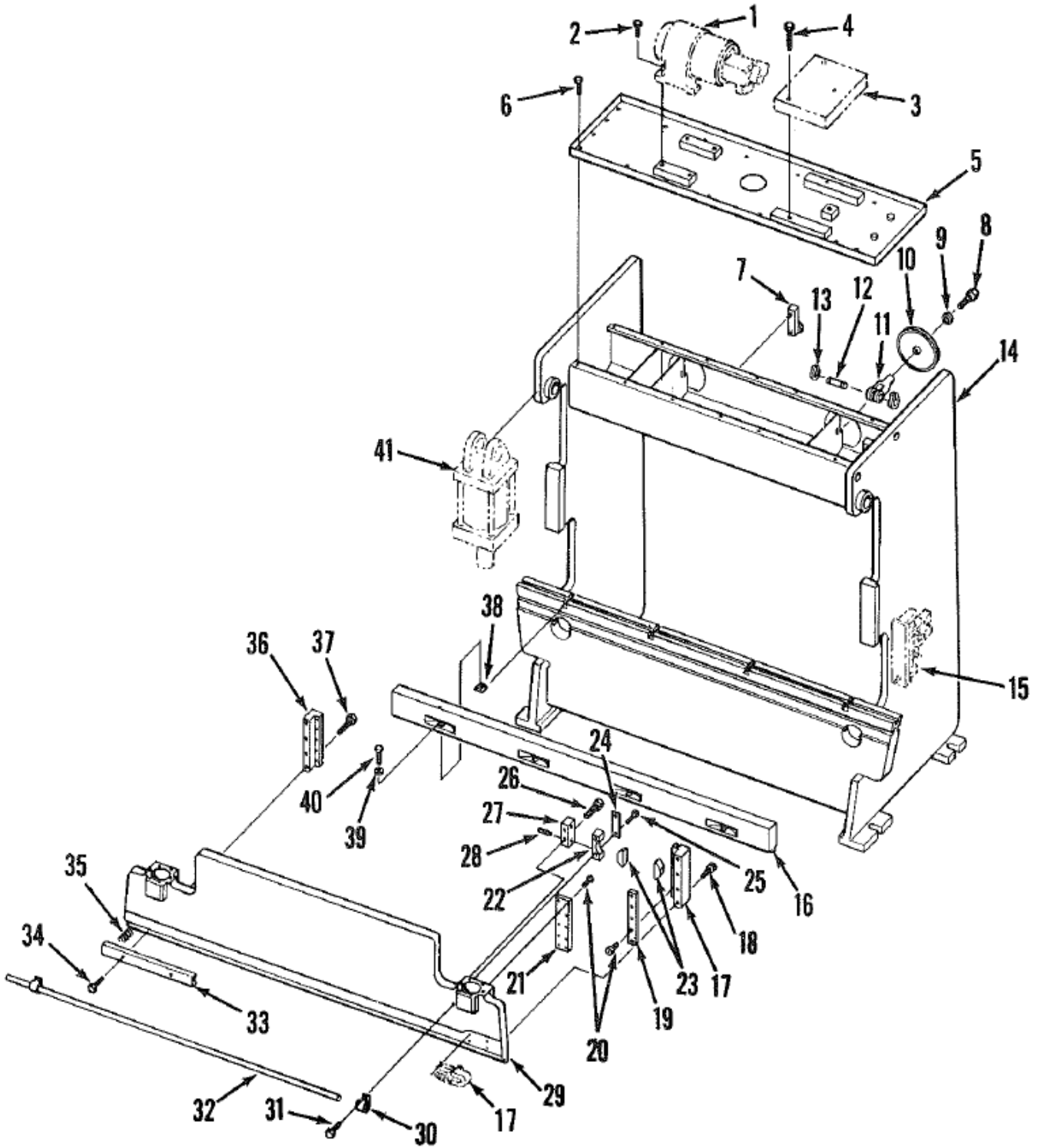


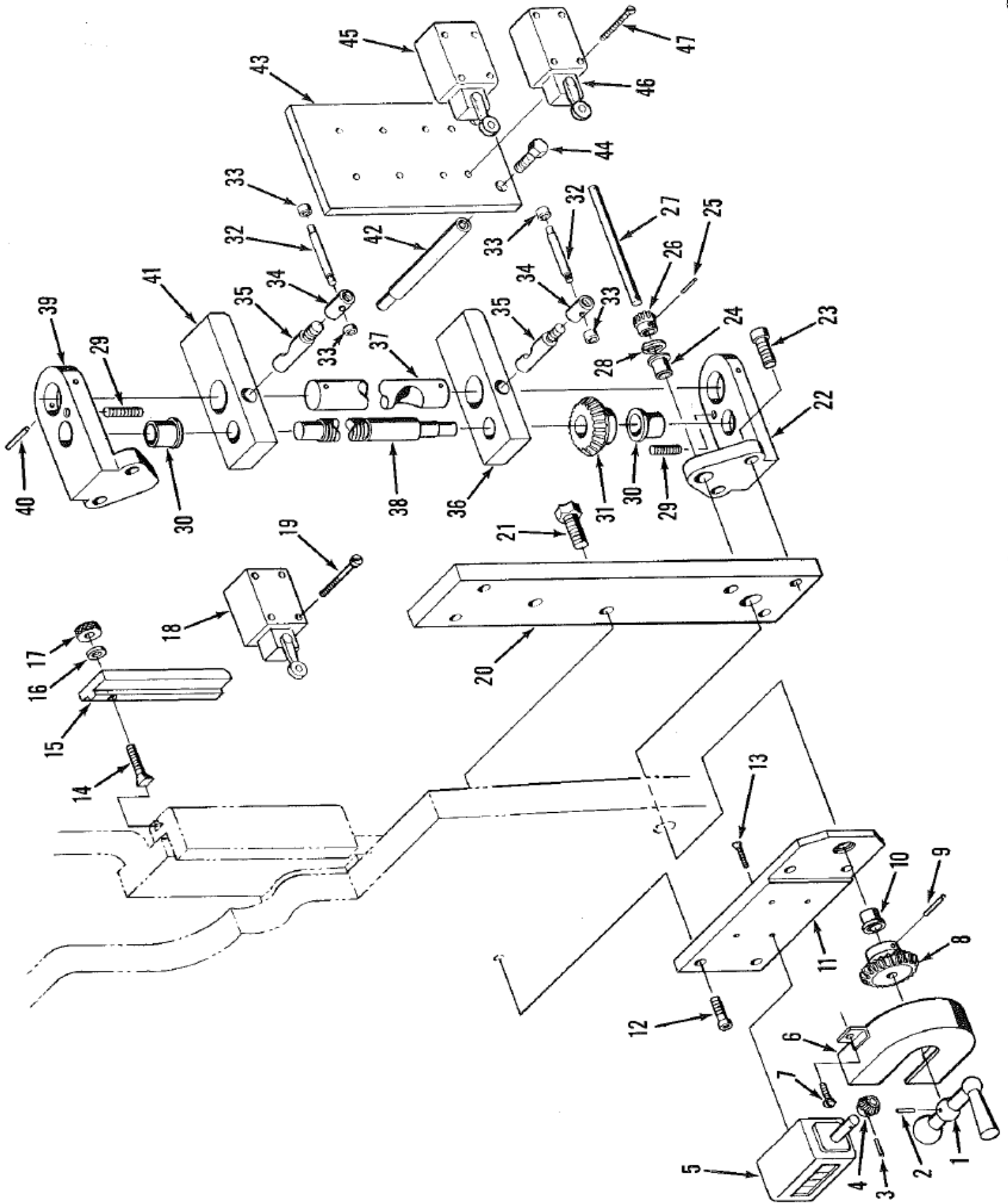
FRAME



## FRAME (Continued)

- |                                   |                          |
|-----------------------------------|--------------------------|
| 1. Main Motor and Pump            | 22. Pivot Block          |
| 2. Bolt                           | 23. Pivot Shoe           |
| 3. Valve Manifold                 | 24. Pivot Block Retainer |
| 4. Bolt                           | 25. Bolt                 |
| 5. Reservoir Cover                | 26. Bolt                 |
| 6. Bolt                           | 27. Adjusting Block      |
| 7. Oil Level Gage and Thermometer | 28. Set Screw            |
| 8. Mounting Bolt                  | 29. Ram                  |
| 9. Seal                           | 30. Pillow Block         |
| 10. Cleanout Cover                | 31. Bolt                 |
| 11. Clevis                        | 32. Safety Rail          |
| 12. Pin                           | 33. Ram Clamp Bar        |
| 13. Snap Ring                     | 34. Bolt                 |
| 14. Frame                         | 35. Spring               |
| 15. Limit Switch Assembly         | 36. L.H. Gib             |
| 16. Filler Block                  | 37. Bolt                 |
| 17. R.H. Gib                      | 38. T-Nut                |
| 18. Bolt                          | 39. Washer               |
| 19. Gib Liner (R.H. & L.H.)       | 40. Bolt                 |
| 20. Bolt                          | 41. Cylinder             |
| 21. Ram Liner                     |                          |

