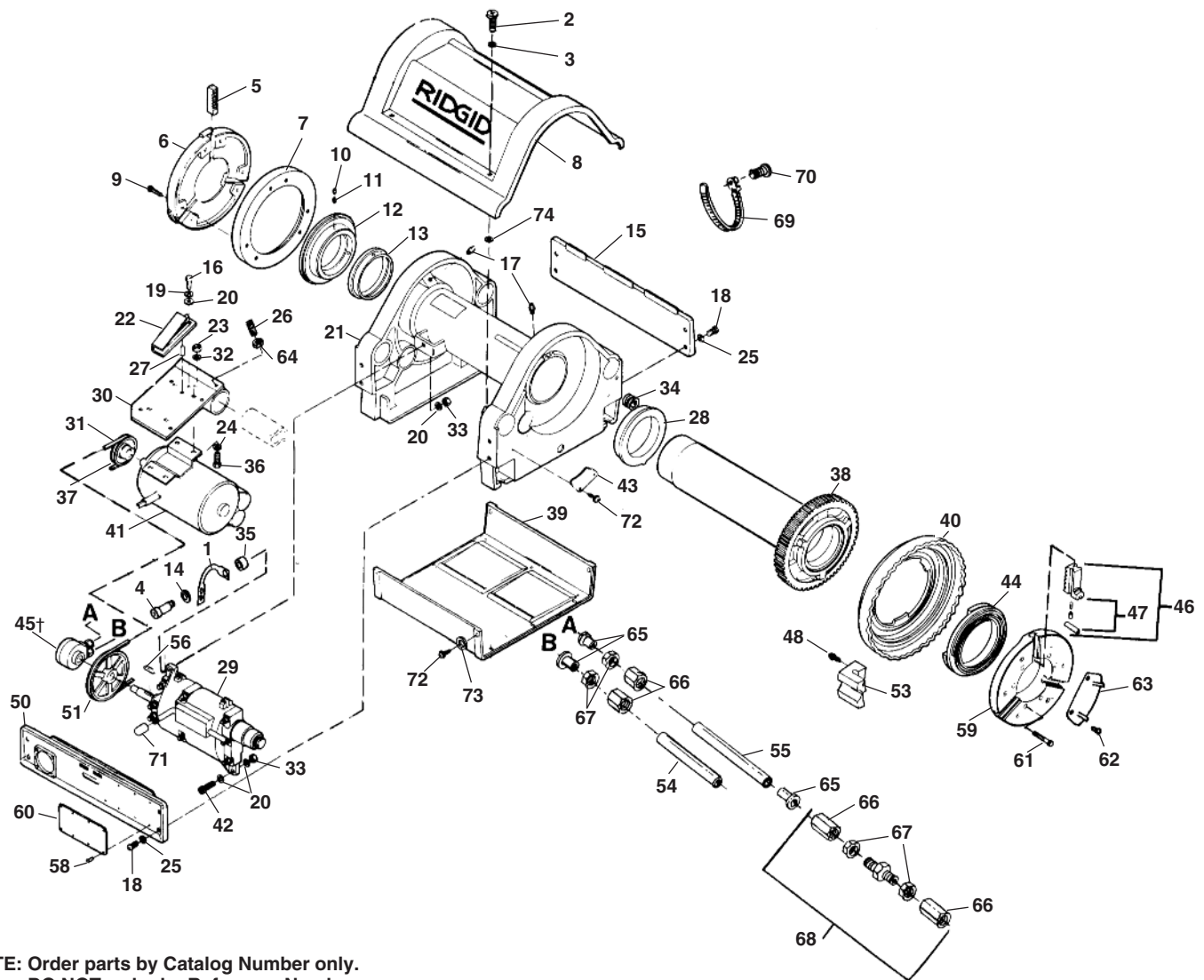


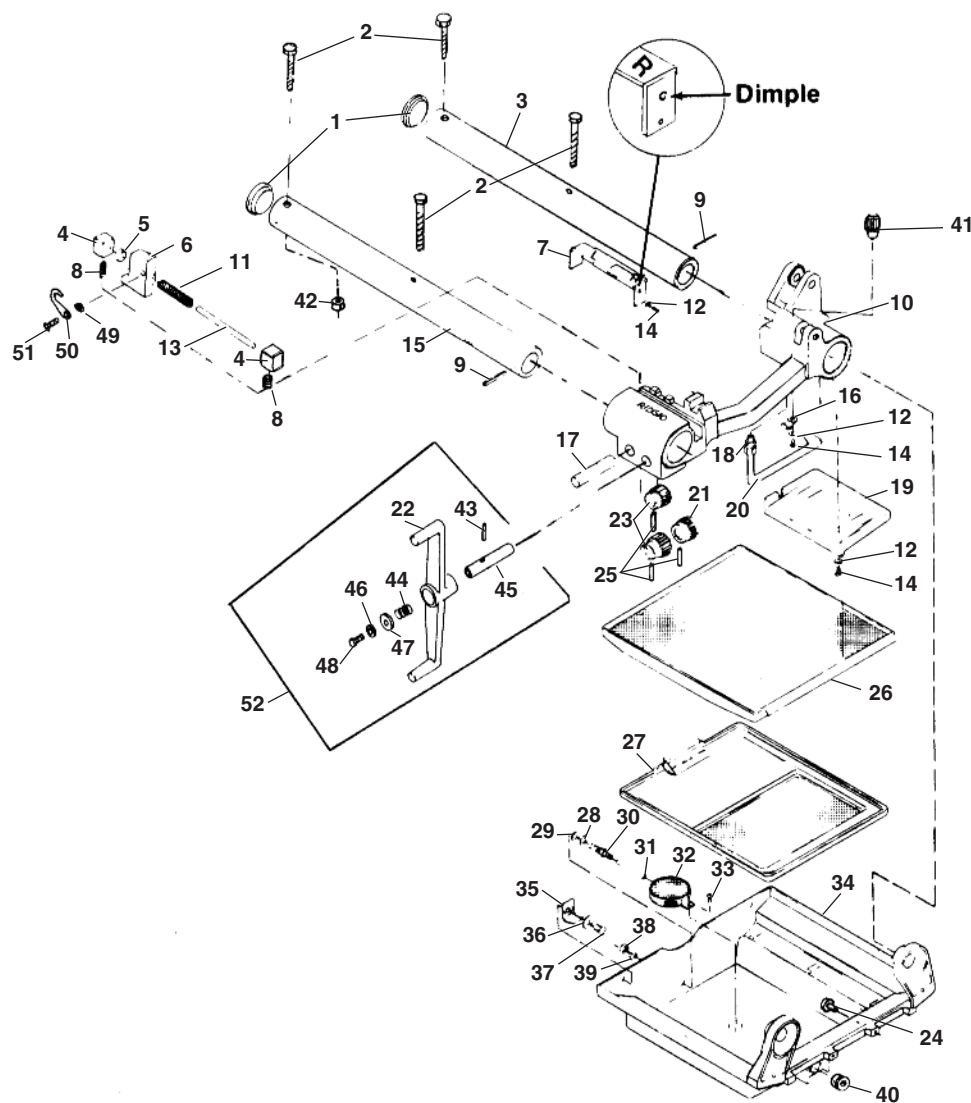
Main Drive Components



**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	26	88265	Set Screw 3/8" - 16 x 1"	47	26242	Jaw Insert Set
2	41597	Screw (12)	27	88230	Roll Pin 1/4" x 9/16"	48	26247	Jaw Insert Set F/Coated Pipe
3	55323	Screw (New Style) 1/4" - 20 x 1"	28	26767	Front Bearing	50	27067	Self-Tapping Screw (2 Req. f/G.S.)
4	41592	Washer (10)	29	26362	Gear Box Assy.	51	59722	Front Side Plate
5	33627	Screw	30	27062	Motor Bracket	52	26852	Gear Box Pulley
6	32412	Centering Jaw Set	31	26832	V-Belt	53	26507	Pinch Point Boss (2 Req. f/G.S.)
7	26537	Centering Head	32	40770	Lock Washer 5/16" (4)	54	27007	Inlet Hose
8	26542	Back Plate	33	27517	Lock Nut 5/16" - 18	55	26822	Output Hose
9	26477	Top Cover	34	47080	Grommet	56	27002	Key
10	46867	Die Head Decal (Not Shown)	35	33617	Spacer	58	85920	Rivets (8)
11	40910	Screw 1/4" - 20 x 3/4" (6)	36	85910	Bolt 5/16" - 18 x 1 1/4"	59	26332	Chuck Cap
12	45300	Set Screw 5/16" - 24 x 1/4" (3)	37	26857	Motor Pulley (60 Hz)	60	88690	Safety Plate
13	45265	Set Screw 5/16" - 24 x 1/2" (3)	38	27082	Motor Pulley (50 Hz)	61	26522	Screw 5/16" - 24 x 2 1/4" (6)
