



Single End Frame Mechanical Squaring Shears

Parts List

Model _____
Serial No. _____

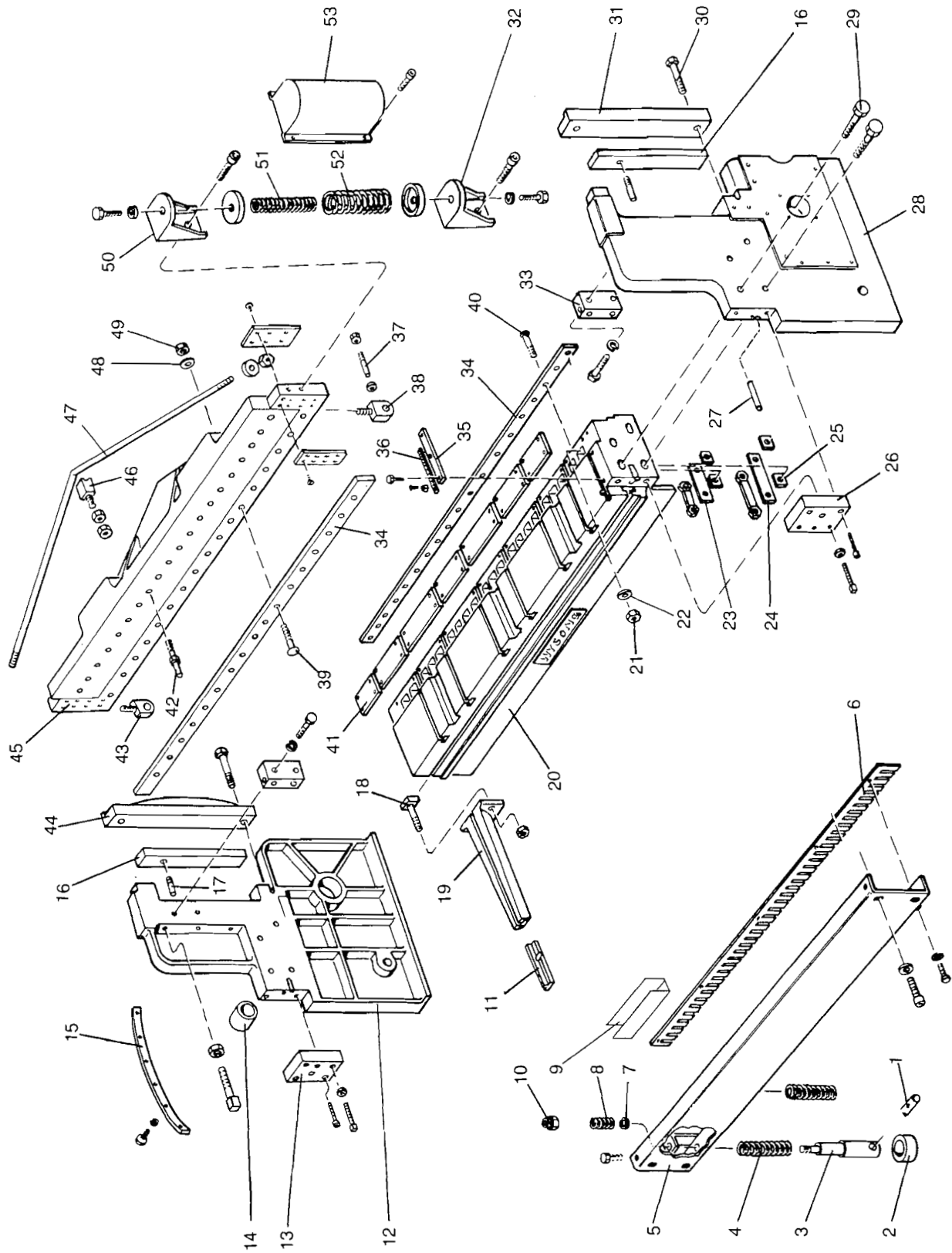
WHEN ORDERING REPLACEMENT PARTS, PLEASE REFER TO YOUR
SHEAR BY MODEL NUMBER AND SERIAL NUMBER..

WYSONG AND MILES COMPANY
4820 U.S. NORTH
POST OFFICE BOX 21168
GREENSBORO, NORTH CAROLINA
27420-1168
FAX: (336) 621-8360
TELEPHONE: (336) 621-3960

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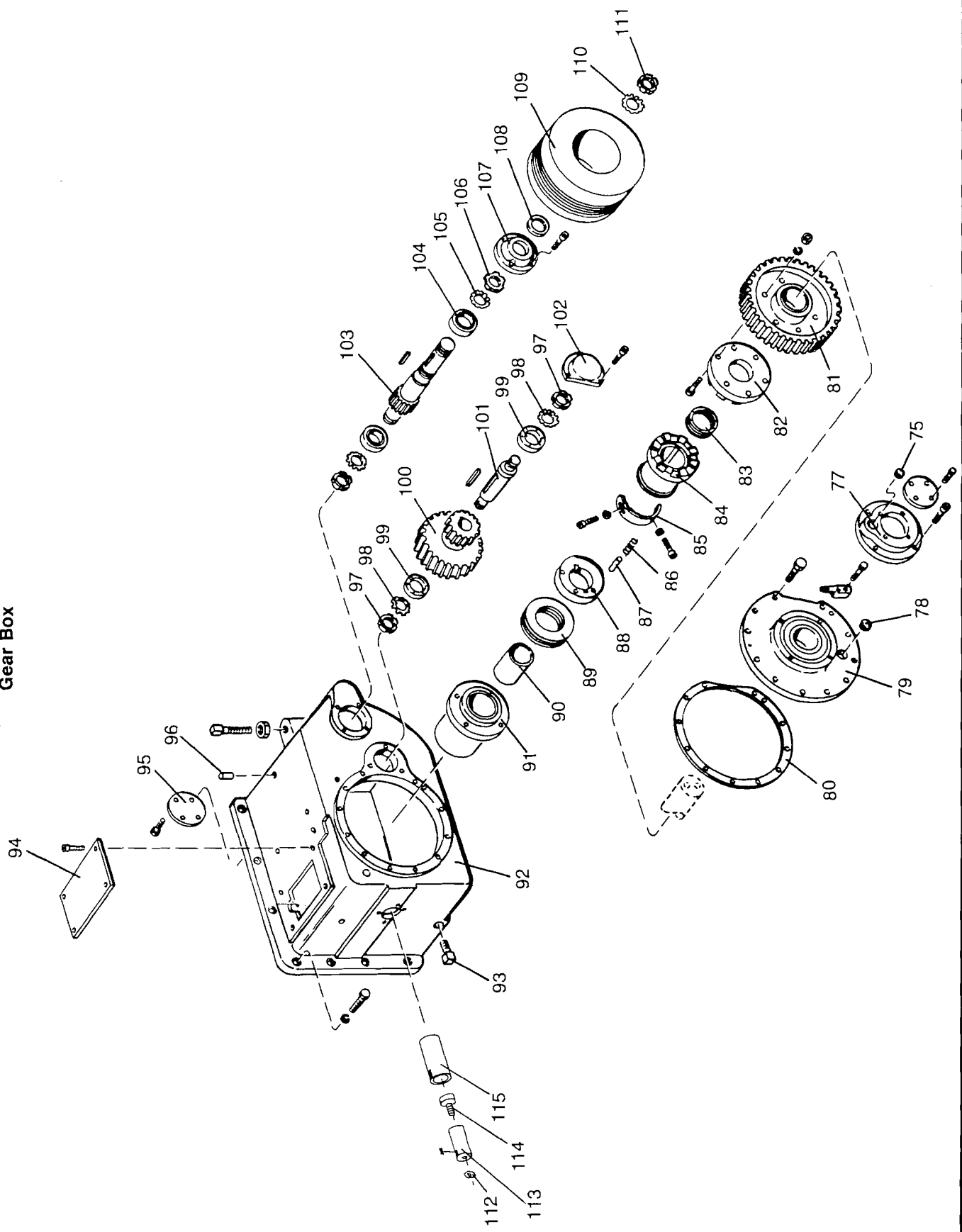
Table End Housings, Holddown
& Knife Bar Assembly



