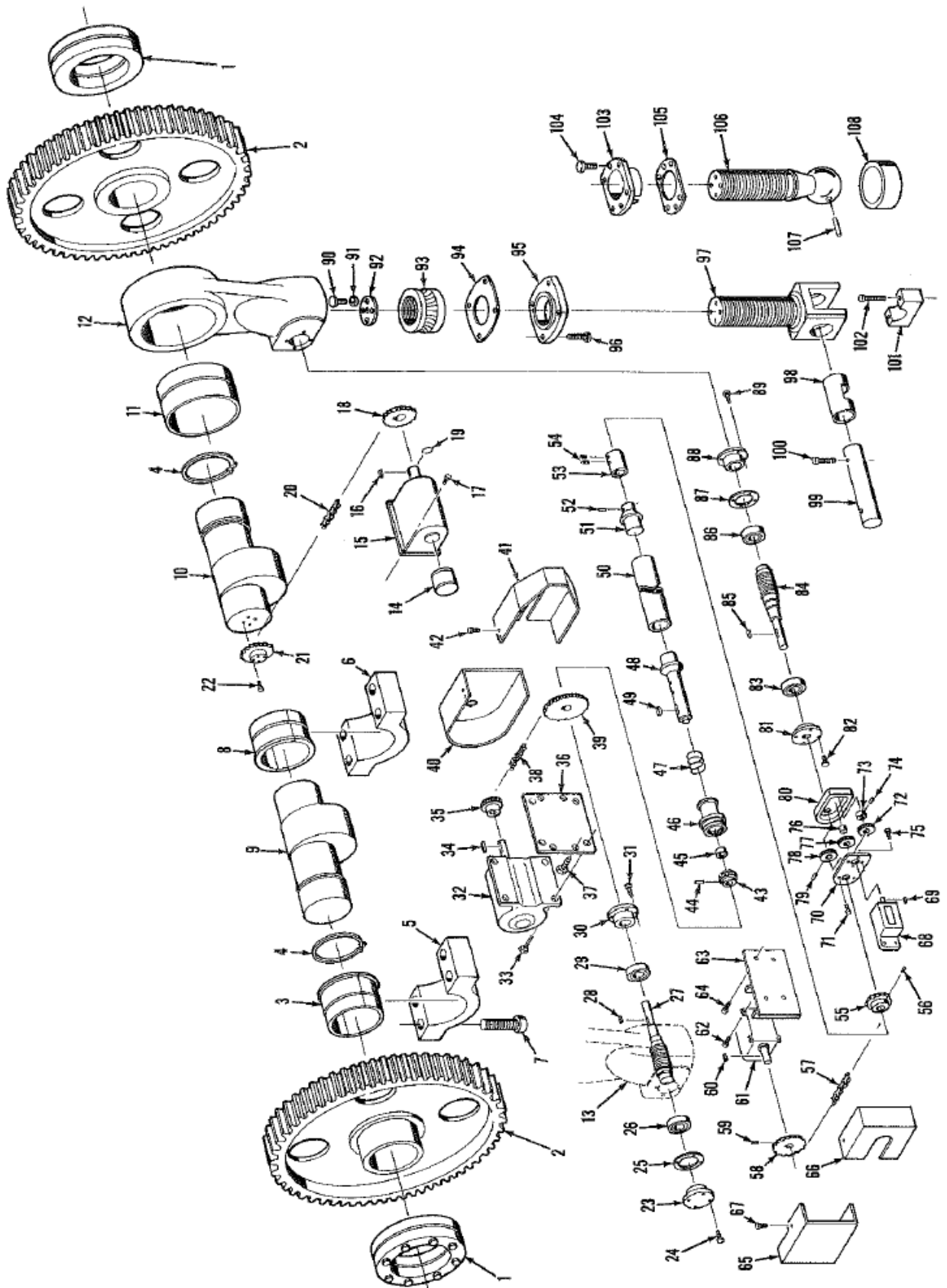


## FRAME & SLIDE

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Frame</li> <li>2. L.H. Gear Guard Back Plate</li> <li>3. L.H. Gear Guard Gasket</li> <li>4. L.H. Gear Guard</li> <li>5. Screw</li> <li>6. Flywheel Brake Bracket</li> <li>7. Bracket Mounting Screw</li> <li>8. Flywheel Brake</li> <li>9. Brake Mounting Screw</li> <li>10. Slide</li> <li>11. Slide Liner</li> <li>12. Liner Mounting Screw</li> <li>13. L.H. Gib Block</li> <li>14. R.H. Gib Block <i>(not shown)</i></li> <li>15. Block Mounting Screw</li> <li>16. Washer</li> <li>17. Gib Adjusting Screw</li> <li>18. Hex Nut</li> <li>19. Gib Lock Screw</li> <li>20. Air Counterbalance <i>(see separate part list)</i></li> <li>21. Counterbalance Mounting Screw</li> <li>22. Motor</li> <li>23. Motor Sheave</li> <li>24. Motor Sheave Key</li> <li>25. Drive Belts</li> <li>26. Motor Mounting Screw</li> <li>27. Motor Plate</li> <li>28. Hinge Pin</li> <li>29. Snap Ring</li> <li>30. Adjusting Pin</li> <li>31. Adjusting Screw</li> <li>32. Roll Pin</li> <li>33. Hex Nut</li> <li>34. R.H. Gear Guard Back Plate</li> <li>35. R.H. Gear Guard Gasket</li> <li>36. R.H. Gear