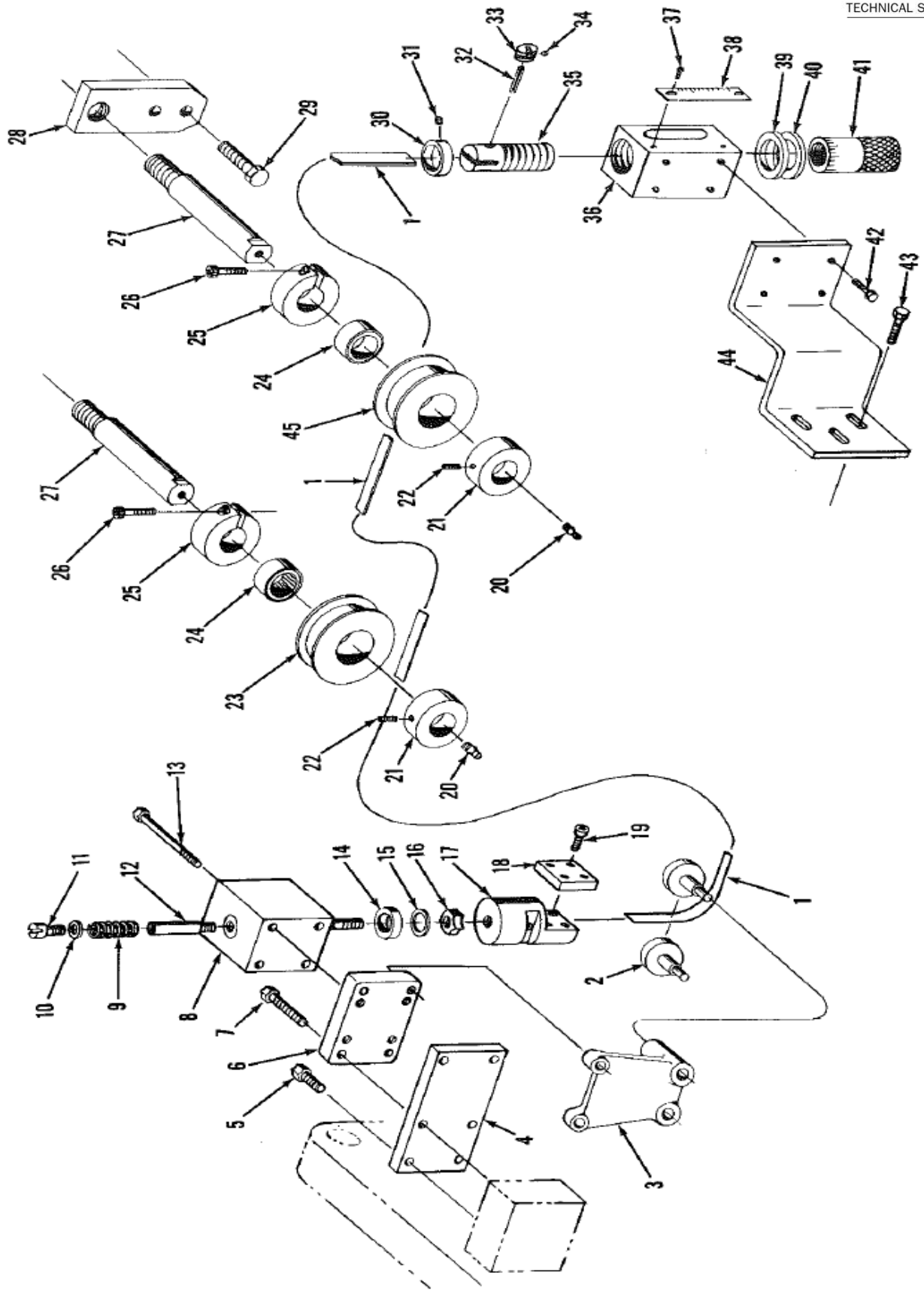
UPPER & LOWER LIMITS ASSEMBLY



**UPPER & LOWER LIMITS ASSEMBLY (Continued)**

- |     |               |     |                |
|-----|---------------|-----|----------------|
| 1.  | Handle        | 25. | Pin            |
| 2.  | Pin           | 26. | Bevel Gear     |
| 3.  | Pin           | 27. | Shaft          |
| 4.  | Bevel Gear    | 28. | Retaining Ring |
| 5.  | Counter       | 29. | Set Screws     |
| 6.  | Gear Cover    | 30. | Bushings       |
| 7.  | Screw         | 31. | Bevel Gear     |
| 8.  | Bevel Gear    | 32. | Handle         |
| 9.  | Pin           | 33. | Stops          |
| 10. | Bushing       | 34. | Clamp Nut      |
| 11. | Bracket       | 35. | Clamp Bolt     |
| 12. | Screw         | 36. | Stop Block     |
| 13. | Screw         | 37. | Gage Rod       |
| 14. | "V" Head Bolt | 38. | Screw          |
| 15. | Cam           | 39. | Bracket        |
| 16. | Washer        | 40. | Roll Pin       |
| 17. | Nut           | 41. | Stop Block     |
| 18. | Limit Switch  | 42. | Support        |
| 19. | Screw         | 43. | Bracket        |
| 20. | Plate         | 44. | Bolt           |
| 21. | Bolt          | 45. | Limit Switch   |
| 22. | Bracket       | 46. | Limit Switch   |
| 23. | Capscrew      | 47. | Screw          |
| 24. | Bushing       |     |                |