**Table End Housings, Holddown
& Knife Bar Assembly**

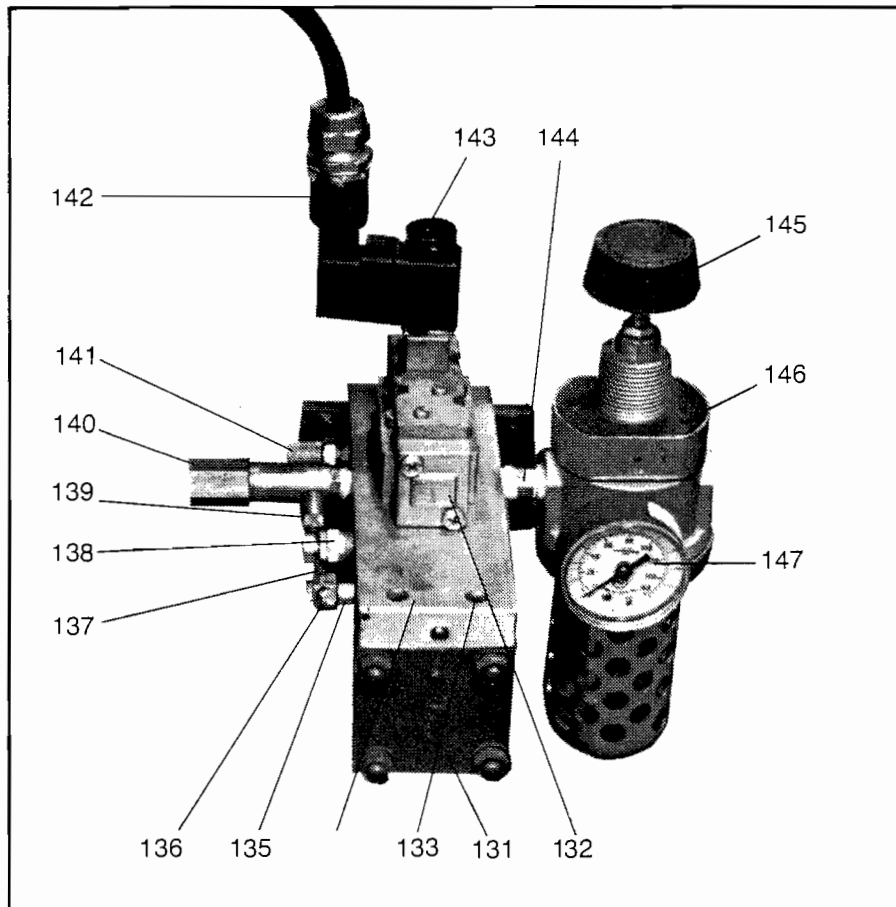
| Item | Description |
|------|---------------------------------|
| 1 | Pin, Roll |
| 2 | Foot, Holddown |
| 3 | Pin, Holddown |
| 4 | Spring, Compression |
| 5 | Channel, Holddown |
| 6 | Finger Guard |
| 7 | Truark |
| 8 | Spring, Compression |
| 9 | Lugs, Lifting |
| 10 | Nut, Lock, 49NU120 |
| 11 | Stop, Dissappearing Assy. |
| 12 | Frame, L.H. |
| 13 | Lug, Table Adjusting |
| 14 | Bushing |
| 15 | Deflector, Oil |
| 16 | Gib, Take Up Assembly |
| 17 | Stud, Ram, Gib |
| 18 | Adapter |
| 19 | Extension, Table 48" Range Std. |
| 20 | Bed, Shear |
| 21 | Nut, HVY S.F Hex |
| 22 | Washer, Flat |
| 23 | Bolt, Table Locking |
| 24 | Bolt, Table Locking |
| 25 | Washer, Table Bolt |
| 26 | Lug, Table Adjusting |
| 27 | Pin, Dowel |
| 28 | Frame, R.H. |
| 29 | Screw, Hex Hd. Cap |
| 30 | Screw, Hex Hd. Cap |
| 31 | Assembly, Gib R.H. |
| 32 | Bracket, Spring |
| 33 | Block, Holddown Mounting |
| 34 | Blade |
| 35 | Gage, Side |
| 36 | Scale, Inch/Metric |
| 37 | Pin, Eyebolt Lock |
| 38 | Eyebolt |
| 39 | Bolt, Blade |
| 40 | Block, Holddown Mounting |
| 41 | Plate, and Mtg. Screws |
| 42 | Stud, Holddown Lifting |
| 43 | Eyebolt |
| 44 | Assembly, Gib L.H. |
| 45 | Ram, Shear |
| 46 | Stud, Tension Rod |
| 47 | Rod, Tension |
| 48 | Nut, Lock |
| 49 | Nut, HVY S.F. Hex |
| 50 | Bracket, Spring |
| 51 | Spring, Style |
| 52 | Spring, Style |
| 53 | Guard, Spring |
| 54 | Ramp, Plate (Not Shown) |