Guard</li> </ol> | <ol style="list-style-type: none"> <li>37. Gear Guard Mounting Screw</li> <li>38. Belt Guard Back Plate</li> <li>39. Belt Guard Gasket</li> <li>40. Belt Guard</li> <li>41. Belt Guard Mounting Screw</li> <li>42. Clutch Guard Mounting Angle</li> <li>43. Screw</li> <li>44. Clutch Guard</li> <li>45. Control Box</li> <li>46. Chain Guard</li> <li>47. Guard Mounting Screw</li> <li>48. Limit-Switch Mounting Plate</li> <li>49. Plate Mounting Screw</li> <li>50. Front Gib</li> <li>51. Front Gib Mounting Screw</li> <li>52. Washer</li> <li>53. Front Support Block</li> <li>54. Support Block Mounting Screw</li> <li>55. Gib Lock Screw</li> <li>56. Gib Adjusting Screw</li> <li>57. Hex Nut</li> <li>58. Rear Gib</li> <li>59. Rear Gib Mounting Screw</li> <li>60. Die Block</li> <li>61. Bolster Plate</li> <li>62. Bolster Screw</li> <li>63. Bolster Washer</li> <li>64. Bolster Nut</li> <li>65. Palm Button Bracket</li> <li>66. Bracket Mounting Screw</li> <li>67. Knockout Bars*</li> <li>68. Cotter Key*</li> <li>69. Knockout Pin*</li> <li>70. Knockout Support*</li> <li>71. Lock Screw*</li> <li>72. Support Screw*</li> </ol> |
|---|---|

