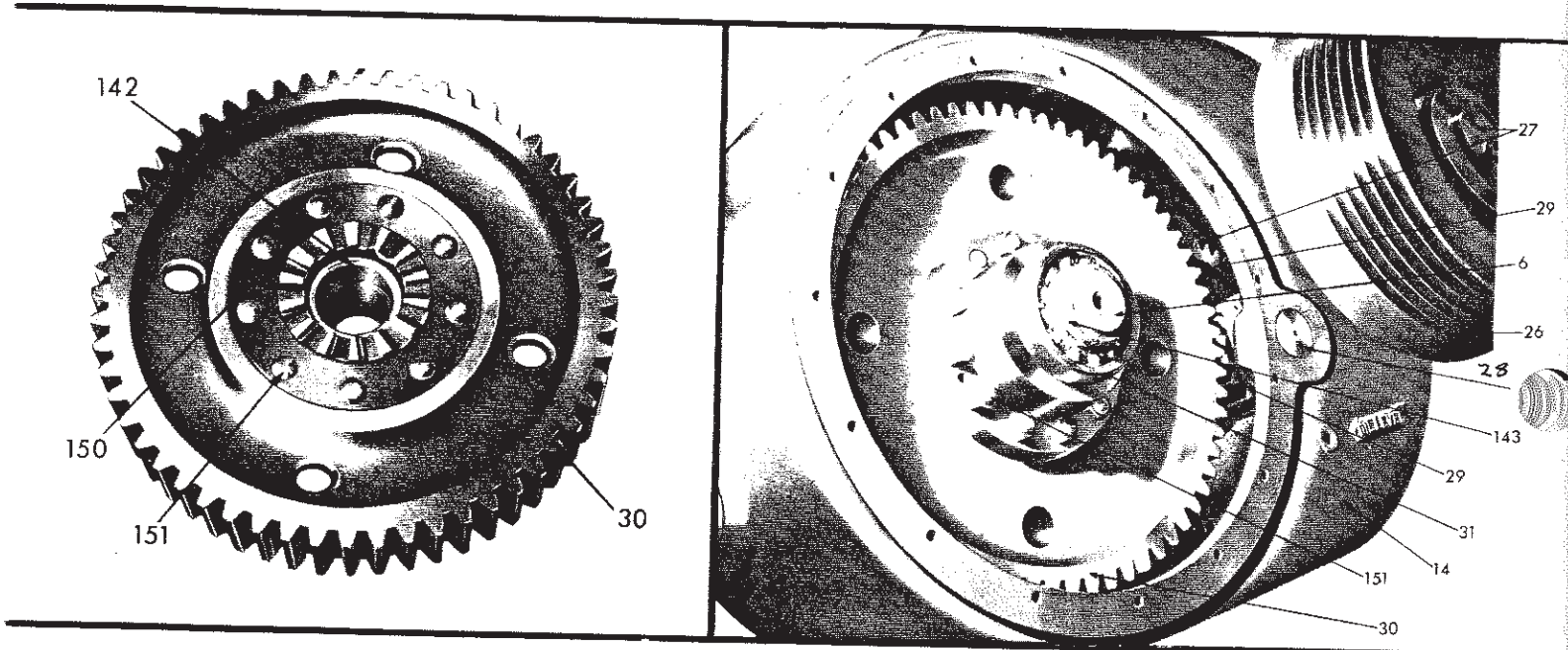
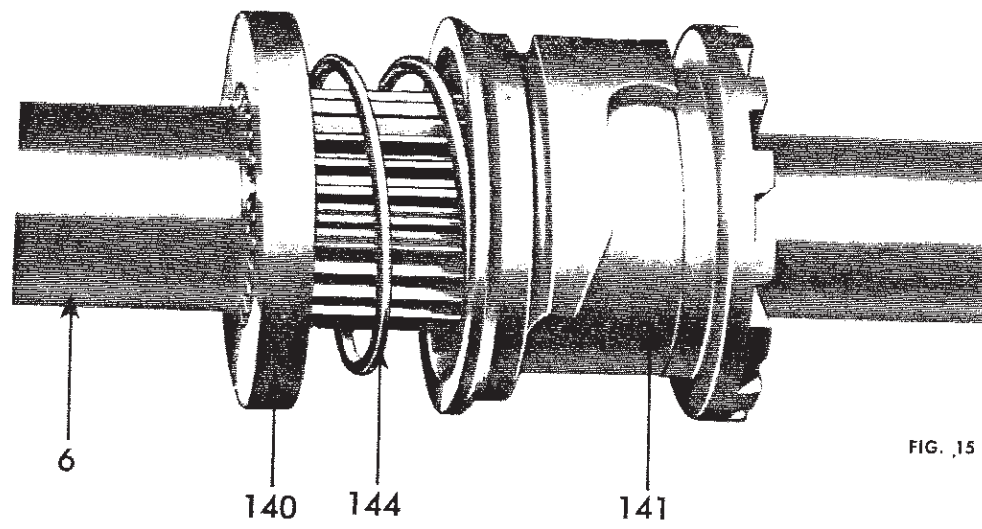