Gear Box



Gear Box

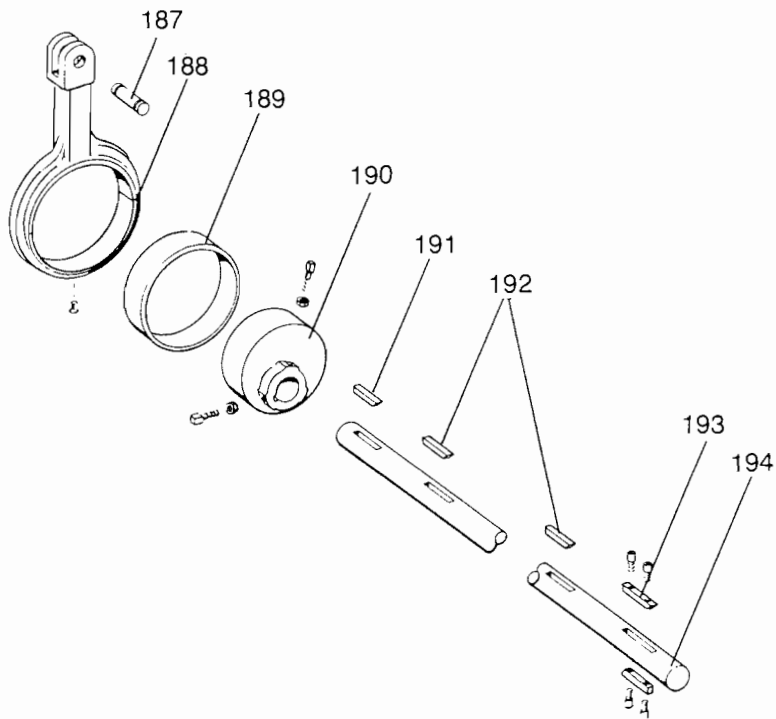
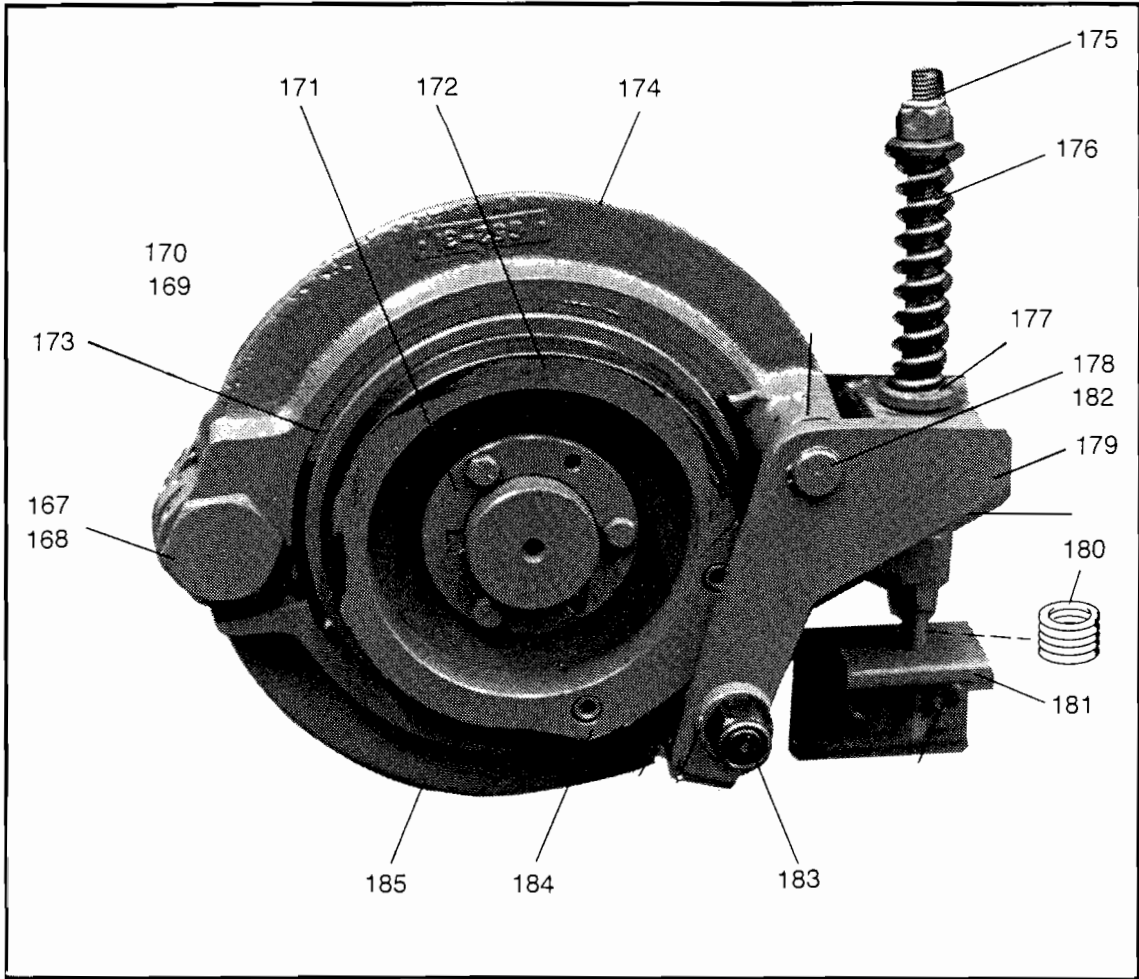
| Item | Description |
|------|---------------------------------|
| 75 | Window-Unit, Level Type |
| 77 | Cover, Housing Indicator |
| 78 | Window-Unit, Level Type |
| 79 | Cover, Gear Case End |
| 80 | Gasket, Gear Box Gasket |
| 81 | Gear, Bull |
| 82 | Plate, Clutch Drive |
| 83 | Ring, Retainer |
| 84 | Plate, Clutch Driven |
| 85 | Cam, Clutch Release |
| 86 | Spring, Compression |
| 87 | Pin, Roll |
| 88 | Plate, Clutch Spring Retainer |
| 89 | Brg., Crov Ball Thrust |
| 90 | SAE660 BRZ |
| 91 | Bearing, Ecc. Shaft |
| 91 | Gear, Box |
| 93 | Fitting, Plug |
| 94 | Cover, Hand Hole |
| 95 | Cover, Gear Case Rear |
| 96 | Fitting, Air-Vent, Str. |
| 97 | Locknut, Bearing |
| 98 | Lockwasher, Bearing |
| 99 | Bearing, Spherical Roll |
| 100 | Gear, Intermediate |
| 101 | Spacer, Bearing |
| 102 | Cap, Intermediate Shaft Bearing |
| 103 | Shaft, Pinion |
| 104 | Bearing, Spherical Roll |
| 105 | Lockwasher, Bearing |
| 106 | Locknut, Bearing |
| 107 | Cap, Pinion Shaft Bearing |
| 108 | Seal, Pinion Shaft |
| 109 | Flywheel |
| 110 | Lockwasher, Bearing |
| 111 | Locknut, Bearing |
| 112 | Nut |
| 113 | Slide, Cam Retracting |
| 114 | Cam Follower |
| 115 | Bushing |



Electro-Pneumatic Assembly

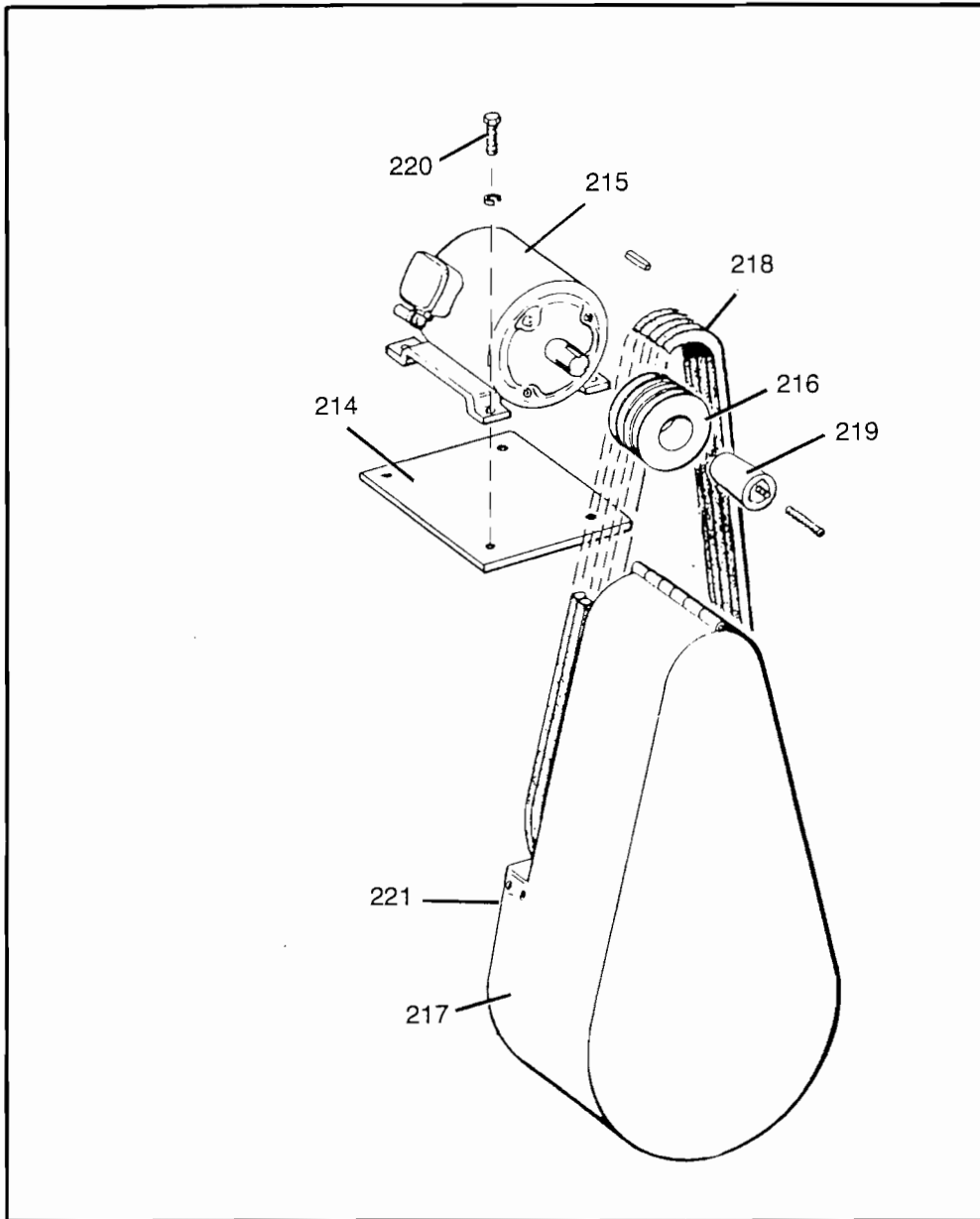
| Item | Description |
|------|---|
| 131 | Cylinder, Air T.J. #TP07DAXAXANG3381 |
| 132 | Valve, Ross 3-way |
| 133 | Screw, Socket Hd. Cap, 10-24 x 3/4 |
| 134 | Manifold, H.P.S. Dwg. #082584 |
| 135 | Valve, Check MCV-2 Clippard |
| 136 | Elbow, 55020 Nycoil |
| 137 | Tubing, 1/8 OD Nycoil |
| 138 | Valve, Relief RV01-5 Lube-Devices |
| 139 | Connector, Knurled 56820 Nycoil |
| 140 | Regulator, MAR-1P Clippard |
| 141 | Muffler, P-28 1/4 |
| 142 | Connector, 270K77 |
| 143 | Coil, Ross Valve 299B94 |
| 144 | Fitting, Nipple 1/4 NPT x 1 1/2 Stainless Steel |
| 145 | Cover, Air Regulator Knob |
| 146 | Regulator, 5321A2012 Ross |
| 147 | Gage, Pressure 5400A2011 Ross Assembly, Air Cylinder Electro-Pneumatic |