14	32407	Scroll	39	26347	Drive Gear/Spindle Assy.	62	27242	Screw 10 - 32 (6)
15	26352	Rear Bearing	40	26482	Bottom Cover	63	33612	Set of 3 Cover Plates
16	26307	Washer	41	26337	Handwheel	64	83545	Jam Nut 5/8" - 16
17	26487	Rear Side Plate	42	26237	Motor w/Capacitor 120V, 60 Hz	65	35117	Tube Insert (3)
18	32145	Screw 1/4" - 20 x 1/2"	43	27287	Motor w/Capacitor 110V, 50 Hz	66	40602	Compression Nut
19	46860	Grease Fitting (2)	44	26232	Motor w/Capacitor 240V, 60 Hz	67	40607	Ferrule
20	26997	Screw 3/8" - 16 x 3/4" (8)	45	27282	Motor w/Capacitor 220/240V, 50 Hz	68	26972	Union
21	44740	Lock Washer 1/4"	46	27078	Motor w/Capacitor 400V, 50 Hz 3PH	69	43552	Tie Down Strap
22	96740	Washer 5/16"	47	27037	Shoulder Bolt	70	45275	Screw 10 - 24 x 1/2"
23	26357	Base	48	27012	Pinion Guard	71	27032	Shifter Knob
24	26492	Belt Tensioner	49	26517	Scroll	72	41597	Screw 12 - 24 x 3/4"
25	96730	Nut 5/16" - 18 (4)	50	27307	Oil Pump	73	41592	Washer #12 - .250 ID
26	27402	Washer 5/16" (4)	51	40087	Chuck Jaw Set	74	55313	Push Nut (4) (New Style)
27	40930	Lock Washer 3/8" (8)	52	47517	Chuck Jaw Set Pl. Ctd. Pipe			

