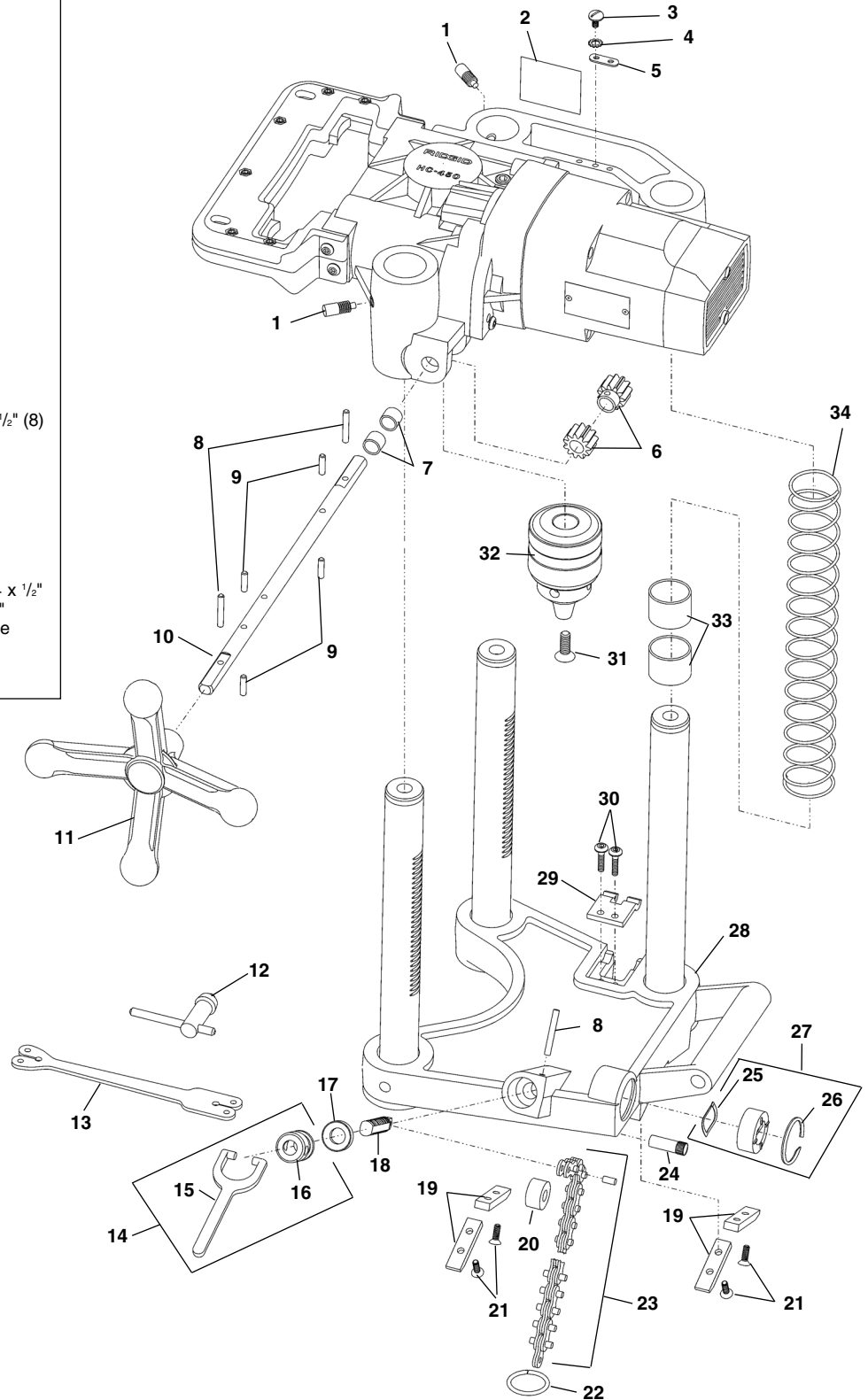


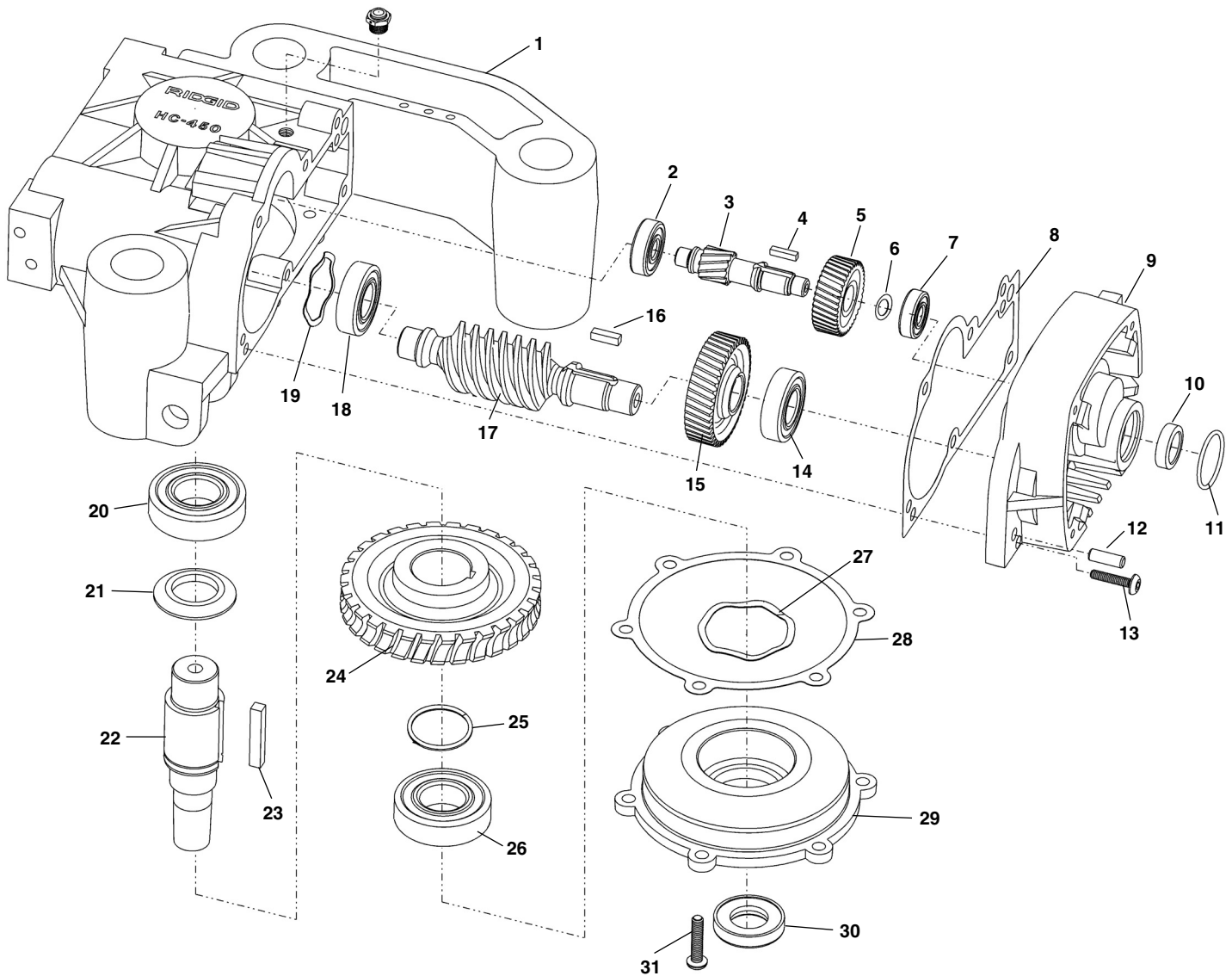
# Main Components

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

Ref. No.	Catalog No.	Description
1	59382	Gib Screw (2)
2	59337	Warning Label
3	45420	Screw, #10-24 x 3/8"
4	46985	Lock Washer #10
5	59407	Ground Spacer
6	59092	Pinion (2)
7	53072	Bearing (3)
8	36387	Split Roll Pin 3/16" x 1" (3)
9	34342	Roll Pin, 3/16" x 15/16" (4)
10	70797	Feed Shaft, 120V/230V
	70802	Feed Shaft, 100V
11	58957	Handwheel
12	59132	Chuck Key – Jacobs Style
	59057	Chuck Key – JIS Style
13	59102	Key Keeper
14	32115	Handle Assembly w/Nut
15	32120	Handle
16	32130	Swivel Nut
17	58987	Friction Ring
18	32135	Chain Screw
19	59187	Wear Pad with Screws (4)
20	40990	Roll
21	59192	Soc. Flat Hd. Screw, #10-24 x 1/2" (8)
22	32555	Wire Ring
23	59012	Chain Assembly
24	41035	Knurl Pin
25	59017	Wave Washer
26	59182	Retaining Ring
27	58997	Level Vial Assembly
28	58977	Base Assembly w/Posts
29	58992	Wear Plate
30	40260	Soc Head Cap Screw, #10-24 x 1/2"
31	59377	Flat Head Screw, 5/16" - 18 x 1"
32	59247	Chuck with Key – Jacobs Style
	59022	Chuck with Key – JIS Style
33	59027	Bearing (6)
34	59177	Compression Spring (3)



