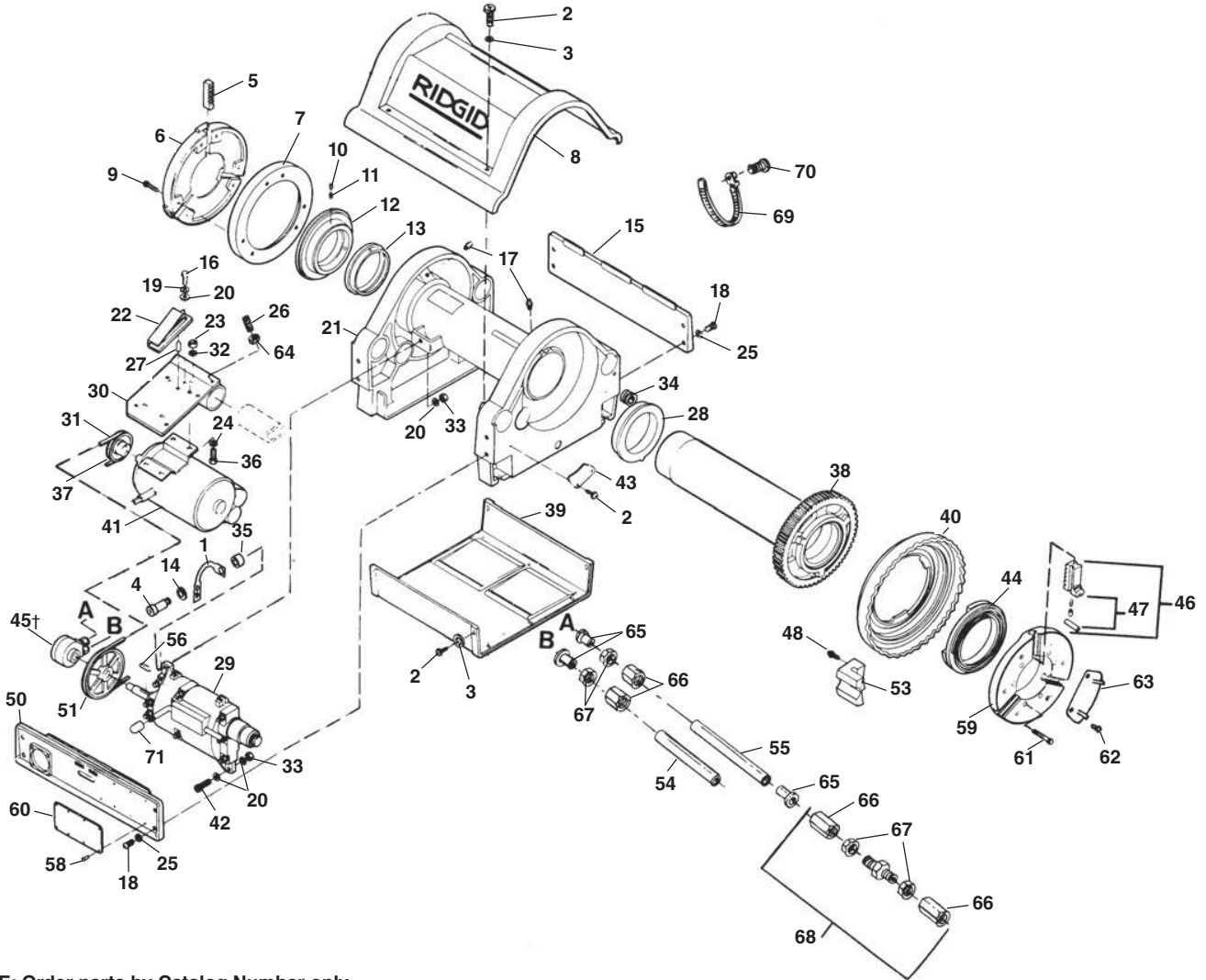


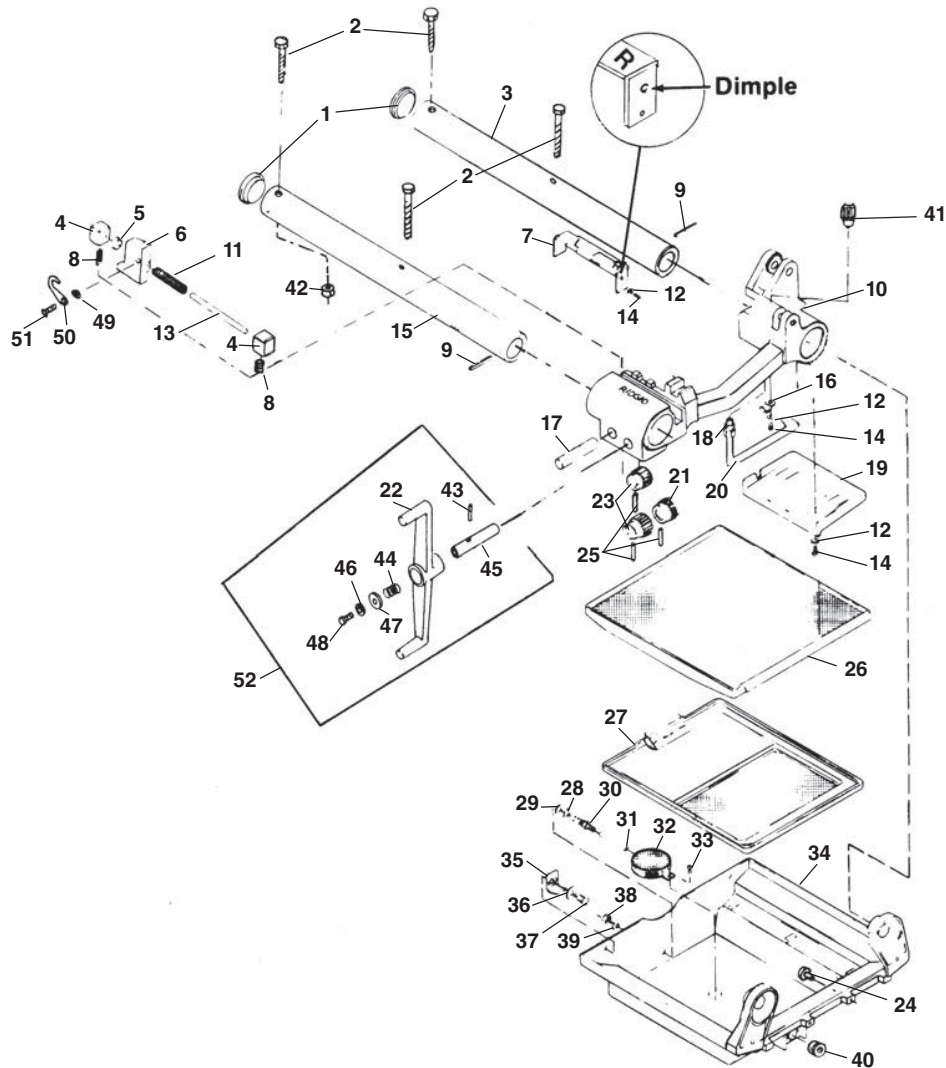
Main Drive Components



NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.

| Ref. No. | Catalog No. | Description | Ref. No. | Catalog No. | Description | Ref. No. | Catalog No. | Description |
|----------|-------------|---------------------------------|----------|-------------|-----------------------------------|----------|-------------|------------------------------------|
| 1 | 33622 | Pump Bracket | 25 | 40930 | Lock Washer 3/8" (8) | 46 | 40087 | Chuck Jaw Set |
| 2 | 41597 | Screw (12) | 26 | 88265 | Set Screw 3/8" - 16 x 1" | | 47517 | Chuck Jaw Set Pl. Ctd. Pipe |
| 3 | 41592 | Washer (10) | 27 | 88230 | Roll Pin 1/4" x 3/16" | 47 | 54212 | Jaw Insert Set |
| 4 | 33627 | Screw | 28 | 26767 | Front Bearing | | 26247 | Jaw Insert Set F/Coated Pipe |
| 5 | 32412 | Centering Jaw Set | 29 | 26362 | Gear Box Assy. | 48 | 27067 | Self-Tapping Screw (2 Req. f/G.S.) |
| 6 | 26537 | Centering Head | 30 | 27062 | Motor Bracket | 50 | 59722 | Front Side Plate |
| 7 | 26542 | Back Plate | 31 | 26832 | V-Belt | 51 | 26852 | Gear Box Pulley |
| 8 | 26477 | Top Cover | 32 | 40770 | Lock Washer 5/16" (4) | 53 | 26507 | Pinch Point Boss (2 Req. f/G.S.) |
| | 46867 | Die Head Decal (Not Shown) | 33 | 27517 | Lock Nut 5/16" - 18 | 54 | 27007 | Inlet Hose |
| 9 | 40910 | Screw 1/4" - 20 x 3/4" (6) | 34 | 47080 | Grommet | 55 | 26822 | Output Hose |