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 $\frac{3}{8}$ " (2)
1	26502	Rail Plug (2)	18	26562	Supply Line Fitting	37	26997	Screw $\frac{3}{8}$ " - 16 x $\frac{3}{4}$ " (2)
2	40167	Bolt $\frac{5}{16}$ " - 18 x $3\frac{1}{2}$ " (4)	19	26772	Drip Plate	38	83545	Hex Nut $\frac{3}{8}$ " - 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 $\frac{5}{16}$ " - 18 (4)
8	26582	Guide Block Spring (2)	25	74965	Roll Pin $\frac{1}{4}$ " x $1\frac{1}{4}$ " (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 $\frac{1}{2}$ " (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 $\frac{5}{16}$ "	51	49472	Spiral Pin
			34	26847	Chip Pan Hanger Assembly	52	42027	Handwheel Kit
			35	26817	Chip Pan Bracket (2)			

“ML” Oil Pump

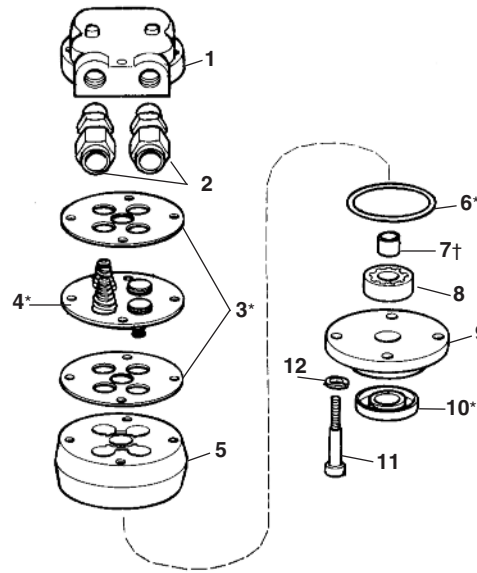
**NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.**

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.

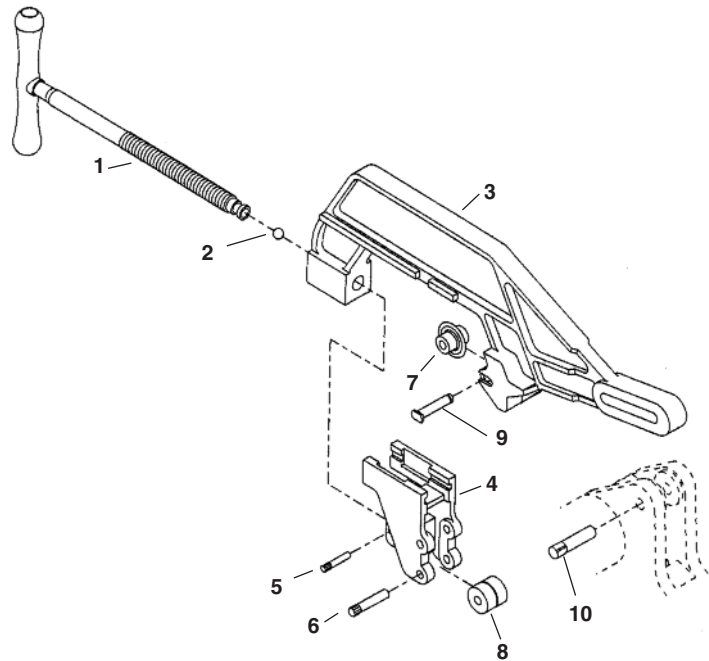
* Indicates Part is Included in Service Kit.