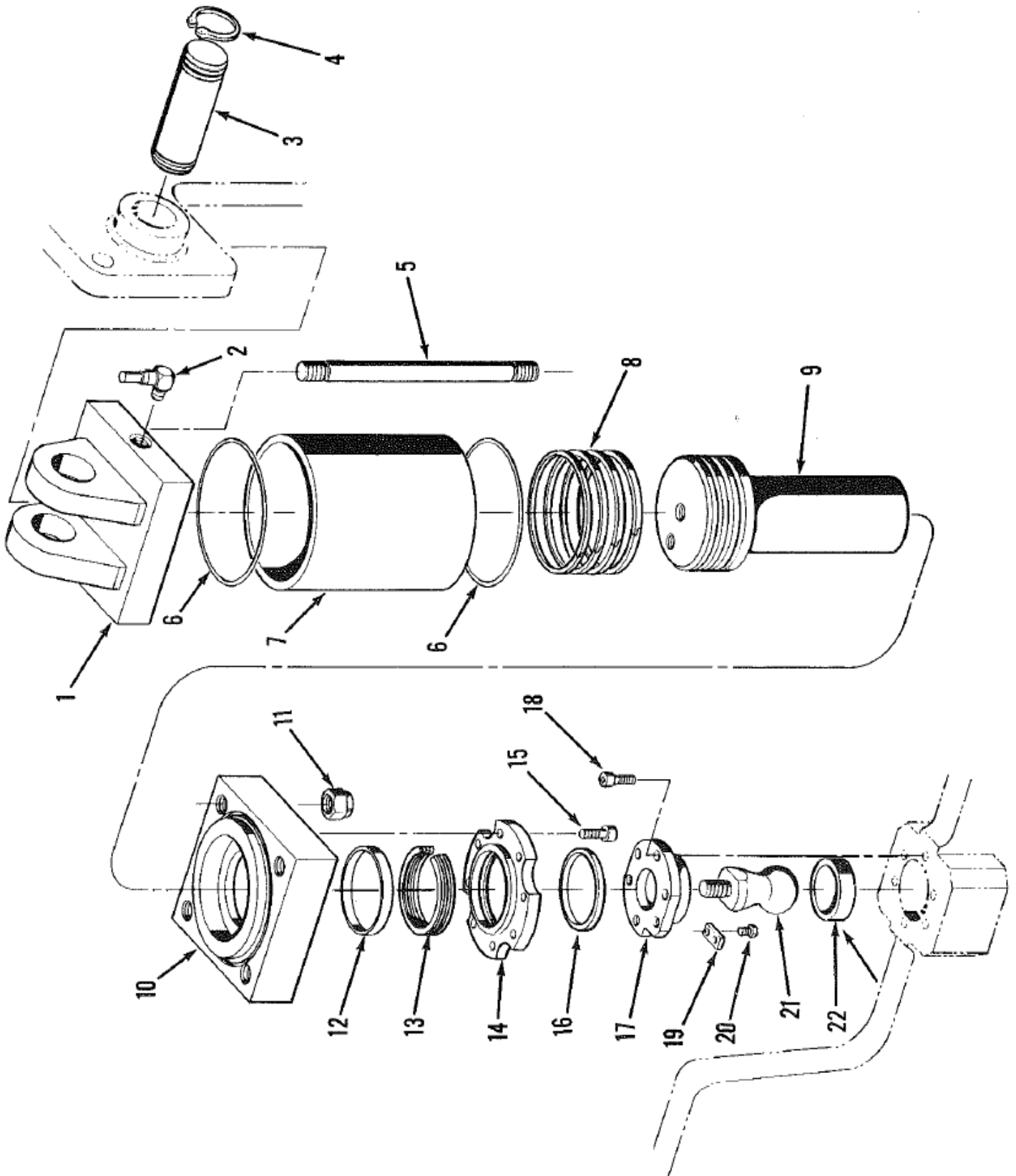
# RAM LEVEL CONTROL



## RAM LEVEL CONTROL (Continued)

- |     |                     |     |                       |
|-----|---------------------|-----|-----------------------|
| 1.  | Tape                | 24. | Bearing               |
| 2.  | Cam Followers       | 25. | Collar                |
| 3.  | Sub Plate           | 26. | Capscrew              |
| 4.  | Plate               | 27. | Shaft                 |
| 5.  | Bolt                | 28. | Bracket               |
| 6.  | Servo Sub Plate     | 29. | Bolt                  |
| 7.  | Bolt                | 30. | Collar                |
| 8.  | Servo Valve         | 31. | Set Screw             |
| 9.  | Spring              | 32. | Roll Pin              |
| 10. | Washer              | 33. | Knob                  |
| 11. | Screw               | 34. | Set Screw             |
| 12. | Guide Rod           | 35. | Tape Adjustment Screw |
| 13. | Valve Mounting Bolt | 36. | Screw Housing         |
| 14. | Cushion             | 37. | Screw                 |
| 15. | Washer              | 38. | Tilt Adjustment Scale |
| 16. | Nut                 | 39. | Bearing               |
| 17. | Tape Holder         | 40. | Thrust Race           |
| 18. | Tape Clamp          | 41. | Adjustment Nut        |
| 19. | Capscrew            | 42. | Bolt                  |
| 20. | Grease Fitting      | 43. | Bolt                  |
| 21. | Collar              | 44. | Bracket               |
| 22. | Set Screw           | 45. | L.H. Tape Idler       |
| 23. | R.H. Tape Idler     |     |                       |