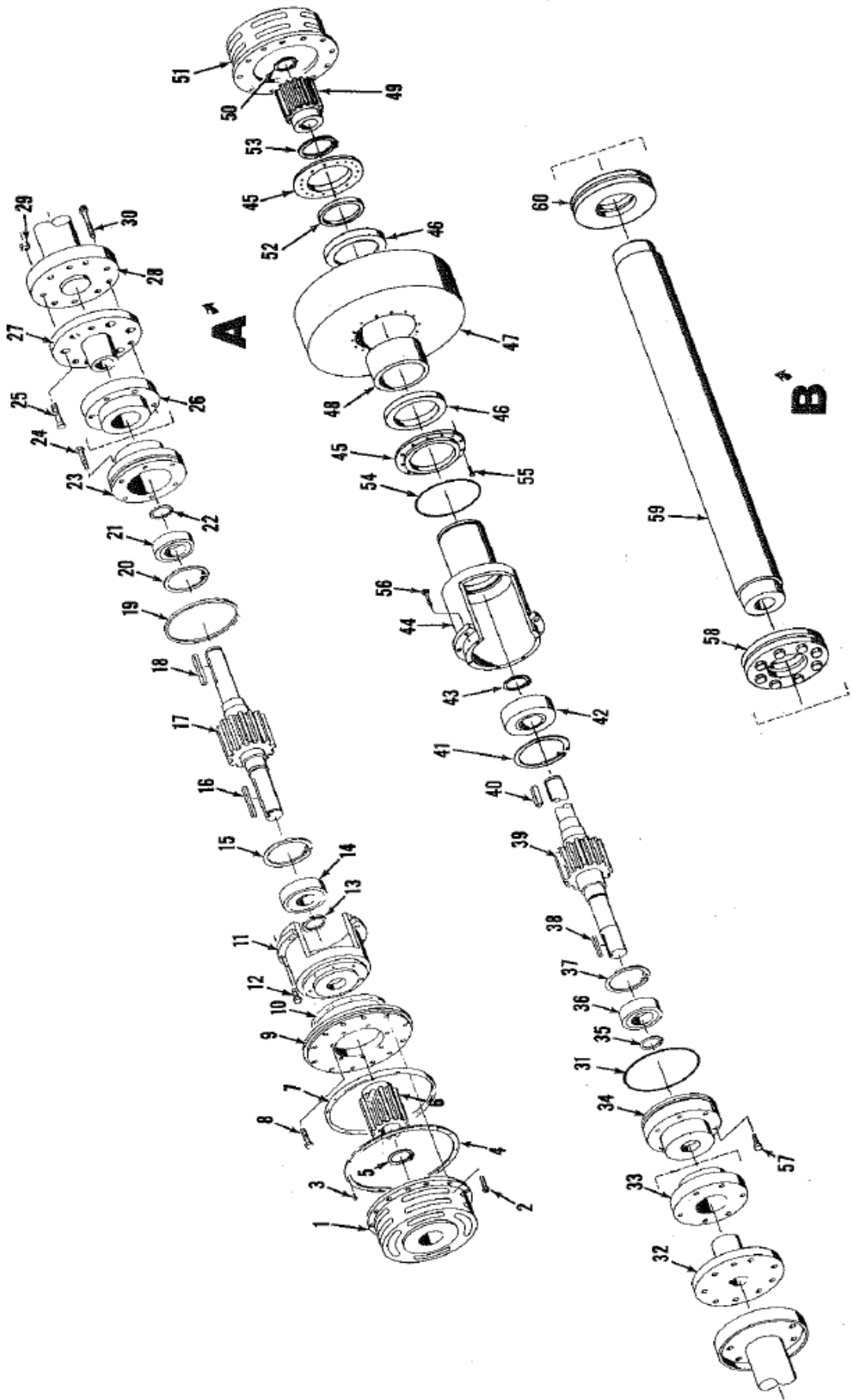
\* *Optional*



## ECCENTRIC & RAM ADJUSTING SHAFT

1. Shrink Disc		
2. Main Gear		
3. Outboard Bushing		
4. Snap Ring		
5. Outboard Bearing Cap		
6. Inboard Bearing Cap		
7. Bearing Cap Screw		
8. Inboard Bushing		
9. L.H. Eccentric Shaft		
10. R.H. Eccentric Shaft		
11. Connection Bushing		
12. R.H. Connection		
13. L.H. Connection		
14. Stroke Position Indicator		
15. Rotary Limit Switch		
16. Key		
17. Limit Switch Mounting Screw		
18. Limit Switch Sprocket		
19. Retaining Ring		
20. Chain		
21. Eccentric Shaft Sprocket		
22. Sprocket Mounting Screw		
23. L.H. Outboard Bearing Retainer		
24. Retainer Screw		
25. Shim		
26. L.H. Outboard Bearing		
27. L.H. Worm		
28. Key		
29. L.H. Inboard Bearing		
30. L.H. Inboard Bearing Retainer		
31. Retainer Screw		
32. Motor		
33. Motor Mounting Screw		
34. Key		
35. Motor Sprocket		
36. Motor Mount Bracket		
37. Bracket Screw		
38. Chain		
39. Adjusting Shaft Sprocket		
40. Rear Motor Chain Guard		
41. Front Motor Chain Guard		
42. Guard Mounting Screw		
43. Coupling Gear		
44. Roll Pin		
45. Bushing		
46. Coupling Sleeve		
47. Spring		
48. L.H. Trunnion		
49. Woodruff Key		
50. Adjusting Shaft Connection Tube		
51. R.H. Trunnion		