† See Service Note



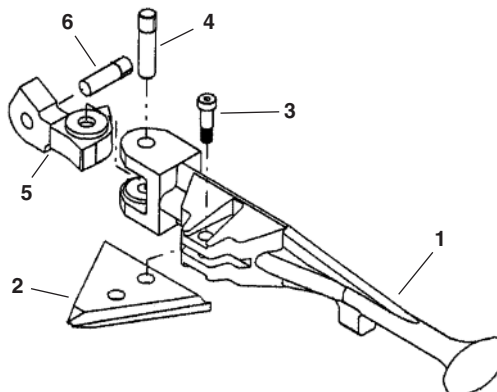
No. 764 Pipe Cutter

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)
9	26252	Roll F/Coated Pipe (2 per set)
10	34790	Wheel Pin
10	27072	Groove Pin



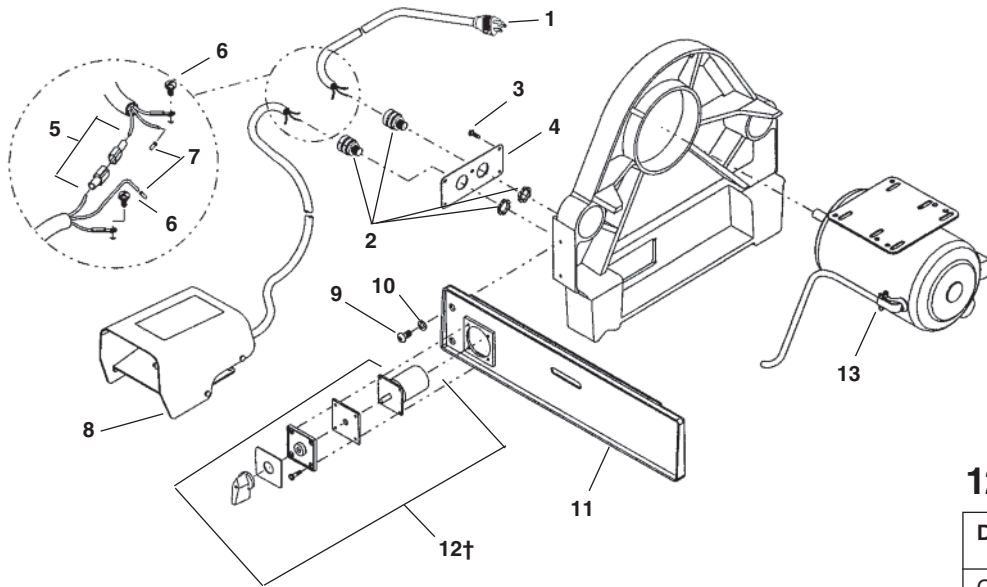
No. 744 Reamer Assembly

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.