FIG. 14



LUBRICATION CHART

Socony-Vacuum Oil Company engineers cooperating with our own staff recommend the following or equal lubricants.

GEAR BOX	GARGOYLE COMPOUND BB
GUIDES (Also Hand Oiled Parts)	GARGOYLE VACTRA OIL BB
CAM ROLLER and WRIST PIN POCKETS (Both Lubricated)	

DIRECTIONS: **Gear Box:** Drain and refill after first three months; thereafter, change oil every six months. Maintain oil level.

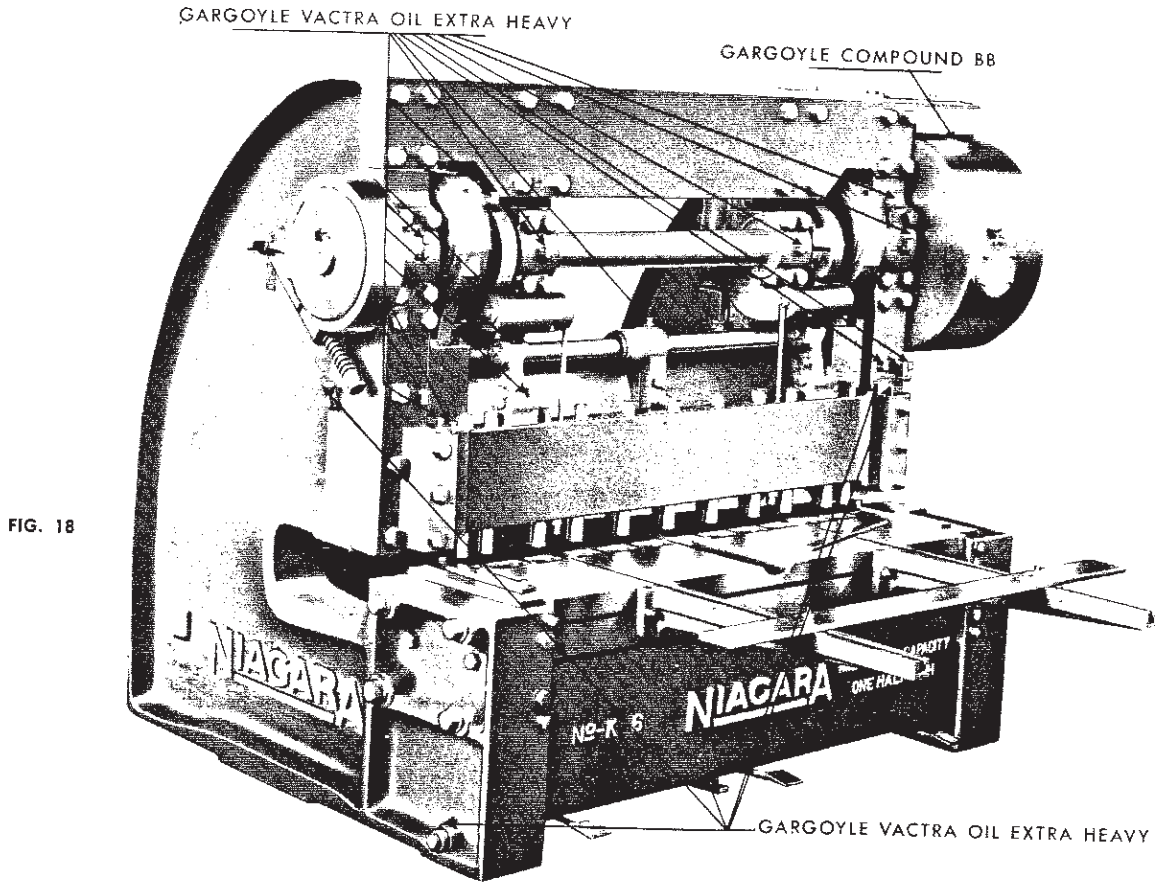


FIG. 18

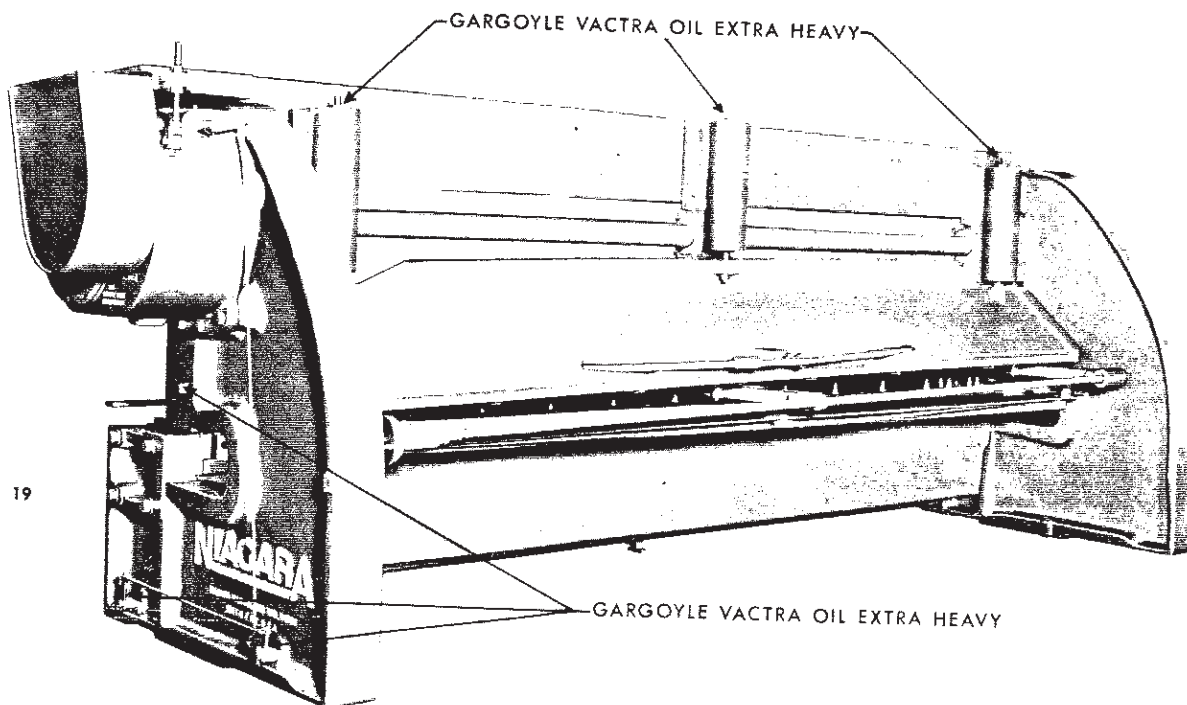


FIG. 19