| 10 | 45300 | Set Screw 5/16" - 24 x 1/4" (3) | 35 | 33617 | Spacer | 56 | 27002 | Key |
| 11 | 45265 | Set Screw 5/16" - 24 x 1/2" (3) | 36 | 85910 | Bolt 5/16" - 18 x 1 1/4" | 58 | 85920 | Rivets (8) |
| 12 | 32407 | Scroll | 37 | 26857 | Motor Pulley (60 Hz) | 59 | 26332 | Chuck Cap |
| 13 | 26352 | Rear Bearing | | 27082 | Motor Pulley (50 Hz) | 60 | 88690 | Safety Plate |
| 14 | 26307 | Washer | 38 | 26347 | Drive Gear/Spindle Assy. | 61 | 26522 | Screw 5/16" - 24 x 2 1/4" (6) |
| 15 | 26487 | Rear Side Plate | 39 | 26482 | Bottom Cover | 62 | 27242 | Screw 10 - 32 (6) |
| 16 | 32145 | Screw 1/4" - 20 x 1/2" | 40 | 26337 | Handwheel | 63 | 33612 | Set of 3 Cover Plates |
| 17 | 46860 | Grease Fitting (2) | 41 | 26237 | Motor w/Capacitor 120V, 60 Hz | 64 | 83545 | Jam Nut 3/8" - 16 |
| 18 | 26997 | Screw 3/8" - 16 x 3/4" (8) | | 27287 | Motor w/Capacitor 110V, 50 Hz | 65 | 35117 | Tube Insert (3) |
| 19 | 44740 | Lock Washer 1/4" | | 26232 | Motor w/Capacitor 240V, 60 Hz | 66 | 40602 | Compression Nut |
| 20 | 96740 | Washer 5/16" | | 27282 | Motor w/Capacitor 220/240V, 50 Hz | 67 | 40607 | Ferrule |
| 21 | 26357 | Base | 42 | 27037 | Shoulder Bolt | 68 | 26972 | Union |
| 22 | 26492 | Belt Tensioner | 43 | 27012 | Pinion Guard | 69 | 43552 | Tie Down Strap |
| 23 | 96730 | Nut 5/16" - 18 (4) | 44 | 26517 | Scroll | 70 | 45275 | Screw 10 - 24 x 1/2" |
| 24 | 27402 | Washer 5/16" (4) | 45† | 27307 | Oil Pump | 71 | 27032 | Shifter Knob |