Brake & Eccentric Shaft Assembly



Brake & Eccentric Shaft Assembly

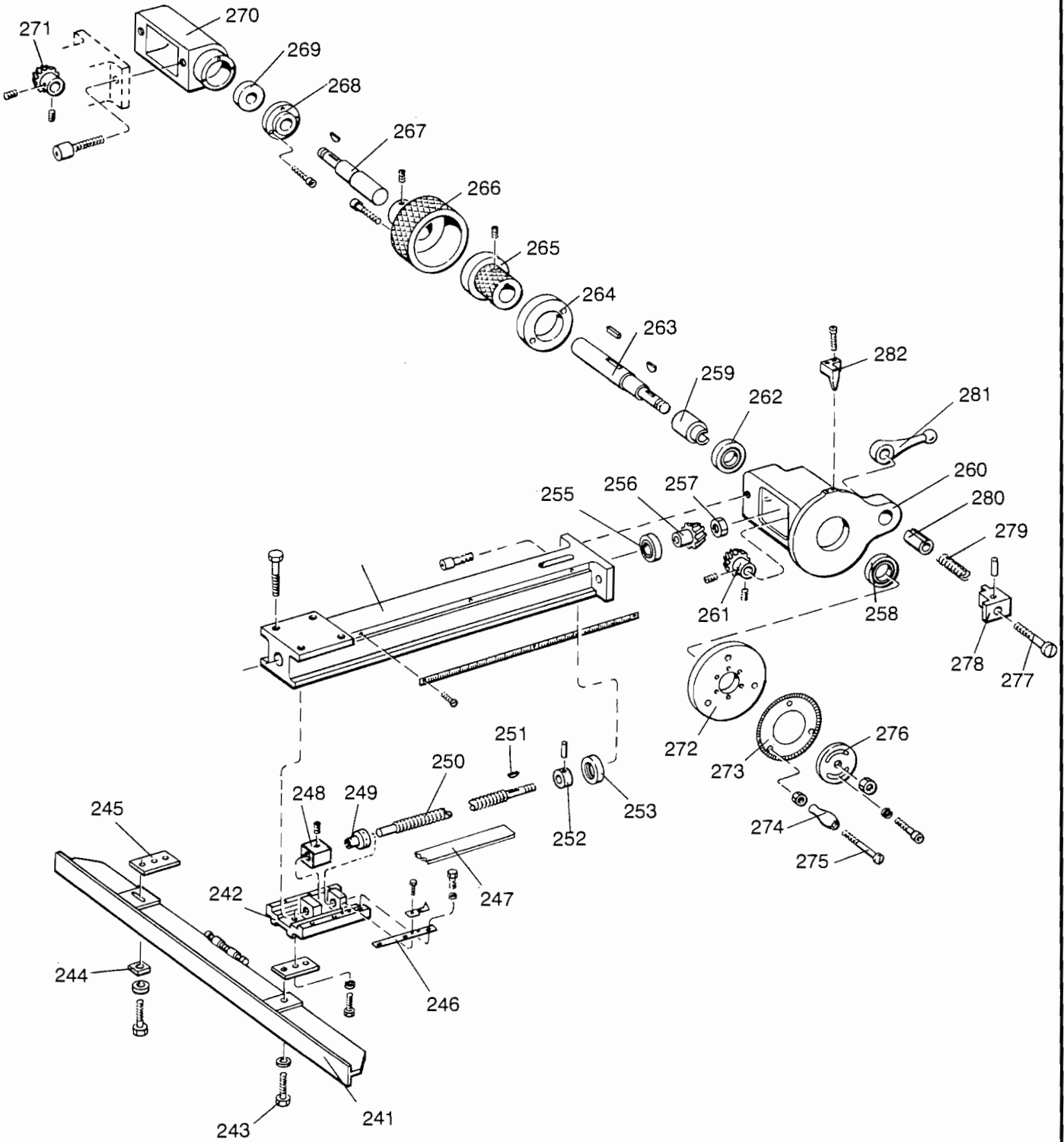
| Item | Description |
|------|--|
| 167 | Stud, Brake Pivot |
| 168 | Washer, Brake Pivot Stud |
| 169 | Washer (Between Brake Assy. & End Frame) |
| 170 | Seal (Between Washer & End Frame) |
| 171 | Bushing |
| 172 | Brake Drum |
| 173 | Brake Lining |
| 174 | Shoe, Female Brake |
| 175 | Spring, Stud |
| 176 | Spring, Compression |
| 177 | Washer, Spring Stud |
| 178 | Stud, Brake Arm Pivot |
| 179 | Arm, Brake |
| 180 | Spring, Compression |
| 181 | Stop, Male Brake Shoe |
| 182 | Ring, Truarc |
| 183 | Brg, Cam Follower |
| 184 | Cam, Brake |
| 185 | Shoe, Male Brake |
| 186 | Brake, Cover (Not Shown) |
| 187 | Pin, Connecting Rod |
| 188 | Strap, Eccentric |
| 189 | Bushing |
| 190 | Eccentric, R.H. |
| 192 | Keys, Eccentric |
| 193 | Key, Clutch |
| 194 | Shaft, Eccentric |



Motor Assembly

| Item | Description |
|------|-----------------------|
| 214 | Motor Base |
| 215 | Motor |
| 216 | Sheave, Taperlock |
| 217 | Flywheel Guard |
| 218 | V-Belt, |
| 219 | Bushing, Taperlock |
| 220 | Stud, Motor Base |
| 221 | Plate, Guard Mounting |