52. Roll Pin		
53. Coupling Sleeve		
54. Set Screw		
55. Shaft Sprocket		
56. Set Screw		
57. Chain		
58. Limit Switch Sprocket		
59. Set Screw		
60. Key		
61. Limit Switch		
62. Switch Mounting Screw		
63. Switch Mounting Bracket		
64. Bracket Mounting Screw		
65. Rear Switch Chain Guard		
66. Front Switch Chain Guard		
67. Guard Mounting Screw		
68. Slide Adjusting Position Indicator		
69. Key		
70. Gear Box Cover <i>(Specify L.H. or R.H. Gear Box Mounting)</i>		
71. Cover Screw		
72. Indicator Gear		
73. Bushing		
74. Roll Pin		
75. Indicator Mounting Screws		
76. Idle Shaft		
77. Idle Gear		
78. Shaft Gear		
79. Roll Pin		
80. Gear Box		
81. R.H. Inboard Bearing Retainer		
82. Retainer Screw		
83. R.H. Inboard Bearing		
84. R.H. Worm		
85. Key		
86. R.H. Outboard Bearing		
87. Shim		
88. R.H. Outboard Bearing Retainer		
89. Retainer Screw		
90. Stop Plate Screw		
91. Lockwasher		
92. Stop Plate		
93. Adjusting Nut		
94. Shim		
95. Connection Cover		
96. Connection Cover Screw		
97. Connection Screw*		
98. Bushing*		
99. Wrist Pin*		
100. Wrist Pin Screw*		
101. Wrist Pin Saddle*		
102. Saddle Screw*		
103. Ball Cover*		
104. Cover Screw*		
105. Shim*		
106. Ball Screw*		
107. Dowel*		
108. Ball Seat*		