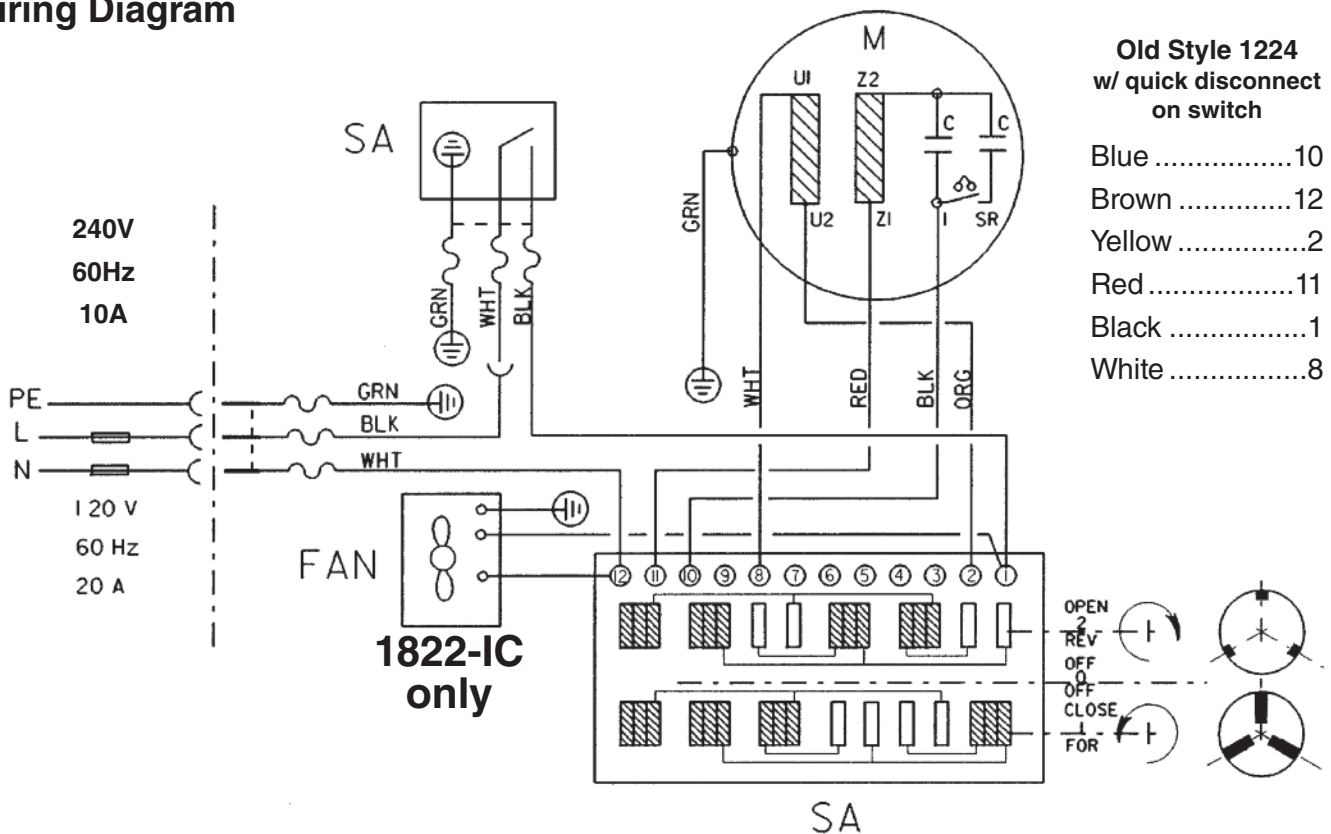


Ref. No.	Catalog No.	Description
1	46740	Power Cord
	46410	Power Cord
2	75977	Strain Relief (2)
3	41597	Self Tapping Screw (4)
4	27162	Strain Relief Bracket
5	56407	Quick Disconnect Set
6	45420	Ground Screw
7	36222	Wire Terminal
8	36642	B-294 Foot Switch
9	26997	Screw 3/8" - 16 x 3/4" (8)
10	40930	Lock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

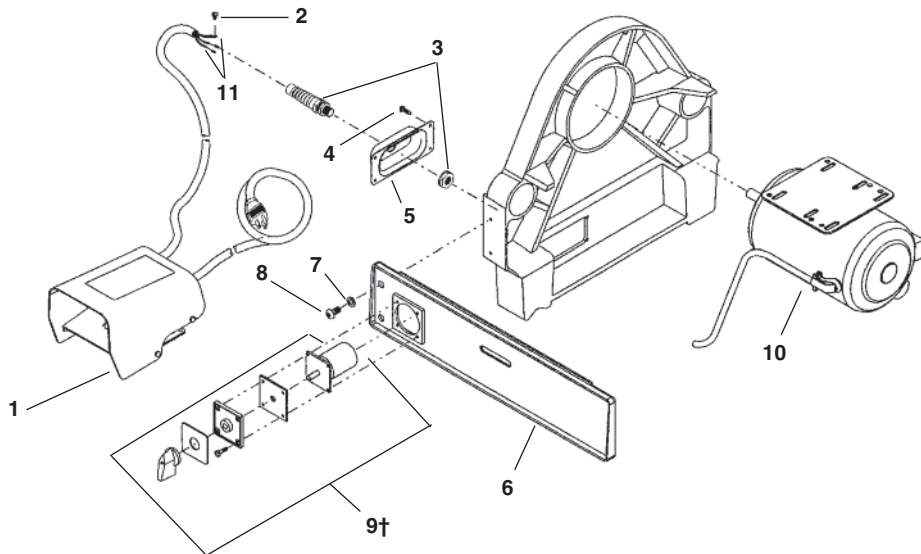
1224 Motor Parts

Description	120V 60Hz	240V 60Hz
Contact Start Switch	21148	—
Start Capacitor	54332	—
Run Capacitor	46807	46807