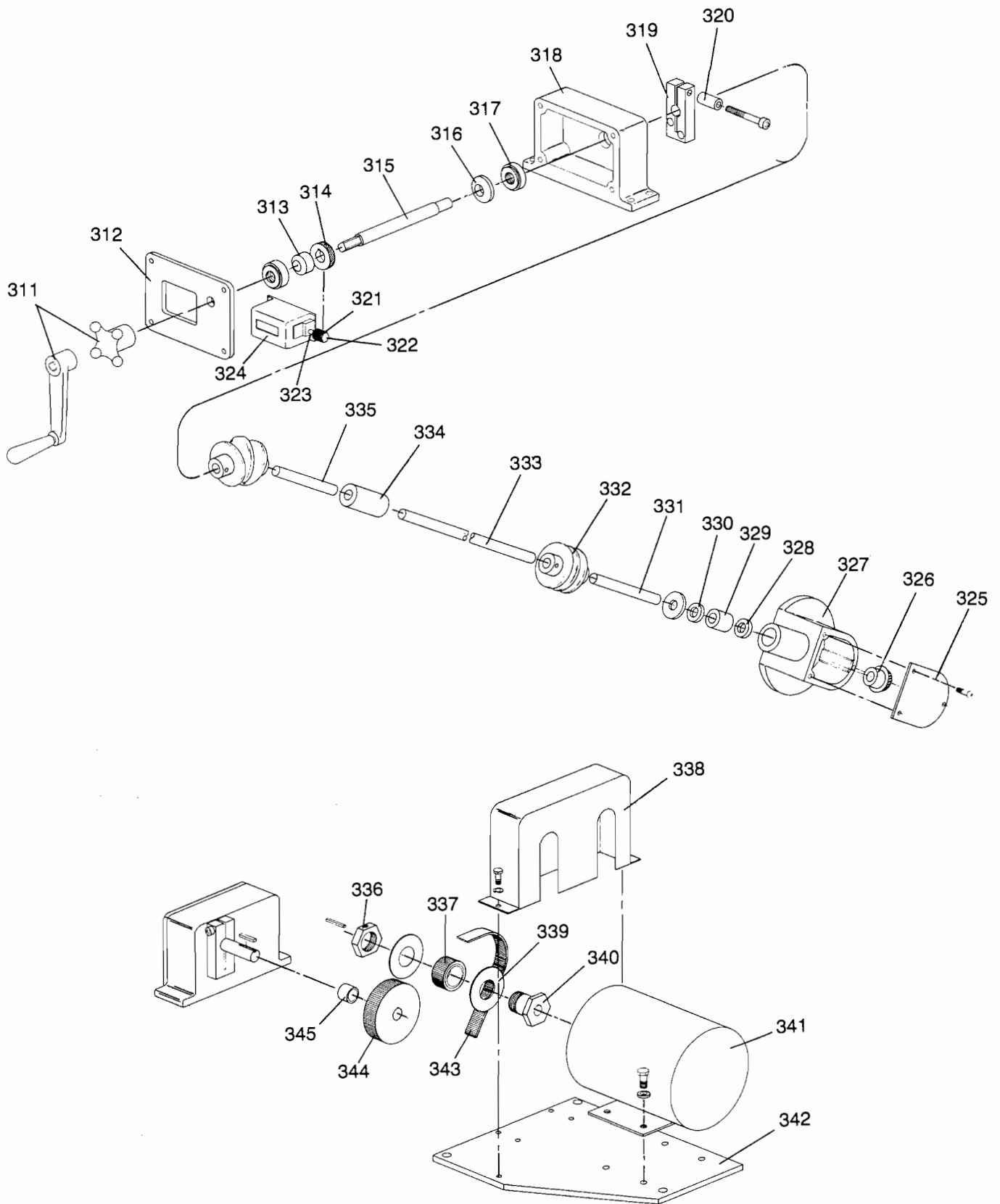
Manual-Rear Operated Back Gauge



Manual-Rear Operated Back Gauge

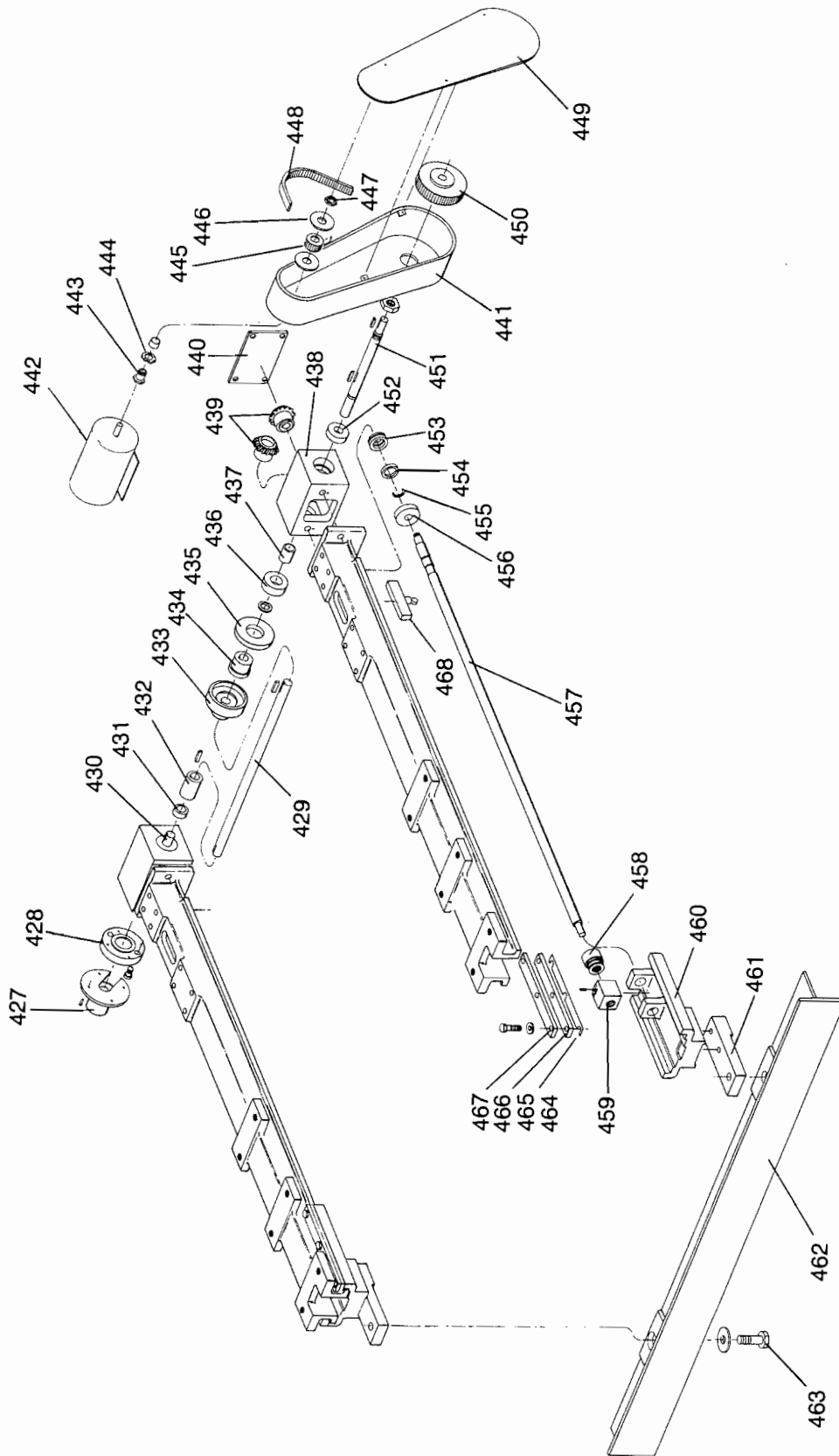
| Item | Description |
|------|----------------------------|
| 241 | Gage, Back Stop |
| 242 | Slide |
| 243 | Screw, Shoulder |
| 244 | Bushing, Angle |
| 245 | Extension, Back Gage Slide |
| 246 | Gib, Slide |
| 247 | Gib, Micarta |
| 248 | Nut, Stationary |
| 249 | Nut, Adjustable |
| 250 | Screw, Back Gage |
| 251 | Key |
| 252 | Washer, Retaining Ring |
| 253 | Thrust Bearing, Retna |
| 254 | Rails |
| 255 | Bearing |
| 256 | Gear, Screw Miter |
| 257 | Nut |
| 258 | Bearing |
| 259 | Bearing, Spacer |
| 260 | Gear Housing, RH |
| 261 | Gear, Miter |
| 262 | Bearing |
| 263 | Shaft, Short, Horz. |
| 264 | Locking Ring |
| 265 | Drum, Clutch |
| 266 | Shoe, Clutch |
| 267 | Shaft, Long, Horz. |
| 268 | Cap, L.H. Gear Housing |
| 269 | Bearing |
| 270 | Gear Housing, L.H. |
| 271 | Gear, Miter |
| 272 | Dial |
| 273 | Measuring Dial |
| 274 | Handle, Revolving |
| 275 | Stud, Handle |
| 276 | Plate, Dial Adjusting |
| 277 | Stud, Clamp |
| 278 | Block, Clamp |
| 279 | Spring |
| 280 | Block, Locking |
| 281 | Handle, Clamp |
| 282 | Pointer |