\* When Used

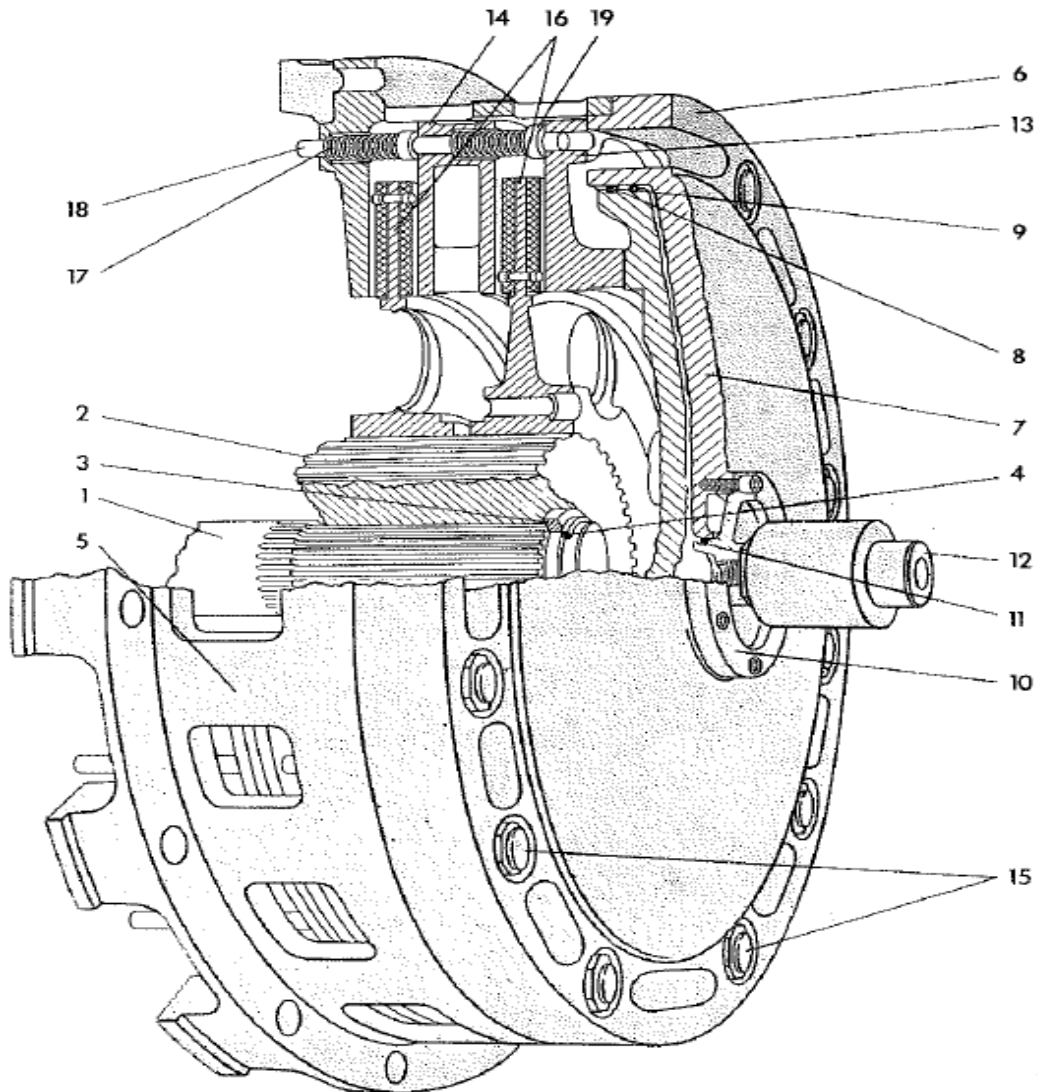


## DRIVE

- |                             |                         |
|-----------------------------|-------------------------|
| 1. Brake                    | 31. 'O' Ring            |
| 2. Capscrew                 | 32. Coupling*           |
| 3. Bolt                     | 33. Taper Lock Adaptor* |
| 4. Brake Adaptor Ring Plate | 34. Bearing Cartridge   |
| 5. Retaining Ring           | 35. Retaining Ring      |
| 6. Brake Hub                | 36. Bearing             |
| 7. Hose Ring Gasket         | 37. Retaining Ring      |
| 8. Bolt                     | 38. Key*                |
| 9. Brake Mounting Plate     | 39. R.H. Drive Shaft    |
| 10. Hose Ring Gasket        | 40. Key                 |
| 11. Bearing Housing         | 41. Retaining Ring      |
| 12. Bolt                    | 42. Bearing             |
| 13. Retaining Ring          | 43. Retaining Ring      |
| 14. Bearing                 | 44. Quill               |
| 15. Retaining Ring          | 45. Bearing Retainer    |
| 16. Key                     | 46. Bearing             |
| 17. L.H. Drive Shaft        | 47. Flywheel            |
| 18. Key*                    | 48. Spacer              |
| 19. 'O' Ring                | 49. Clutch Hub          |
| 20. Retaining Ring          | 50. Retaining Ring      |
| 21. Bearing                 | 51. Clutch              |
| 22. Retaining Ring          | 52. Spacer              |
| 23. Bearing Cartridge       | 53. Retaining Ring      |
| 24. Bolt                    | 54. Hose Ring Gasket    |
| 25. Drive Bolt*             | 55. Bolt                |
| 26. Taperlock Adaptor*      | 56. Bolt                |
| 27. Coupling                | 57. Bolt                |
| 28. Middle Driveshaft*      | 58. Shrink Disc*        |
| 29. Nut*                    | 59. Center Driveshaft*  |
| 30. Capscrew*               | 60. Shrink Disc*        |

\* When used in either Arrangement "A" or "B"