Carriage and Chip Pan



**NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.**

| Ref. No. | Catalog No. | Description | Ref. No. | Catalog No. | Description | Ref. No. | Catalog No. | Description |
|----------|-------------|--|----------|-------------|----------------------------|----------|-------------|---------------------------------|
| — | 49992 | Carriage Assembly (Includes Ref. #4-8, 10-14, 17, 21, 23, 25, 41, 49-52) | 17 | 26777 | Sine Bar/Pinion Shaft (2) | 36 | 40930 | Lock Washer 3/8" (2) |
| 1 | 26502 | Rail Plug (2) | 18 | 26562 | Supply Line Fitting | 37 | 26997 | Screw 3/8" - 16 x 3/4" (2) |
| 2 | 40167 | Bolt 5/16" - 18 x 3 1/2" (4) | 19 | 26772 | Drip Plate | 38 | 83545 | Hex Nut 3/8" - 16 |
| 3 | 49982 | Rear Rail | 20 | 26812 | Die Lubrication Tube | 39 | 26307 | Washer |
| 4 | 26787 | Guide Block (2) | 21 | 26587 | Sine Bar Pinion | 40 | 48337 | Drain Plug |
| 5 | 26792 | Sine Bar Spacer | 22 | 40147 | Carriage Handwheel | 26842 | 26842 | Drain Plug (Rubber-Early Style) |
| 6 | 40242 | Sine Bar | 23 | 26572 | Carriage Pinion (2) | 41 | 28462 | Ball Detente |
| 7 | 26912 | Sine Bar Cover Assembly | 24 | 26837 | Stud (2) | 42 | 27517 | Lock Nut 5/16" - 18 (4) |
| 8 | 26582 | Guide Block Spring (2) | 25 | 74965 | Roll Pin 1/4" x 1 1/4" (3) | 43 | 74965 | Pin |
| 9 | 27052 | Roll Pin (2) | 26 | 26802 | Draw Tray Assembly | 44 | 89530 | Spring |
| 10 | 49987 | Carriage (Includes Ref. #41) | 27 | 26807 | Insert Assembly | 45 | 40157 | Handwheel Shaft |
| 11 | 26592 | Sine Bar Return Spring | 28 | 27252 | Washer | 46 | 41582 | Lock Washer |
| 12 | 41592 | Washer #10 (2) | 29 | 41715 | Seal Washer | 47 | 40152 | Washer |
| 13 | 26577 | Guide Bar | 30 | 26697 | Bulk Head Fitting | 48 | 26997 | Screw |
| 14 | 79965 | Screw #10 - 32 x 1/2" (5) | 31 | 26927 | Tubing | 49 | 40227 | Spring Washer |
| 15 | 49977 | Front Rail | 32 | 27262 | Screen Assembly | 50 | 40237 | Latch |
| 16 | 26652 | Oil Supply Clamp | 33 | 26797 | Screw #10 - 32 x 5/16" | 51 | 49472 | Spiral Pin |
| | | | 34 | 26847 | Chip Pan Hanger Assembly | 52 | 42027 | Handwheel Kit |
| | | | 35 | 26817 | Chip Pan Bracket (2) | | | |

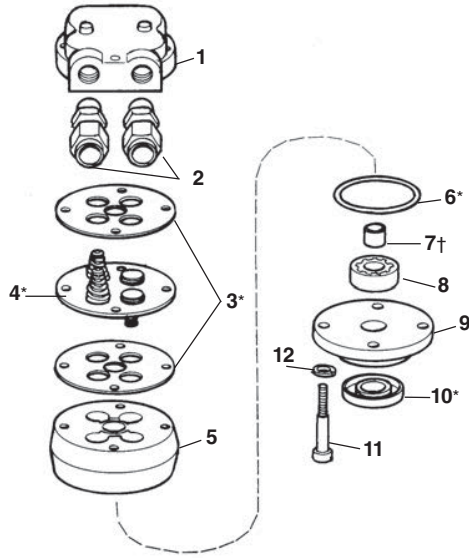
†See Service Notes

“ML” Oil Pump

NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.