Power/Manual Back Gage



Power/Manual Back Gage

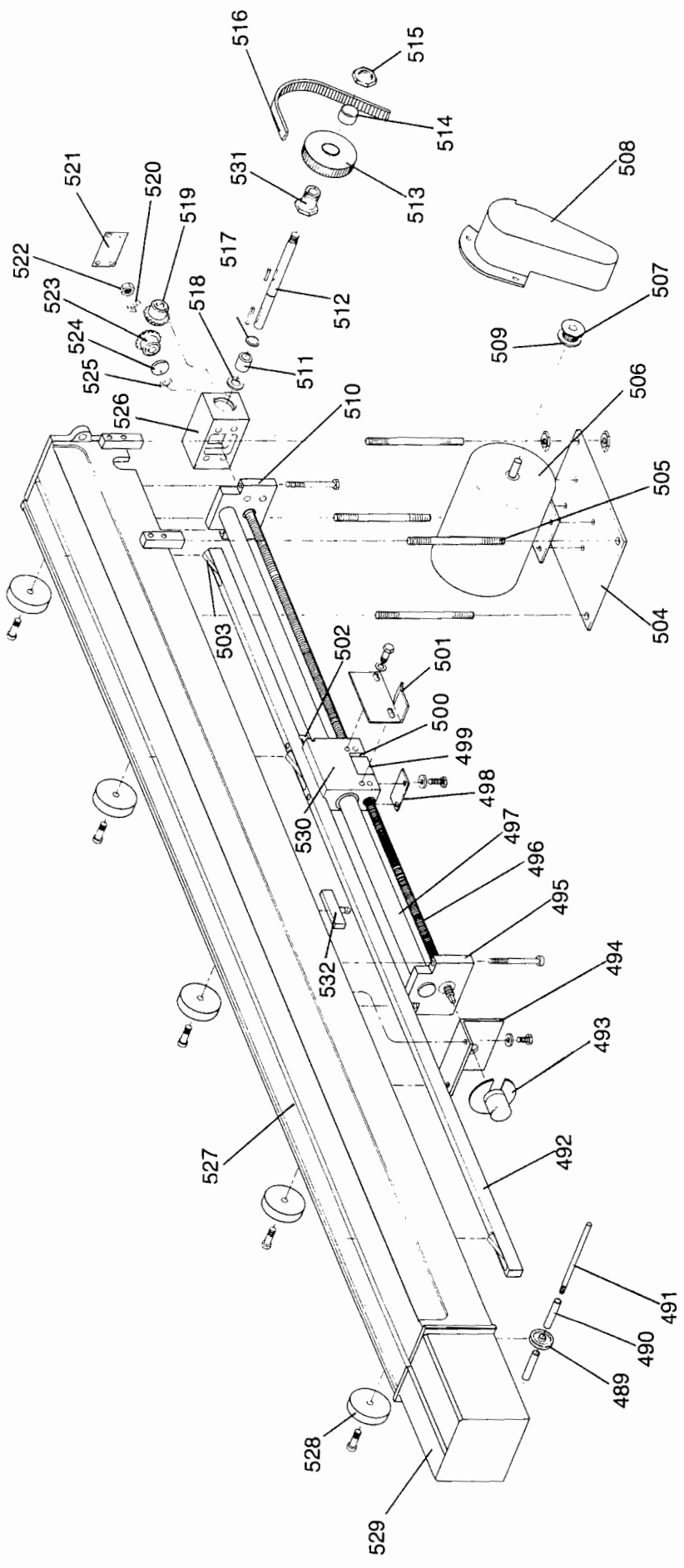
| Item | Description |
|------|------------------------------|
| 311 | Handle |
| 312 | Cover, Counter Housing |
| 313 | Collar, Set |
| 314 | Gear |
| 315 | Shaft, Measure Box |
| 316 | Spacer, Gear |
| 317 | Bearing, Ball |
| 318 | Housing, Back Gage Counter |
| 319 | Block, Shaft Clamp |
| 320 | Spacer, Clamp |
| 321 | Gear Helical |
| 322 | Jam Nut |
| 323 | Collet, Counter Gear |
| 324 | Counter |
| 325 | Cover, Gear Housing |
| 326 | Gear, Miter |
| 327 | Miter Gear Housing |
| 328 | Bearing, Inner Race |
| 329 | Spacer, Bearing |
| 330 | Washer |
| 331 | Shaft, Miter Gear |
| 332 | Universal Joint |
| 333 | Shaft, Universal Drive |
| 334 | Coupling, Drive Shaft |
| 335 | Shaft, Upper Universal Drive |
| 336 | Nut, Timing Pulley |
| 339 | Pulley, Timing |
| 338 | Guard, Timing Pulley |
| 339 | Washer, Timing Pulley |
| 340 | Hub, Timing Pulley |
| 341 | Motor |
| 342 | Base B.G. Counter and Motor |
| 343 | Belt Timing |
| 344 | Pulley, Timing |
| 345 | Spacer, Timing Pulley |