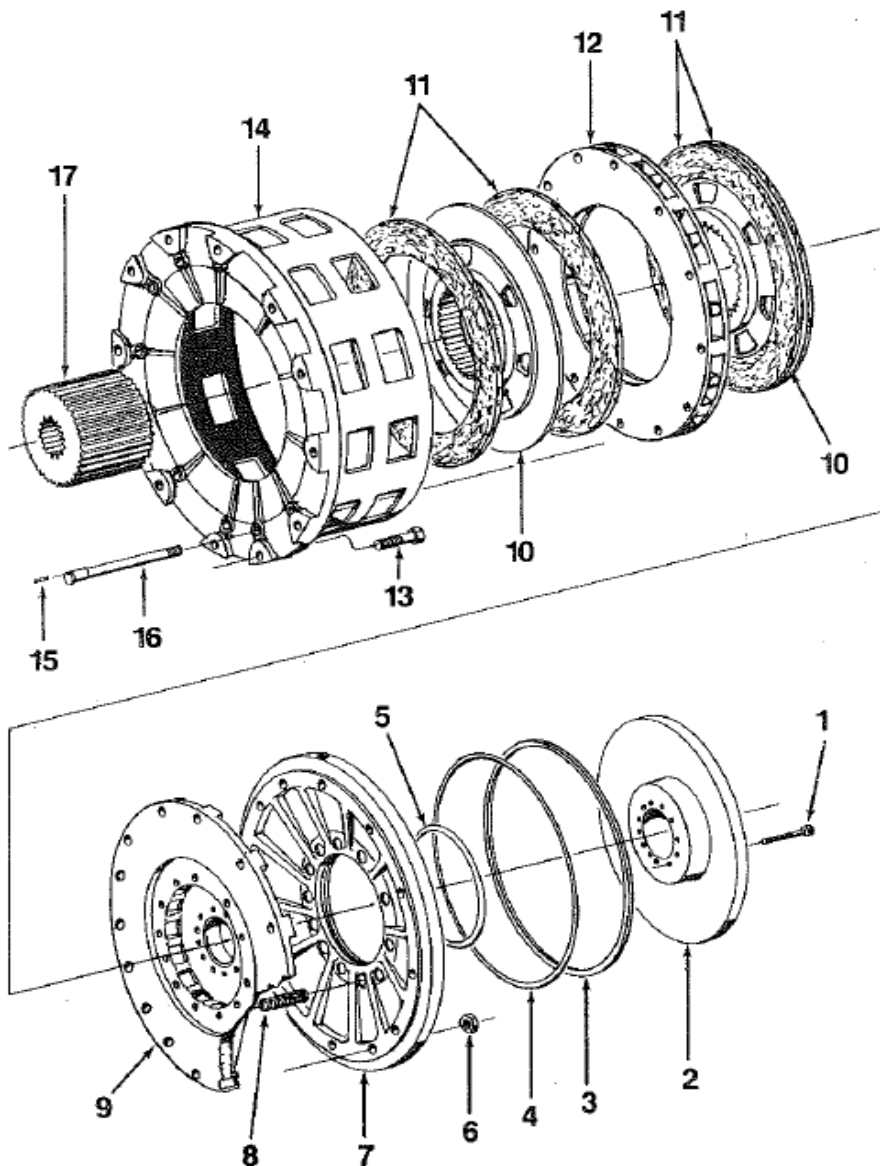
## AIR FRICTION CLUTCH - Type LI-P



- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1. Drive Shaft</li> <li>2. Driving Hub</li> <li>3. Key</li> <li>4. Retainer Ring</li> <li>5. Clutch Housing</li> <li>6. Clutch Cylinder</li> <li>7. Clutch Piston</li> <li>8. Piston Wiper</li> <li>9. Piston "O" Ring</li> <li>10. Rotary Air Seal Adapter</li> </ul> | <ul style="list-style-type: none"> <li>11. Adapter "O" Ring</li> <li>12. Rotary Air Seal</li> <li>13. Pressure Plate</li> <li>14. Inner Pressure Plate</li> <li>*15. Pressure Plate Guides &amp; Nut</li> <li>16. Friction Disc</li> <li>17. Spreader Spring</li> <li>18. Spring Guide</li> <li>19. Guide Collar</li> </ul> <p>* Refer to Table for recommended torque value.</p> |
|---|---|

TORQUE VALUES BY FRICTION DISC DIAMETER	
8"	25-30 ft/lbs
10"	30-35 ft/lbs
11"	35-40 ft/lbs
13"	45-50 ft/lbs
17"	70-80 ft/lbs
18"	70-80 ft/lbs
21"	90-100 ft/lbs
25"	110-120 ft/lbs
30"	190-200 ft/lbs
35"	220-230 ft/lbs

## AIR RELEASING DISC BRAKE



- 1. Piston Screw (Remove to replace seal and rings.)
- 2. Piston
- 3. Piston Dust Seal
- 4. Piston Ring (outer)
- 5. Piston Ring (inner)
- \*6. Cylinder Stud Nut (Remove to replace linings.)
- 7. Cylinder
- 8. Spring
- 9. Pressure Plate

- 10. Brake Disc (quantity may vary)
- 11. Brake Lining (quantity may vary)
- 12. Center Plate (not used with single disc)
- 13. Brake Ring Mounting Screw
- 14. Brake Ring
- 15. Brake Stud Pin
- 16. Brake Stud
- 17. Brake Hub
- 18. Lining Rivet (not shown)