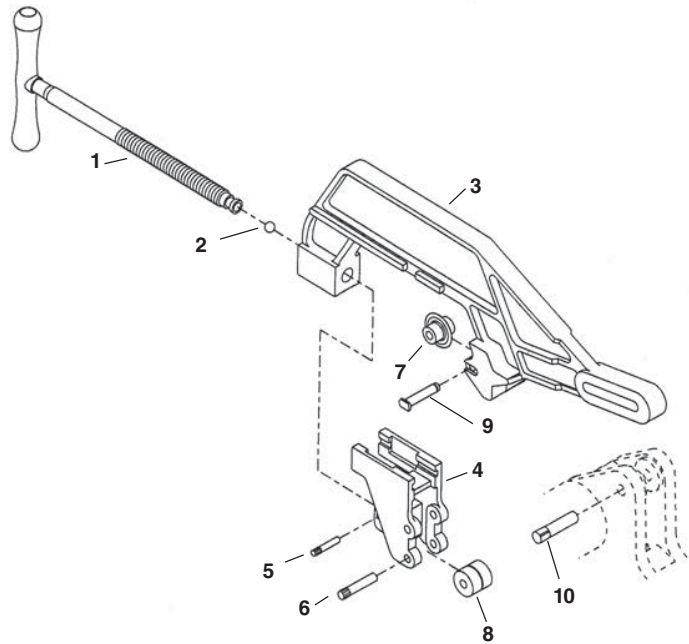
| Ref. No. | Catalog No. | Description |
|----------|-------------|-----------------------------------|
| —† | 27307 | “ML” Oil Pump |
| 1 | 33442 | Pump Valve Body |
| 2 | 33432 | Compression Fitting (2) |
| 3* | 33457 | Gasket (Set of 2) |
| 4* | 33452 | Valve Retainer Assy. |
| 5 | 33482 | Gerotor Housing w/Bearing |
| 6* | 33477 | O-Ring |
| 7† | 33462 | Sleeve Bearing |
| 8 | 33467 | Gerotor Set |
| 9 | 33447 | Pump Cap w/Seal |
| 10* | 33472 | Oil Seal |
| 11 | 44510 | Soc. Hd. Cap Screw 1/4" - 20 x 2" |
| 12 | 45150 | Lock Washer 1/4" |
| * | 33422 | “ML” Service Kit |

Note: Ref. 7 Sleeve Bearing used on older Gerotor Housings, not required on new pumps.
* Indicates Part is Included in Service Kit.
† See Service Note



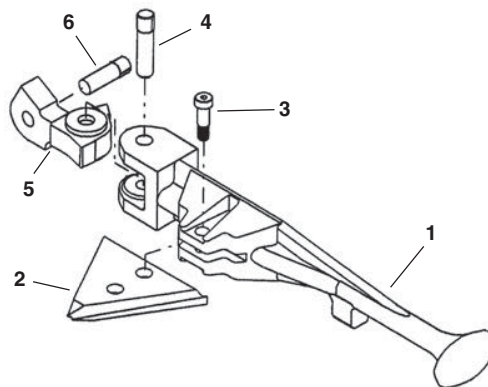
No. 764 Pipe Cutter

| Ref. No. | Catalog No. | Description |
|----------|-------------|--------------------------------|
| — | 26212 | 764 Pipe Cutter |
| 1 | 26752 | Screw Handle |
| 2 | 41730 | Ball Bearing |
| 3 | 26742 | Cutter Frame |
| 4 | 26747 | Roll Housing |
| 5 | 26757 | Groove Pin |
| 6 | 26762 | Groove Pin (2) |
| 7 | 33125 | Cutter Wheel |
| 8 | 34785 | Roll (2) |
| | 26252 | Roll F/Coated Pipe (2 per set) |
| 9 | 34790 | Wheel Pin |
| 10 | 27072 | Groove Pin |