CNC Back Gage

| Item | Description |
|------|--------------------------------|
| 427 | Encoder |
| 428 | Adapter, Encoder |
| 429 | Cover, Cross Shaft (Not Shown) |
| 430 | Shaft, Gear, L.H. |
| 431 | Collar, Set |
| 432 | Coupling, Cross Shaft |
| 433 | Shoe, Clutch |
| 434 | Drum, Clutch |
| 435 | Ring, Locking |
| 436 | Bearing |
| 437 | Spacer, Miter Gear |
| 438 | Housing, Miter Gear |
| 439 | Screw, Miter Gear |
| 440 | Cover, Miter Gear |
| 441 | Guard, Belt |
| 442 | Motor |
| 443 | Hub, Timing Pulley |
| 444 | Washer, Wave |
| 445 | Pulley, Timing |
| 446 | Washer, Timing Pulley |
| 447 | Nut, Timing Pulley |
| 448 | Belt, Timing |
| 449 | Plate, Belt Guard Front |
| 450 | Pulley, Timing |
| 451 | Shaft, Gear R.H. |
| 452 | Bearing |
| 453 | Bearing |
| 454 | Spacer |
| 455 | Ring, Retaining |
| 456 | Washer, Rubber |
| 457 | Screw, Slide |
| 458 | Driving, Nut (Adjustable) |
| 459 | Driving, Nut (Stationary) |
| 460 | Slide |
| 461 | Extension Back Gage |
| 462 | Gage, Back Stop |
| 463 | Screw, Shoulder |
| 464 | Shim, .005 |
| 465 | Shim, .003 |
| 466 | Insert, Micarta |
| 467 | Slide, Gib |
| 468 | Switch, Proximity |
| 469 | Cover, Cross Shaft (Not Shown) |

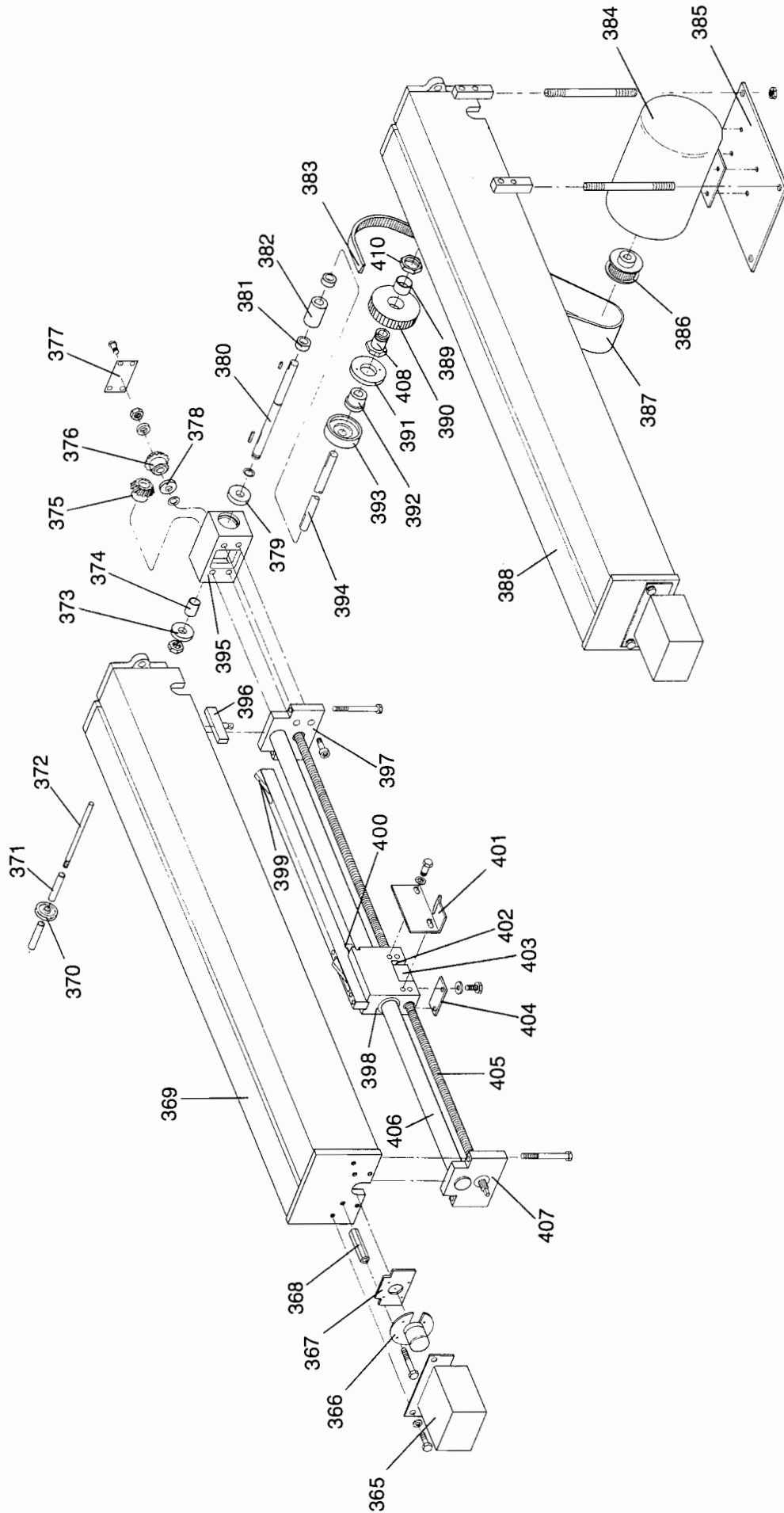
Power Squaring Arm



Power Squaring Arm

| Item | Description |
|------|----------------------------|
| 489 | Skate Wheel |
| 490 | Spacer, Skate Wheel |
| 491 | Screw, Hex |
| 492 | Housing, Dis. Stop |
| 493 | Encoder |
| 494 | Encoder Bracket |
| 495 | Block, Front Bearing |
| 496 | Screw Front |
| 497 | Shaft, Thomson |
| 498 | Keeper, Nut |
| 499 | Nut, Drive (Stationary) |
| 500 | Nut, Drive (Adjustable) |
| 501 | Trip, Prox. Switch |
| 502 | Clomp Dis. Stop Housing |
| 503 | Disappearing Stop |
| 504 | Base, Front Gage Motor |
| 505 | Rod, Drive Support |
| 506 | Motor |
| 507 | Pulley, Timing Belt |
| 508 | Cover, Power Squaring Arm |
| 509 | Washer, Timing Pulley |
| 510 | Block, Rear Bearing |
| 511 | Spacer, Miter Gear |
| 512 | Shaft, Miter Gear |
| 513 | Pulley, Timing — 36 Tooth |
| 514 | Bushing |
| 515 | Nut, Timing Pulley |
| 516 | Belt, Timing |
| 517 | Ring, Retaining |
| 518 | Bearing |
| 519 | Gear, Miter |
| 520 | Spacer |
| 521 | Cover, Housing |
| 522 | Nut |
| 523 | Gear, Miter |
| 524 | Bearing |
| 525 | Ring Retaining |
| 526 | Housing, Miter Gear |
| 527 | Arm, Power Squaring Arm |
| 528 | Disk, Side Gage |
| 529 | Guard, Dis. Stop Housing |
| 530 | Housing, Disappearing Stop |
| 531 | Hub, Timing Pulley |
| 532 | Limit Switch |

CNC Front Gage



CNC Front Gage

| Item | Description |
|------|--------------------------------|
| 365 | Cover, Encoder |
| 366 | Encoder |
| 367 | Plate, Encoder Mtg. |
| 368 | Post, Encoder Mtg. |
| 369 | Housing, Front Gage L.H. |
| 370 | Wheel, Skate |
| 371 | Spacer, Skate Wheel |
| 372 | Screw, Hex |
| 373 | Bearing |
| 374 | Spacer, Miter Gear |
| 375 | Gear, Miter |
| 376 | Gear, Miter |
| 377 | Cover Miter |
| 378 | Bearing |
| 379 | Bearing |
| 380 | Shaft, Miter Gear R.H. |
| 381 | Collar, Set |
| 382 | Coupling, Cross Shaft |
| 383 | Belt, Timing |
| 384 | Motor |
| 385 | Base, Front Gage Motor |
| 386 | Pulley, Timing |
| 387 | Cover, Front Gage Timing Belt |
| 388 | Housing, Front Gage R.H. |
| 389 | Bushing |
| 390 | Pulley, Timing Belt |
| 391 | Ring, Locking |
| 392 | Drum, Clutch |
| 393 | Shoe, Clutch |
| 394 | Shaft, Cross |
| 395 | Housing, Miter Gear |
| 396 | Switch, Proximity |
| 397 | Block, Rear Bearing |
| 398 | Housing, Disappearing |
| 399 | Stop, Front |
| 400 | Clamp, Disappearing |
| 401 | Trip, Proximity Switch |
| 402 | Nut, Driving (Adjusting) |
| 403 | Nut, Driving (Stationary) |
| 404 | Keeper, Nut |
| 405 | Screw, Front Gage |
| 406 | Shaft Thomson |
| 407 | Block, Front Bearing |
| 408 | Hub, Timing Pulley |
| 409 | Bushing |
| 410 | Nut, Timing |
| 411 | Washer, Wave (Not Shown) |
| 412 | Cover, Cross Shaft (Not Shown) |

WARNING

USE OF FOOT CONTROLS ON MACHINERY LACKING EFFECTIVE POINT OF OPERATION SAFEGUARDS CAN CAUSE SERIOUS INJURY TO THE OPERATOR.