1224 & 1822-I Replacement Switch Wiring Diagram



50 Hz Electrical Components



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

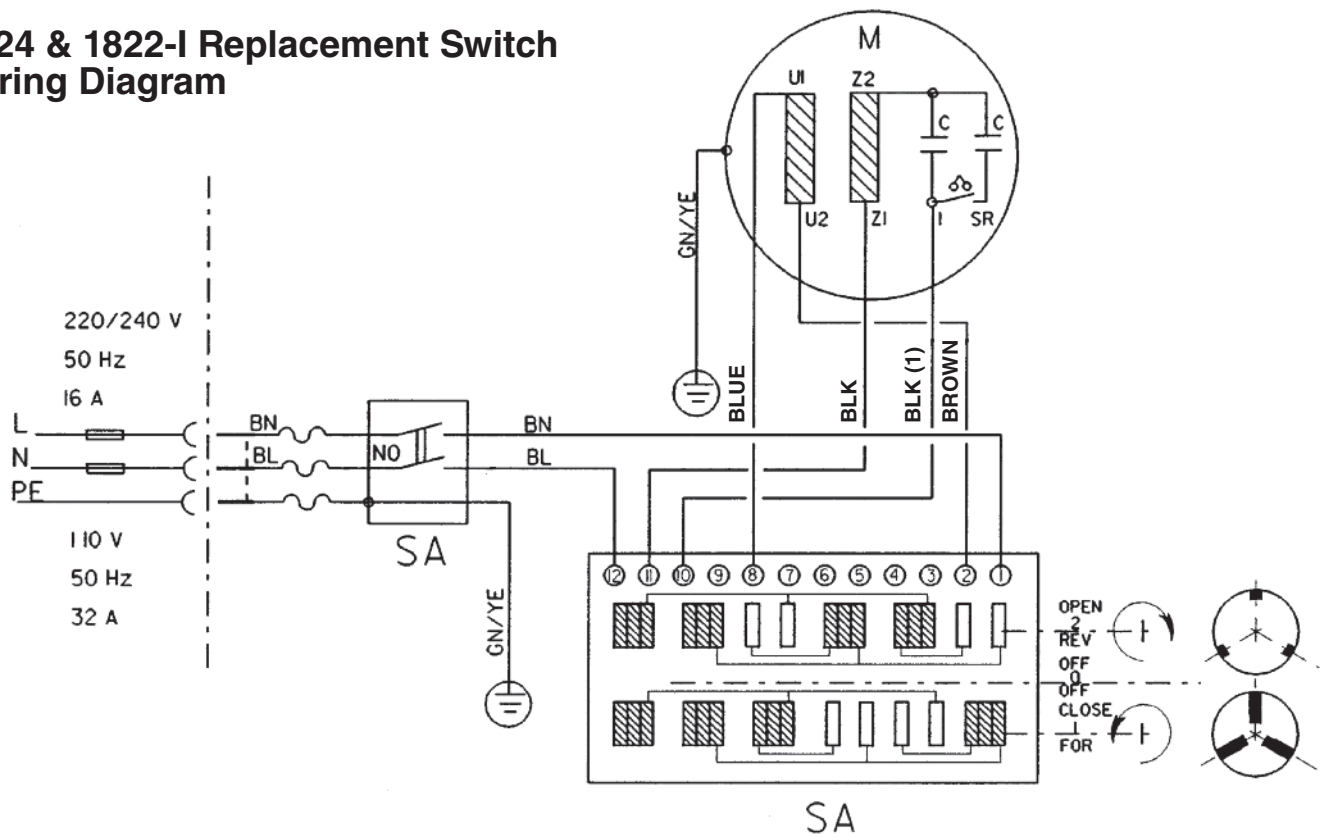
Ref. No.	Catalog No.	Description
1	36652	B-296 Foot Switch
	36657	B-297 Foot Switch
2	45420	Ground Screw
3	27187	Strain Relief
4	41597	Self Tapping Screw (4)
5	27197	Strain Relief Bracket
6	59722	Front Side Plate
7	40930	Lock Washer $\frac{3}{8}$ " (8)
8	26997	Screw $\frac{3}{8}$ " - 16 x $\frac{3}{4}$ " (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
Dual Contact Start Switch	46772	46772
Start Capacitor	46792	—
Run Capacitor	46807	—

† Ref. No. 12 – When replacing early style switches, which have a black body, order Switch Kit, Catalog No. 59762. Kit includes 59757 Switch Assembly and 59742 Switch Adapter Plate

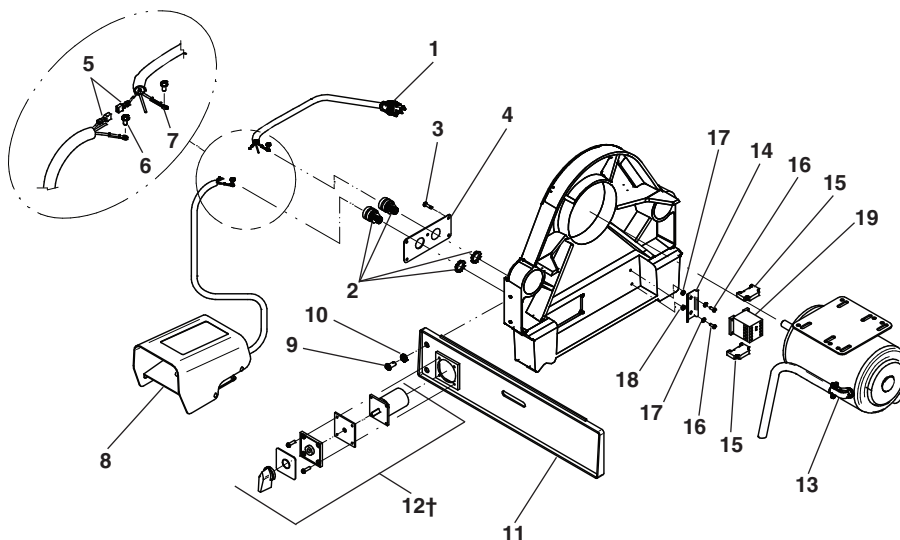
1224 & 1822-I Replacement Switch Wiring Diagram