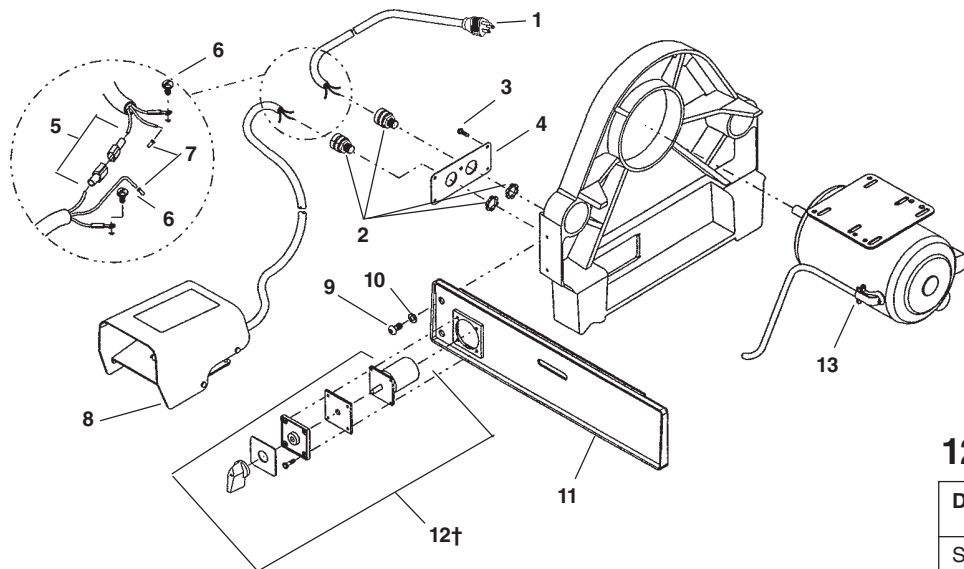
No. 744 Reamer Assembly

| Ref. No. | Catalog No. | Description |
|----------|-------------|------------------------|
| — | 26217 | 744 Reamer Assembly |
| 1 | 26602 | Reamer Arm |
| 2 | 34577 | Reamer Blade 1/4" - 4" |
| 3 | 27037 | Shoulder Bolt |
| 4 | 27072 | Groove Pin |
| 5 | 26607 | Pivot Block |
| 6 | 26727 | Groove Pin (2) |



60 Hz Electrical Components

NOTE: Order parts by Catalog Number only. DO NOT order by Reference Number.



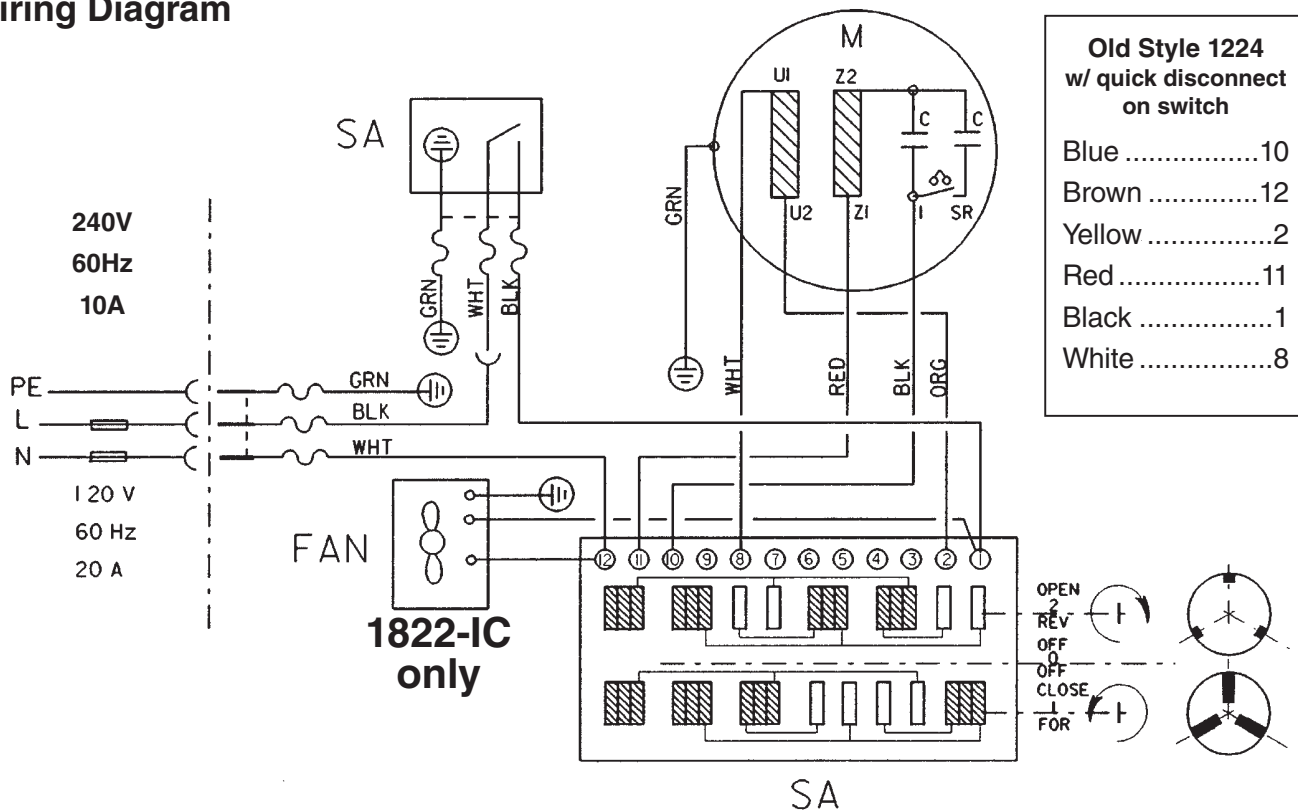
| Ref. No. | Catalog No. | Description |
|----------|-------------|----------------------------|
| 1 | 46740 | Power Cord |
| | 46410 | Power Cord |
| 2 | 75977 | Strain Relief (2) |
| 3 | 41597 | Self Tapping Screw (4) |
| 4 | 27162 | Strain Relief Bracket |
| 5 | 56407 | Quick Disconnect Set |
| 6 | 45420 | Ground Screw |
| 7 | 36222 | Wire Terminal |
| 8 | 36642 | B-294 Foot Switch |
| 9 | 26997 | Screw 3/8" - 16 x 3/4" (8) |
| 10 | 40930 | Lock Washer 3/8" (8) |
| 11 | 59722 | Front Side Plate |
| 12† | 20113 | Switch Assembly |
| 13 | 26237 | Motor 120V 60 Hz |
| | 26232 | Motor 240V 60 Hz |