HYDRAULIC CYLINDER

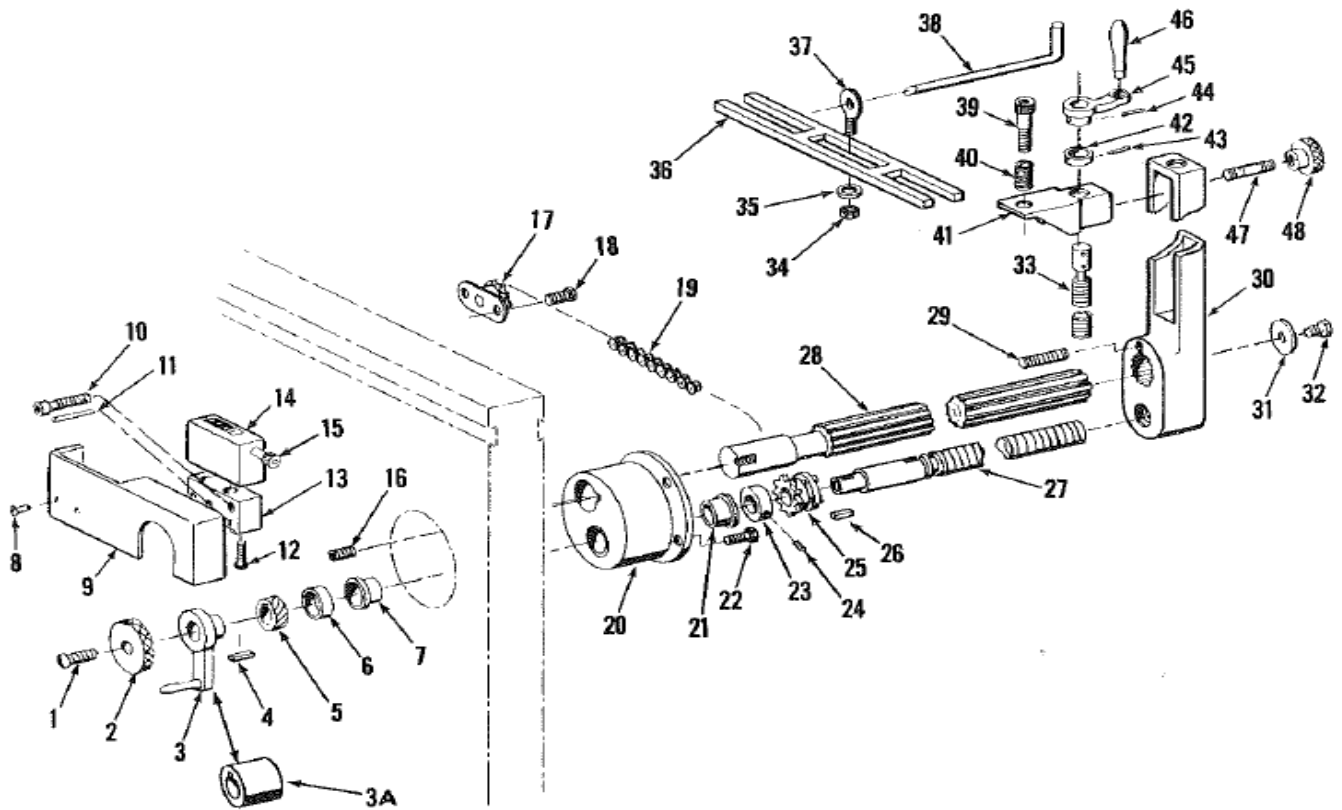


## HYDRAULIC CYLINDER (Continued)

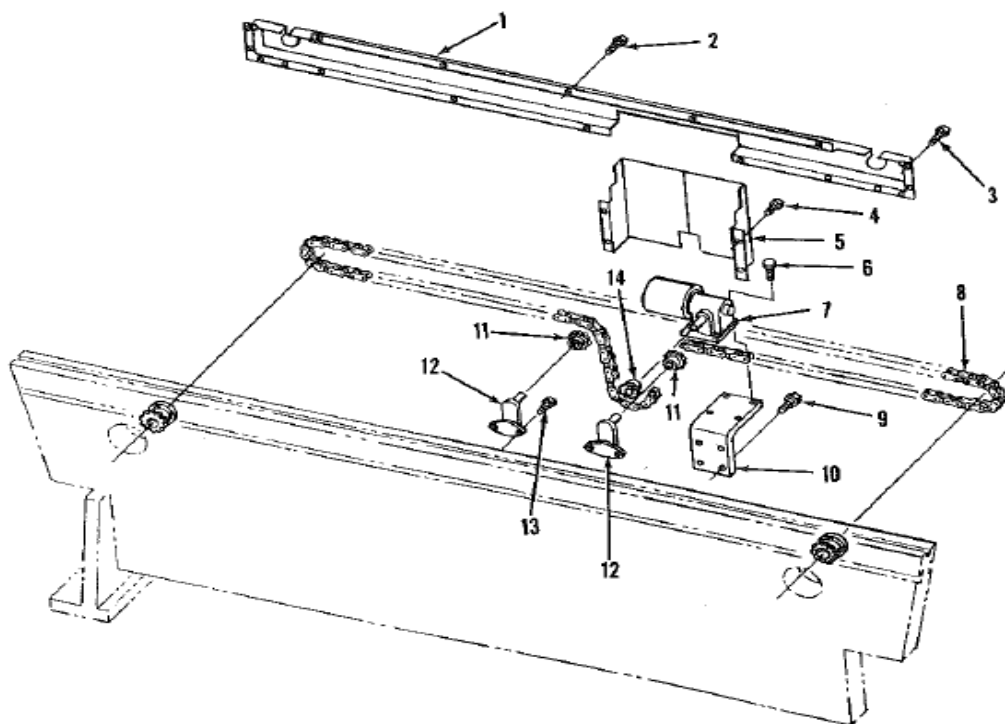
1. Cap\*
2. Fitting
3. Pin
4. Retaining Ring
5. Tie Rod
6. "O" Rings\*
7. Barrel\*