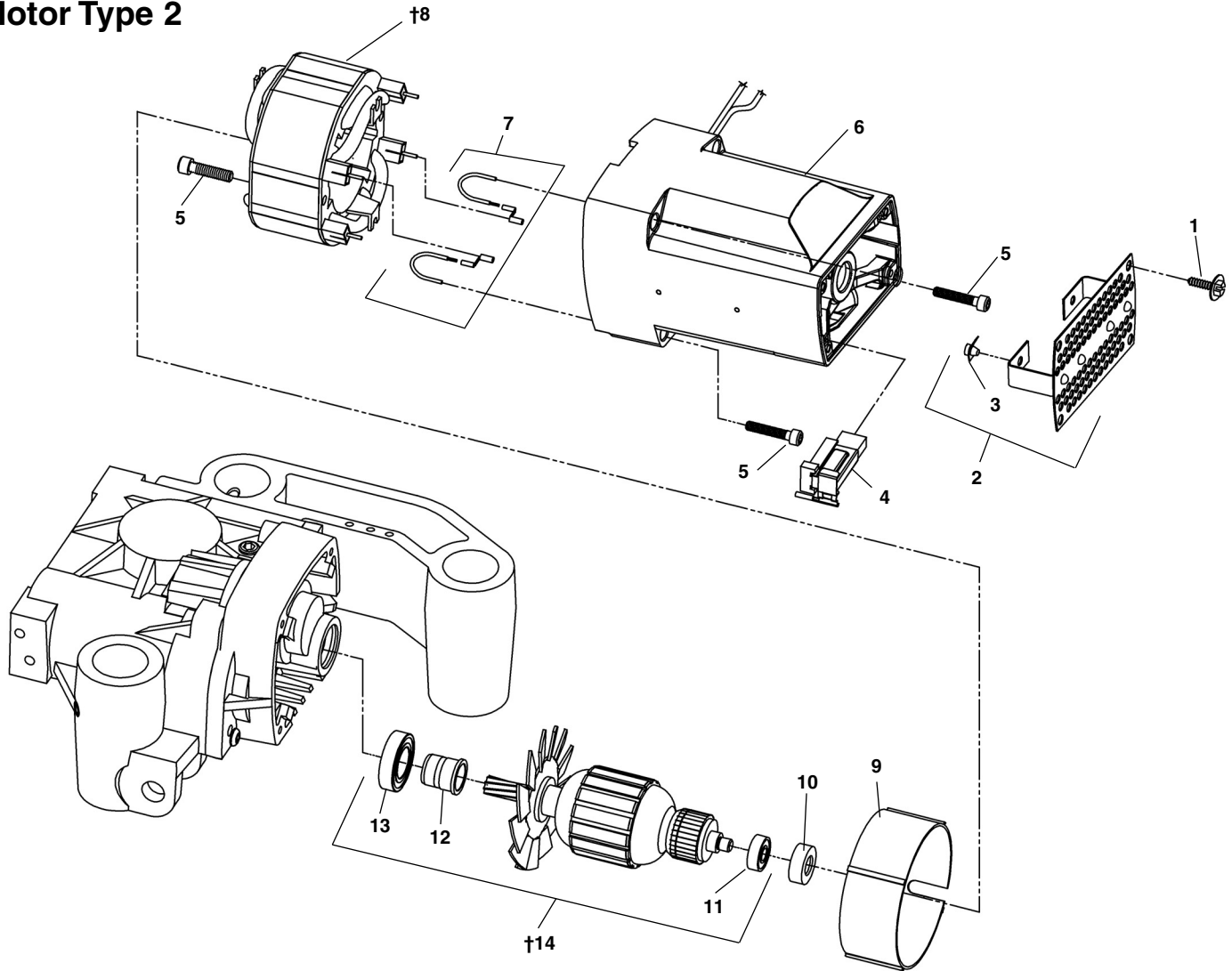
## Transmission



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

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
1	29062	Transmission Housing	15	59052	Helical Gear
2	44760	Ball Bearing	16	26657	Key, 3/16" Sq. x 5/8" Lg.
3	77222	Intermediate Gear Shaft, T2	17	59047	Worm Shaft
	59037	Intermediate Gear Shaft	18	44565	Ball Bearing
4	34472	Key	19	72267	Wave Washer
5	59042	Helical Gear	20	59152	Angular Contact Bearing
6	77237	Spacer, T2	21	59162	Spacer
7	77217	Ball Bearing, T2	22	59142	Output Spindle
	59147	Ball Bearing	23	26457	Key, 1/4" Sq. x 1 3/16"
8	72192	Gasket, T2	24	59167	Worm Gear
	59077	Gasket	25	72217	Retaining Ring
9	77212	Motor Adapter, T2	26	45315	Ball Bearing
10	77207	Grease Seal, T2	27	59082	Wave Washer
11	77202	O-Ring, T2	28	72207	Gasket
	60227	O-Ring	29	72202	Cover
12	44640	Dowel Pin, 1/4" x 3/4" (2)	30	59392	Oil Seal
13	72212	Hex Button Hd Scr w/Sealant (12)	31	59935	Screw, 1/4" x 20 x 1" SHC
14	59137	Angular Contact Bearing	32	40628	Breather Plug 100V Only (NOT SHOWN)