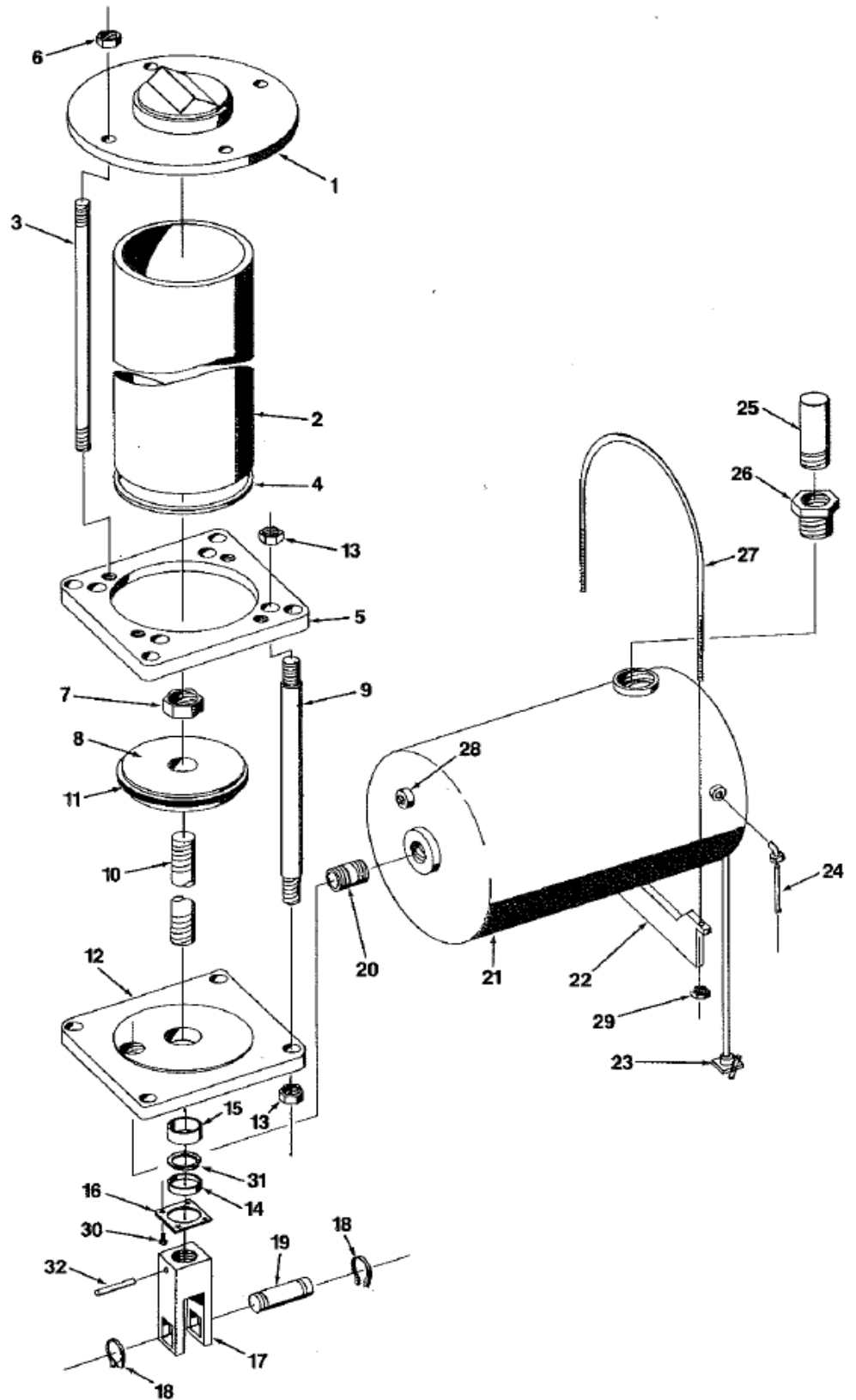
\* Refer to Table for recommended torque value.