8. Piston Rings\*
9. Piston\*
10. Head\*
11. Lock Nut
12. Wear Ring
13. "V" Packing
14. Packing Gland
15. Capscrew
16. Wiper Ring
17. Ball Screw Cap
18. Mounting Bolt
19. Ball Screw Lock
20. Bolt
21. Ball Screw
22. Ball Seat

\* Specify R.H. or L.H.

**FRONT OPERATED MICROMETER BACKGAGE**



**ADDITIONAL PARTS FOR FRONT OPERATED MICROMETER BACKGAGE**



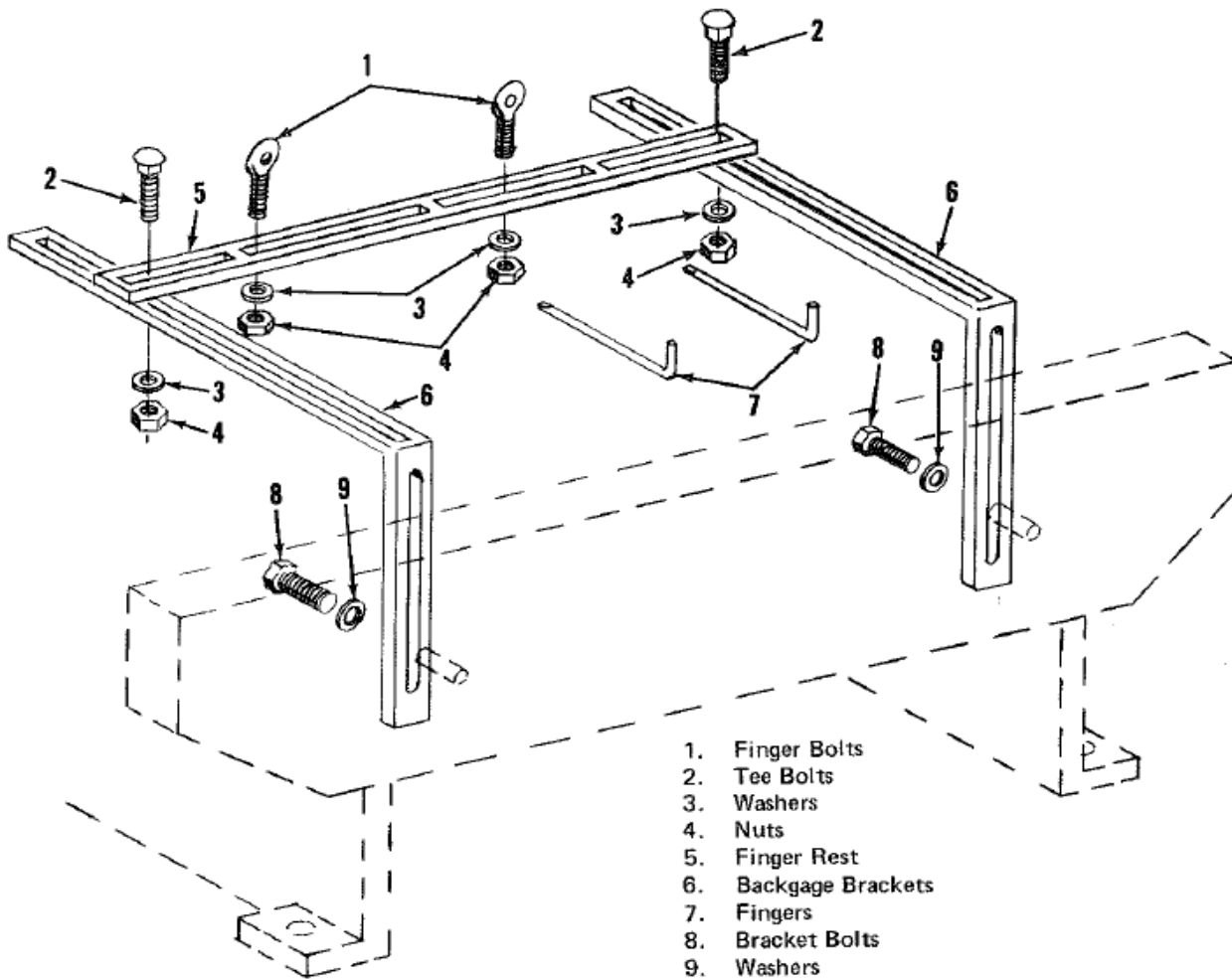
**FRONT OPERATED MICROMETER BACKGAGE (Continued)**