1224 Motor Parts

| Description | 120V 60Hz | 240V 60Hz |
|-----------------|-----------|-----------|
| Start Capacitor | 54332 | — |
| Run Capacitor | 46807 | 46807 |

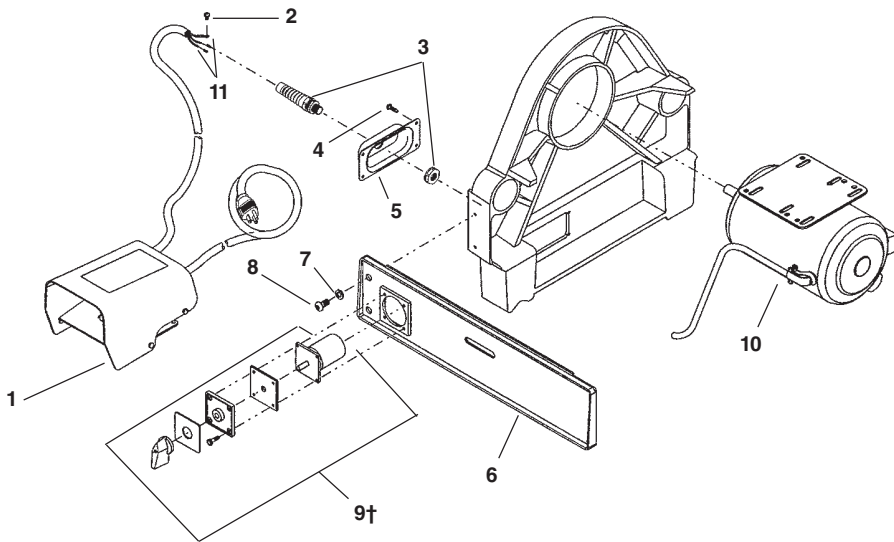
† Ref. No. 12 – When replacing early style switches, which have a black body, order Catalog No. 59742 Switch Adapter Plate

1224 & 1822-I Replacement Switch Wiring Diagram



50 Hz Electrical Components

NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.



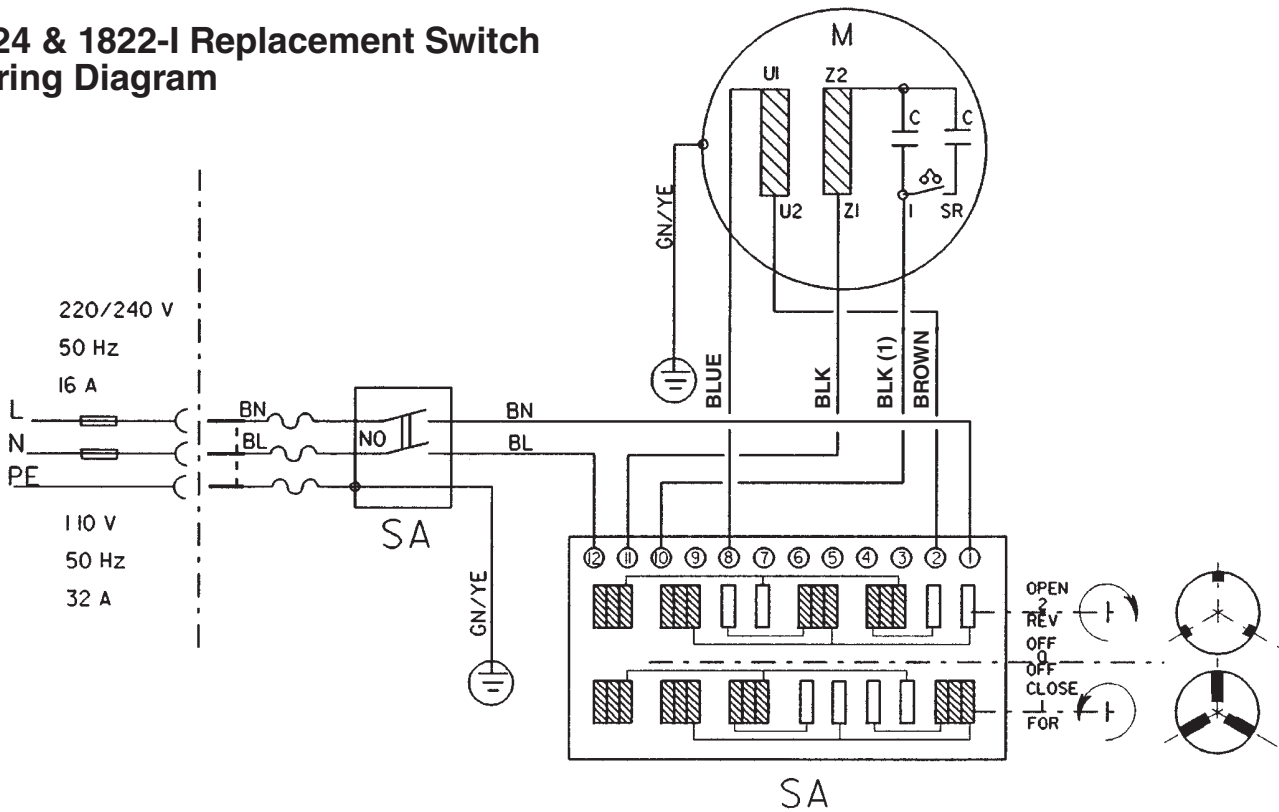
| Ref. No. | Catalog No. | Description |
|----------|-------------|----------------------------|
| 1 | 36652 | B-296 Foot Switch |
| | 36657 | B-297 Foot Switch |
| 2 | 45420 | Ground Screw |
| 3 | 27187 | Strain Relief |
| 4 | 41597 | Self Tapping Screw (4) |
| 5 | 27197 | Strain Relief Bracket |
| 6 | 59722 | Front Side Plate |
| 7 | 40930 | Lock Washer 3/8" (8) |
| 8 | 26997 | Screw 3/8" - 16 x 3/4" (8) |
| 9† | 20113 | Switch Assembly |
| 10 | 27282 | Motor 220/240V 50 Hz |
| | 27287 | Motor 110V 50 Hz |
| 11 | 36222 | Wire Terminal |