<b>TORQUE VALUES BY FRICTION DISC DIAMETER</b>	
8"	25-30 ft/lbs
10"	30-35 ft/lbs
11"	35-40 ft/lbs
13"	45-50 ft/lbs
17"	70-80 ft/lbs
18"	70-80 ft/lbs
21"	90-100 ft/lbs
25"	110-120 ft/lbs
30"	190-200 ft/lbs
35"	220-230 ft/lbs

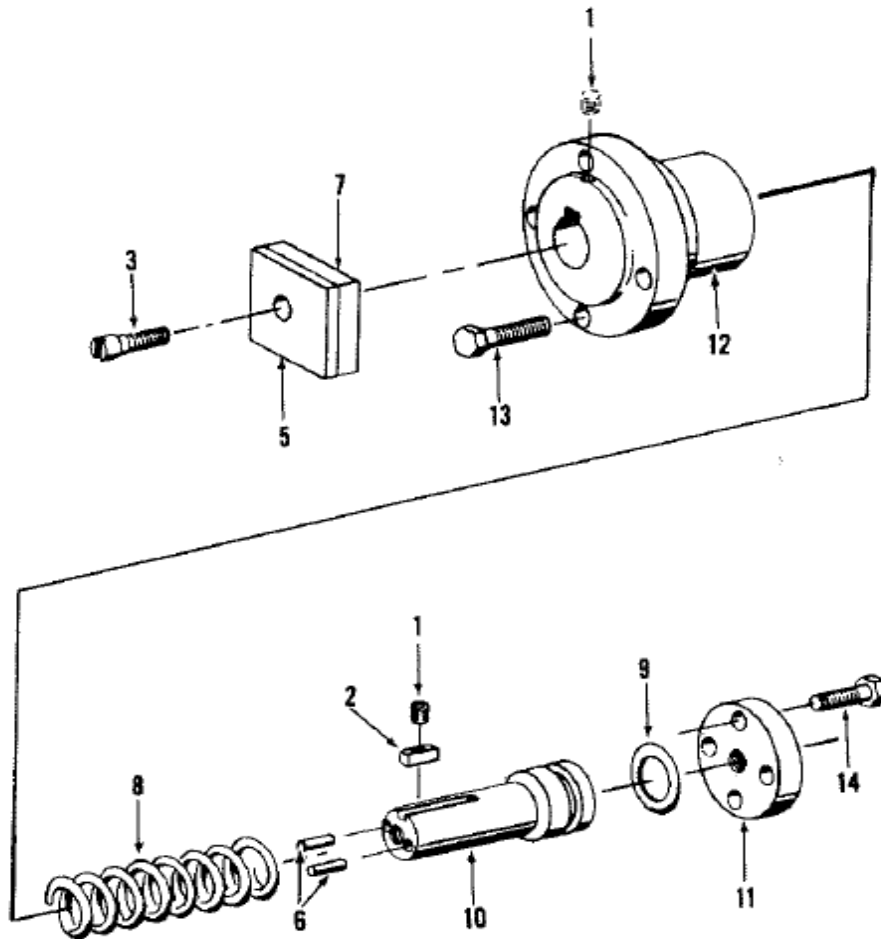


## AIR COUNTERBALANCE and TANK

1. Cylinder Cap
2. Cylinder
3. Stud
4. Seal
5. Mounting Plate
6. Stud Nut
7. Piston Rod Nut
8. Piston
9. Tie Rod
10. Piston Rod
11. Piston Seal
12. Lower Cylinder Cover
13. Tie Rod Nut
14. Seal
15. Bushing
16. Retaining Plate
17. Clevis
18. Retaining Ring
19. Clevis Pin
20. Piping
21. Air Tank
22. Tank Bracket
23. Petcock
24. Air Line
25. Safety Valve
26. Bushing
27. Tank Rod
28. Fusible Plug
29. Tank Rod Nut
30. Retaining Plate Screws
31. Retaining Ring
32. Roll Pin



## AIR OPERATED FLYWHEEL BRAKE



- |                   |                             |
|-------------------|-----------------------------|
| 1. Key Dowel Pin  | 9. "O" Ring                 |
| 2. Guide Key      | 10. Piston                  |
| 3. Mounting Screw | 11. Cylinder Cover          |
| 5. Brake Lining   | 12. Cylinder                |
| 6. Dowel Pin      | 13. Cylinder Mounting Screw |
| 7. Brake Shoe     | 14. Cover Mounting Screw    |
| 8. Spring         |                             |