Foot controls should only be used where "Point of Operation" and "Pinch Point" guarding devices have been properly installed and are utilized so that it is **IMPOSSIBLE** for the operator's hands or fingers to remain within the point of operation during the machine cycle.

IT IS THE RESPONSIBILITY OF THE USER to determine the suitability of a foot control for the user's intended use and to determine that the foot control chosen by the user and wiring up and installation of the same will comply with all Federal, State and Local safety and health regulations and codes.

Due to the unlimited variety of business equipment, instruments, machines and vehicles on which our foot switches are used, the thousands of standards, and customers' varying interpretations of the standards covering these applications, it is impossible for **LINEMASTER** personnel to be experts on standards and requirements for all these products. We offer over 150 stock foot switch models and guards plus a large variety of specials which are made to customer specifications. We can advise you what is available in our foot switch line and you can examine models to see what meets your needs. We believe our customers' engineering departments should be the qualified experts in their own product field and know what specifications or details they require in a foot switch for their equipment. If one of our stock models meets their needs, they can specify it, or possibly ask for a modification of a stock model if that is required.

SHOULD YOU HAVE ANY QUESTIONS OR IF ANY OF THE ABOVE WARNING IS UNCLEAR, PLEASE CALL LINEMASTER SWITCH CORPORATION.

(860) 974-1000; FAX (860) 974-0691 OR (800) 974-3668.

READ INSTRUCTIONS on reverse side of this page.

DEFINITIONS:

POINT OF OPERATION - The point or area of the machine or equipment where the work piece or material is actually positioned and work is being performed during any process such as cutting, shearing, punching, forming, welding, riveting, assembling, etc..

PINCH POINT - Any point at which it is possible for a portion of the body to be caught and injured between moving machine or equipment or work piece parts.

HEAVY DUTY ANTI-TRIP FOOT SWITCH

1. **⚠ WARNING: TO AVOID PERSONAL INJURY, DO NOT USE THIS SWITCH ON MACHINERY WITH AN UNGUARDED POINT OF OPERATION.**

⚠ READ WARNING STATEMENT on reverse side of this page.

2. When wiring up this device make sure **POWER IS OFF AND LINES ARE DEAD.**
3. This device is for use in ordinary locations, TYPE 2, 4 and 13 and intended to be permanently connected by means of conduit, flexible cord or other system in accordance with the **NATIONAL ELECTRICAL CODE.**
When wiring up this device with flexible cord an **UNDERWRITERS LABORATORIES LISTED** liquidtight connector **MUST BE** provided. Use appropriate pipe thread sealant at assembly to seal connector threads. When threading into the conduit opening, **CARE** must be taken to tighten the threaded joint sufficiently to prevent loosening but should **NOT BE FORCED.** The conduit threads should be kept clean; free from dirt and foreign materials that would hinder proper installation.
4. **MODELS 511-B & 511-B3** are supplied with non-adjustable actuating mechanism. Factory set to operate approximately $\frac{3}{4}$ treadle stroke.
5. **MODELS 511-B2 & 511-B4** are supplied with right interior switch with non-adjustable actuating mechanism. Left interior switch with an adjustable actuating mechanism, set at factory to operate as Double-Pole Double-Throw.

SPECIAL NOTE:

In many applications it is highly desirable to wire the Normally Closed Circuit to the adjustable left switch and the Normally Open Circuit to the non-adjustable right switch. In such a case the 511-B2 can then be adjusted to have the Normally Closed Circuit remake near the top of the treadle release stroke. **EXAMPLE:** This means that in a press control circuit, the operator must go through a substantial portion of the treadle release stroke before he can reset the control circuit for another operation.

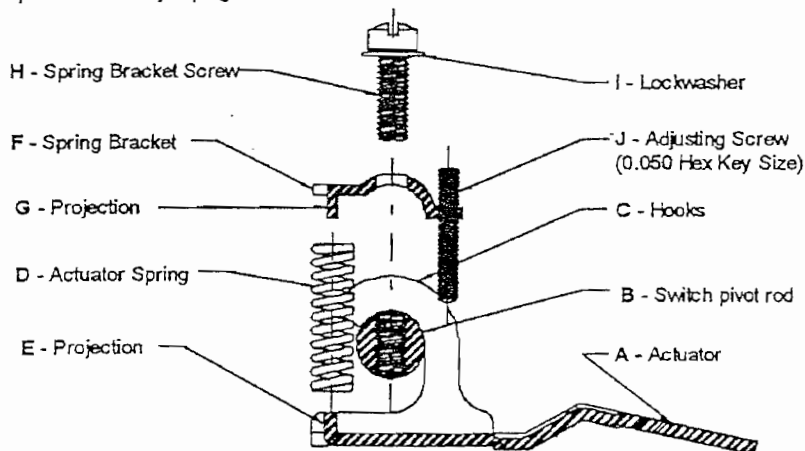
6. **TO CHANGE ADJUSTMENT** of the operating point of the left interior switch, depress the treadle to the point where you want the switch to operate. With the treadle depressed to the desired operating point, turn the adjusting screw until the switch snaps.

Turn clockwise to lower the operating point and counter-clockwise to raise it.

Apply Loctite Corporation Threadlocker Adhesive #290 (or equivalent) penetrating low-viscosity anaerobic liquid adhesive to adjusting screw "J" after changing adjustment.

Avoid applying an excessive amount of the liquid adhesive to prevent migration.

Remove excess liquid adhesive by wiping.



7. Tighten the cover screws such that an effective seal is obtained with the gasket. Tighten to 30 to 35 in—lb. (3.4 to 4.0 Nm); two tightenings required.

8. **CLEANLINESS** must be observed during installation and in use.

On a **REGULAR BASIS**, lubricate the treadle pivot rod with one or two drops of lubricating oil on that portion of the pivot rod that extends between the outside of the base and inside of the treadle; two places.

On a **REGULAR BASIS**, inspect foot switch frequently to guard against wear, damage, unlawful alterations or removal of guards, or for unusual enclosure deterioration and the like. Inspect the entire length of the connecting cord (or wiring system) from where it enters the foot switch to the equipment its wired up to for wear, loose strain relief connections and the like. **DO NOT OPERATE** the foot switch if any of the above is observed or if the nameplate or warning labels have been obscured or removed.

It is **IMPERATIVE** that inspection authorities and users exercise more than ordinary care with regard to installation and maintenance and that this information sheet be made available to the end user, operators, maintenance personnel and to others responsible for the proper installation and safe operation of this foot switch.

ADDITIONAL COPIES of this information sheet and warning labels are available upon request.