3 Phase Electrical Components

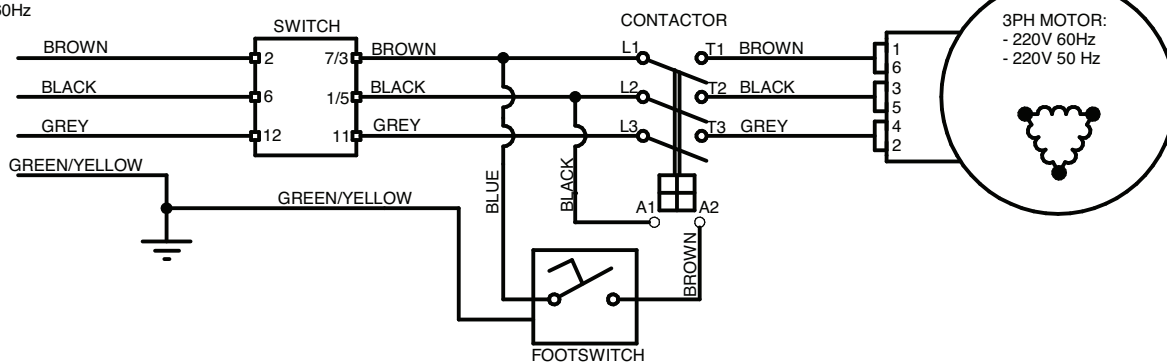
NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.

Ref. No.	Catalog No.	Description
1	54238	Power Cord
2	55318	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 $\frac{3}{8}$ " - 16 x $\frac{3}{4}$ " (8)
10	40930	Lock Washer $\frac{3}{8}$ " (8)
11	59722	Front Side Plate
12†	54243	Switch Assembly
13	27078	Motor 400V 50Hz 3PH
14	90517	Din Rail
15	53388	Din Rail Stops (2)
16	79965	Din Rail Screw 10-32 x $\frac{1}{2}$ " (2)
17	46985	Din Rail Washer #10 (2)
18	34722	Din Rail Nut 10-32 (2)
19	53393	Contactor 230V
	27093	Contactor 400V