- |                                   |                             |
|-----------------------------------|-----------------------------|
| 1. Handle Screw                   | 25. Sprocket                |
| 2. Hand Knob                      | 26. Key                     |
| 3. Hand Crank (Manually Driven)   | 27. Adjusting Screw         |
| 3a. Spacer (Power Driven)         | 28. Guide Rod               |
| 4. Key                            | 29. Set Screw               |
| 5. Helical Gear (Adjusting Screw) | 30. Upright                 |
| 6. Collar                         | 31. Washer                  |
| 7. Bushing                        | 32. Cap Screw               |
| 8. Cover Screw                    | 33. Upright Adjusting Screw |
| 9. Counter Cover                  | 34. Nut                     |
| 10. Mounting Screw                | 35. Washer                  |
| 11. Roll Pin (Used for Location)  | 36. Finger Rest             |
| 12. Counter Mounting Screw        | 37. Finger Bolt             |
| 13. Counter Bracket               | 38. Finger                  |
| 14. Counter                       | 39. Shoulder Bolt           |
| 15. Helical Gear (Counter)        | 40. Spring                  |
| 16. Set Screw                     | 41. Support Arm             |
| 17. Torque Tightening Sprocket    | 42. Collar                  |
| 18. Mounting Bolt                 | 43. Roll Pin                |
| 19. Chain                         | 44. Roll Pin                |
| 20. Cartridge                     | 45. Hand Crank              |
| 21. Bushing                       | 46. Handle                  |
| 22. Mounting Bolt                 | 47. Stud                    |
| 23. Collar                        | 48. Knurled Knob            |
| 24. Set Screw                     |                             |

**ADDITIONAL PARTS FOR  
FRONT OPERATED MICROMETER BACKGAGE  
(Continued)**

- |                   |                     |
|-------------------|---------------------|
| 1. Chain Guard    | 8. Chain            |
| 2. Screw          | 9. Bolt             |
| 3. Screw          | 10. Motor Bracket   |
| 4. Bolt           | 11. Sprocket Idlers |
| 5. Sprocket Guard | 12. Tightener       |
| 6. Bolt           | 13. Bolt            |
| 7. Motor          | 14. Drive Sprocket  |

### STANDARD BACKGAGE



1. Finger Bolts
2. Tee Bolts
3. Washers
4. Nuts
5. Finger Rest
6. Backgage Brackets
7. Fingers
8. Bracket Bolts
9. Washers

### MICROMETER TYPE BACKGAGE

10. "V" Bolt
11. Backgage Base
12. Lockwasher
13. Locknut
14. Bracket
15. Tee Bolts
16. Micrometer Stud
17. Micrometer Support
18. Nut
19. Micrometer Nut
20. Jam Nut
21. Cap Screw
22. Finger Support
23. Finger