1224 Motor Parts

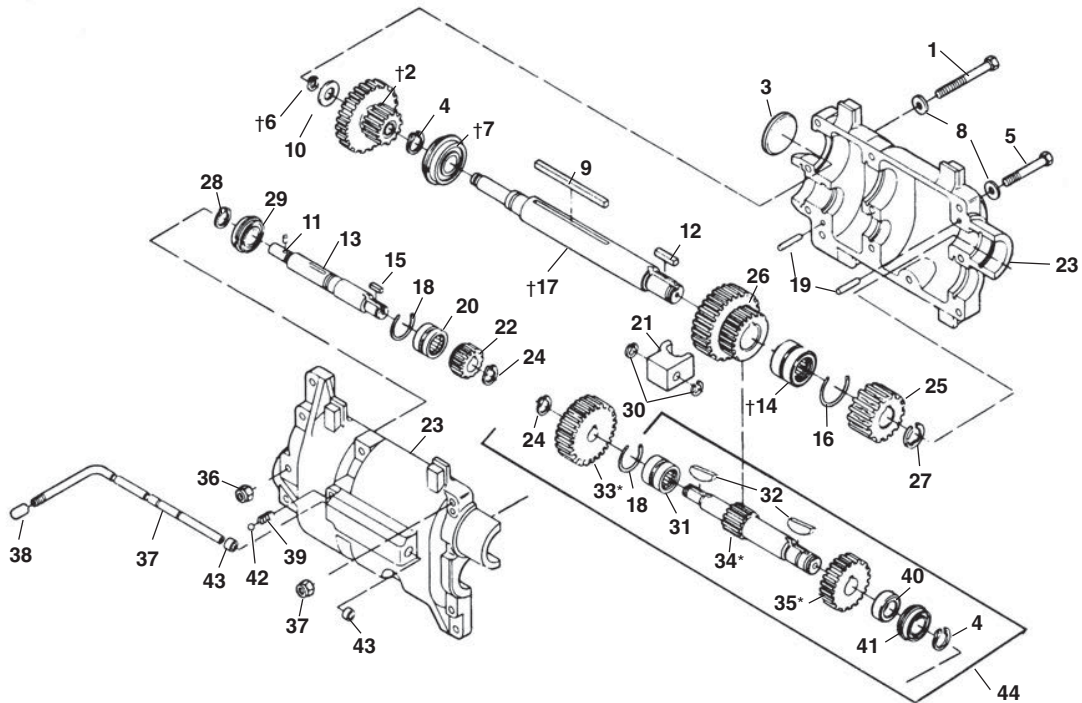
| Description | 220V/240V 50Hz | 110V 50Hz |
|-----------------|-------------------|--------------|
| Start Capacitor | 46792 | — |
| Run Capacitor | 46807 | — |

† Ref. No. 12 – When replacing early style switches, which have a black body, order Catalog No. 59742 Switch Adapter Plate