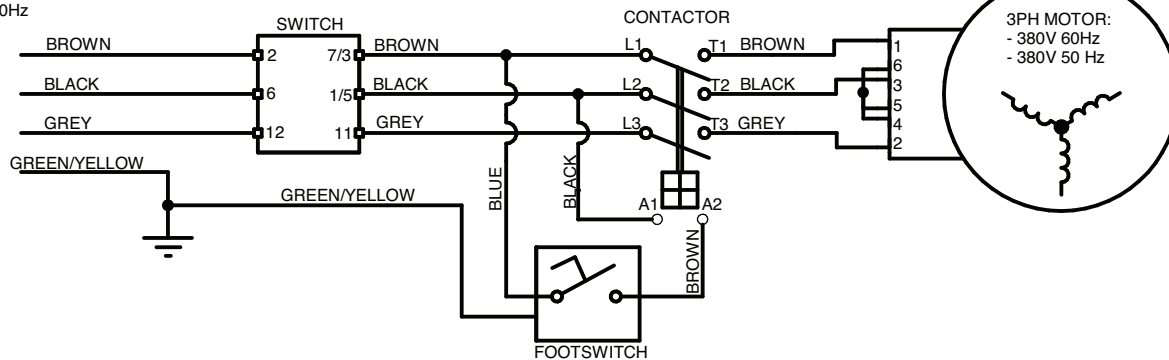


1224/535T 3 Phase Wiring Diagram

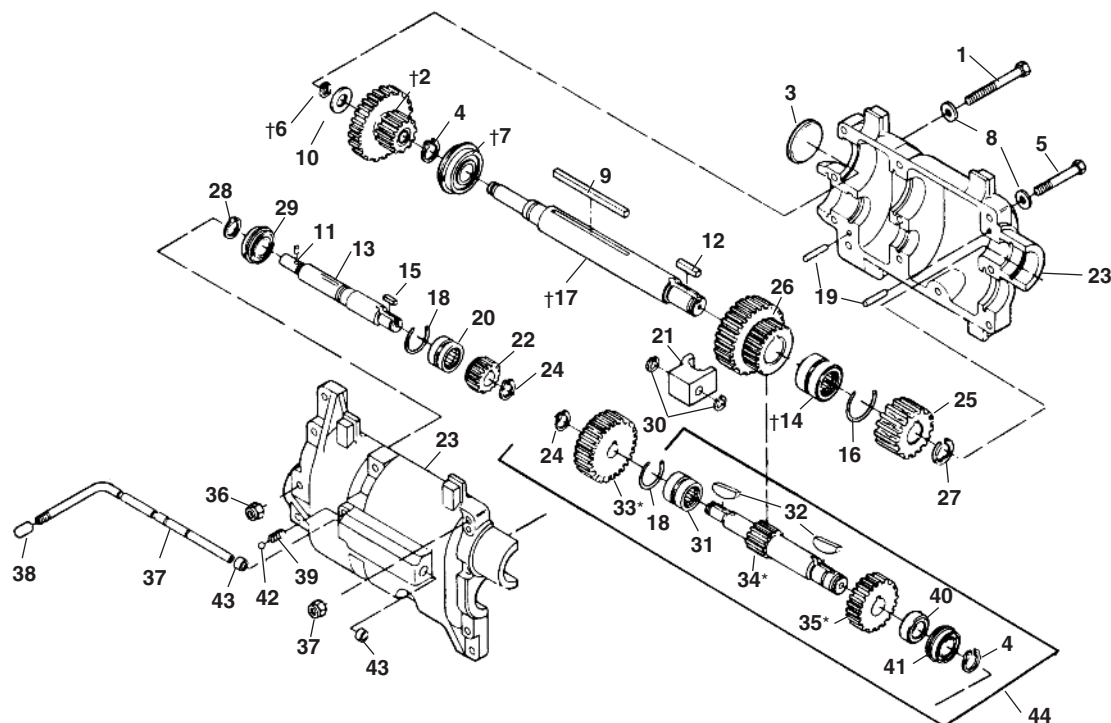
PLUG:
220V 3Ø 50/60Hz



PLUG:
380V 3Ø 50/60Hz



Gear Box



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

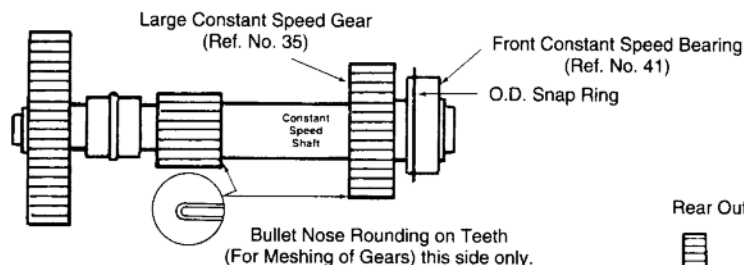
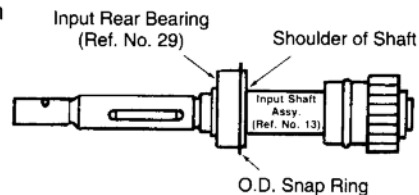
Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
—	26362	Gear Box Assembly	16	26922	Wire Ring	32	33982	Woodruff Key (2)
1	27102	Screw $\frac{5}{16}$ " - 18 x $3\frac{1}{4}$ " (2)	†17	26382	Output Shaft	33*	33992	1st Gear Constant Speed
†2	26702	Fixed 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 $\frac{5}{16}$ " - 18 (11)
5	27107	Screw $\frac{5}{16}$ " - 18 x $2\frac{1}{2}$ " (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 $\frac{5}{16}$ " (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

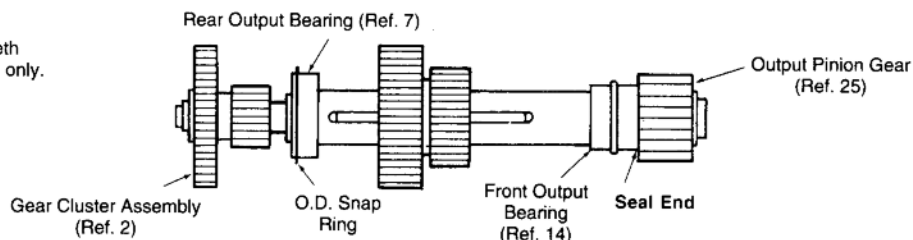
*When replacing early style parts, using square keys, a complete shaft assembly (Ref. No. 44) should be used.

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)

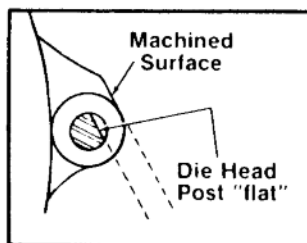
Position Seal End of Front Output Bearing (Ref. No. 14) towards Output Pinion Gear (Ref. No. 25)

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.