1224 & 1822-I Replacement Switch Wiring Diagram



Gear Box



**NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.**

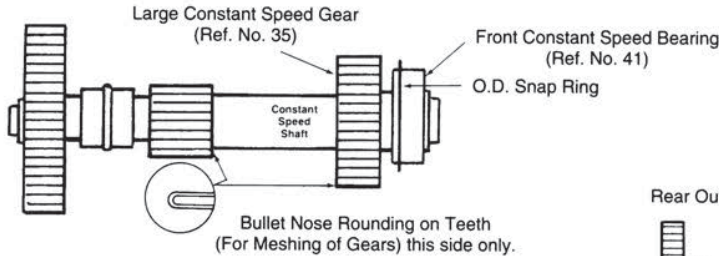
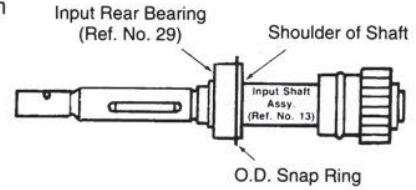
| Ref. No. | Catalog No. | Description | Ref. No. | Catalog No. | Description | Ref. No. | Catalog No. | Description |
|----------|-------------|-------------------------------|----------|-------------|---------------------|----------|-------------|------------------------------|
| — | 26362 | Gear Box Assembly | 16 | 26922 | Wire Ring | 32 | 33982 | Woodruff Key (2) |
| 1 | 27102 | Screw 5/16" - 18 x 3 1/4" (2) | †17 | 26382 | Output Shaft | 33* | 33992 | 1st Gear Constant Speed |
| †2 | 26702 | Fixed Gear Cluster Assembly | 18 | 26917 | Wire Ring (2) | 34* | 33987 | Constant Speed Shaft |
| 3 | 26667 | Freeze Plug | 19 | 26662 | Dowel Pin (2) | †35* | 33997 | Large Constant Speed Gear |
| 4 | 26412 | Snap Ring (2) | 20 | 26367 | Front Input Bearing | 36 | 75110 | Stop Nut 5/16" - 18 (11) |
| 5 | 27107 | Screw 5/16" - 18 x 2 1/2" (9) | 21 | 26437 | Shifting Fork | 37 | 26442 | Shift Slide |
| †6 | 27117 | Snap Ring | 22 | 26377 | 1st Input Gear | 38 | 27032 | Shifter Knob |
| †7 | 26417 | Rear Output Bearing | 23 | 26647 | Gear Box | 39 | 26692 | Shifter Detente Spring |
| 8 | 96740 | Washer 5/16" (11) | 24 | 26677 | Snap Ring | 40 | 26452 | Spacer |
| 9 | 26552 | Shift Cluster Key | †25 | 26432 | Output Pinion Gear | 41 | 26407 | Front Constant Speed Bearing |
| 10 | 26672 | Thrust Washer | 26 | 26422 | Cluster Shift Gear | 42 | 46925 | Steel Ball |
| 11 | 26907 | Spiral Pin | 27 | 26557 | Snap Ring | 43 | 26447 | Shift Slide Sleeve Bearing |
| 12 | 26457 | Output Pinion Key | 28 | 44430 | Retaining Ring | | 26707 | Grease (1 lb. can) |
| 13 | 26902 | Input Shaft Assembly | †29 | 26372 | Input Rear Bearing | 44 | 28047 | Constant Speed Assembly |
| †14 | 26427 | Front Output Bearing | 30 | 34245 | Rings Set of 5 | | | |
| 15 | 26657 | Input Pinion Key | 31 | 26397 | Rear Bearing | | | |

†See Service Notes

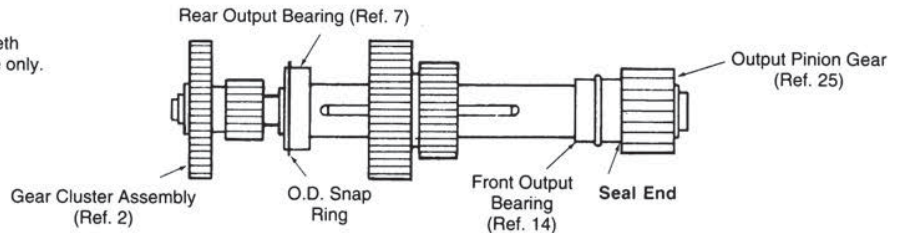
*When replacing early style parts, using square keys, a complete shaft assembly (Ref. No. 44) should be used.

**Service Notes
Transmission**

Position Bearing (Ref. No. 29) with O.D. Snap Ring towards shoulder of Input Shaft.



Position Large Constant Speed Gear Ref. No. 35 so that bullet nose side of gear teeth are facing toward center of shaft. Position O.D. Snap Ring towards Large Constant Speed Gear.

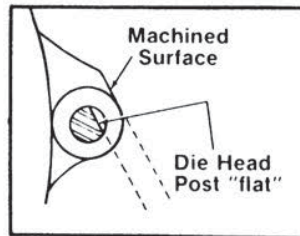


Position Bearing (Ref. No. 7) with O.D. Snap Ring towards Gear Cluster (Ref. No. 2)

Position Seal End of Front Output Bearing (Ref. No. 14) towards Output Pinion Gear (Ref. No. 25)

**Replacement Instructions for Die Head Post
All 1224 Die Heads— 541, 542, 711, 713, 714, 911, 913, 914**

—IMPORTANT—
Post must be properly oriented to insure oil flow through head. Insert illustrates proper relationship (parallel) of "flat" on die head post to flat "machined surface" of die head casting.



Oil Pump

Installing Oil Pump Onto Input Shaft Assembly

1. Align Square Slot (behind seal) in the No. 27307 Oil Pump with the Drive Pin in the No. 26902 Gear Box Input Shaft Assembly.
2. Slide Oil Pump onto Input Shaft Assembly.
3. When Pump is properly engaged onto Shaft, the distance between Pump body and Keyway Slot should not exceed 1/8 inch.