**Motor Type 2**

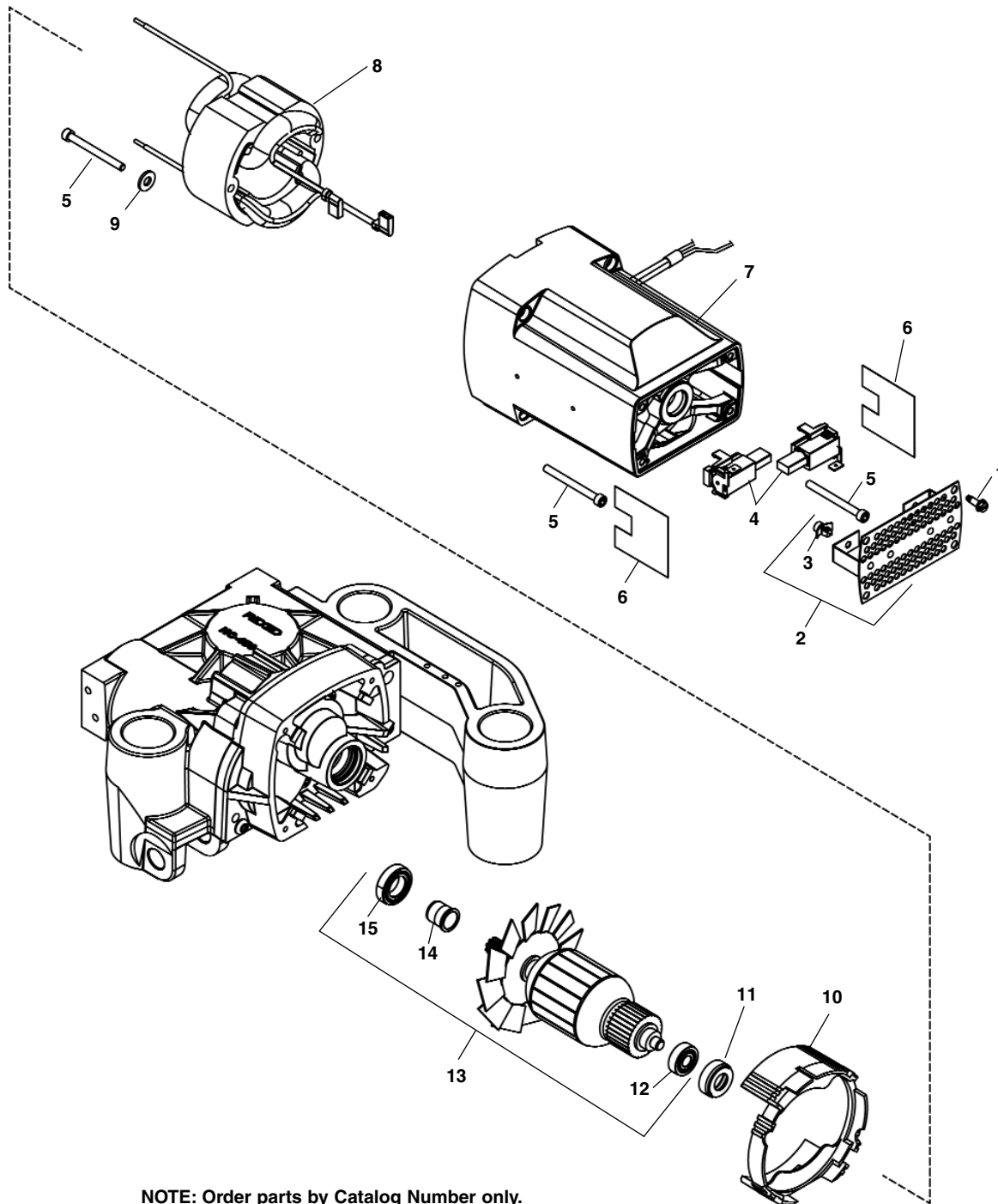


**NOTE: Order parts by Catalog Number only.  
DO NOT order by Reference Number.**

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
1	10908	Screw, Self Tapping (4)	9	35328	Fan Shroud
2	10913	End Cover	10	42777	Rubber Sleeve
3	10918	Bumper (2)	11	43017	Bearing
4	34078	Brush Assembly Set 115V	12	77227	Armature Sleeve
	34083	Brush Assembly Set 230V	13	77232	Bearing
5	10923	Screw, #10-24 x 2" Soc. Hd. Cap (6)	†14	84087	Armature Assembly 120V
6	10903	Motor Housing		84082	Armature Assembly 230V
7	77027	Motor Lead Set		84092	Armature Assembly 100V
†8	45897	Field 120V			
	58567	Field 220V			
	58572	Field 100V			

† Service Note: When replacing early style 115V or 230V armature# or field# you must replace with both new style armature#, field# and brushes#.

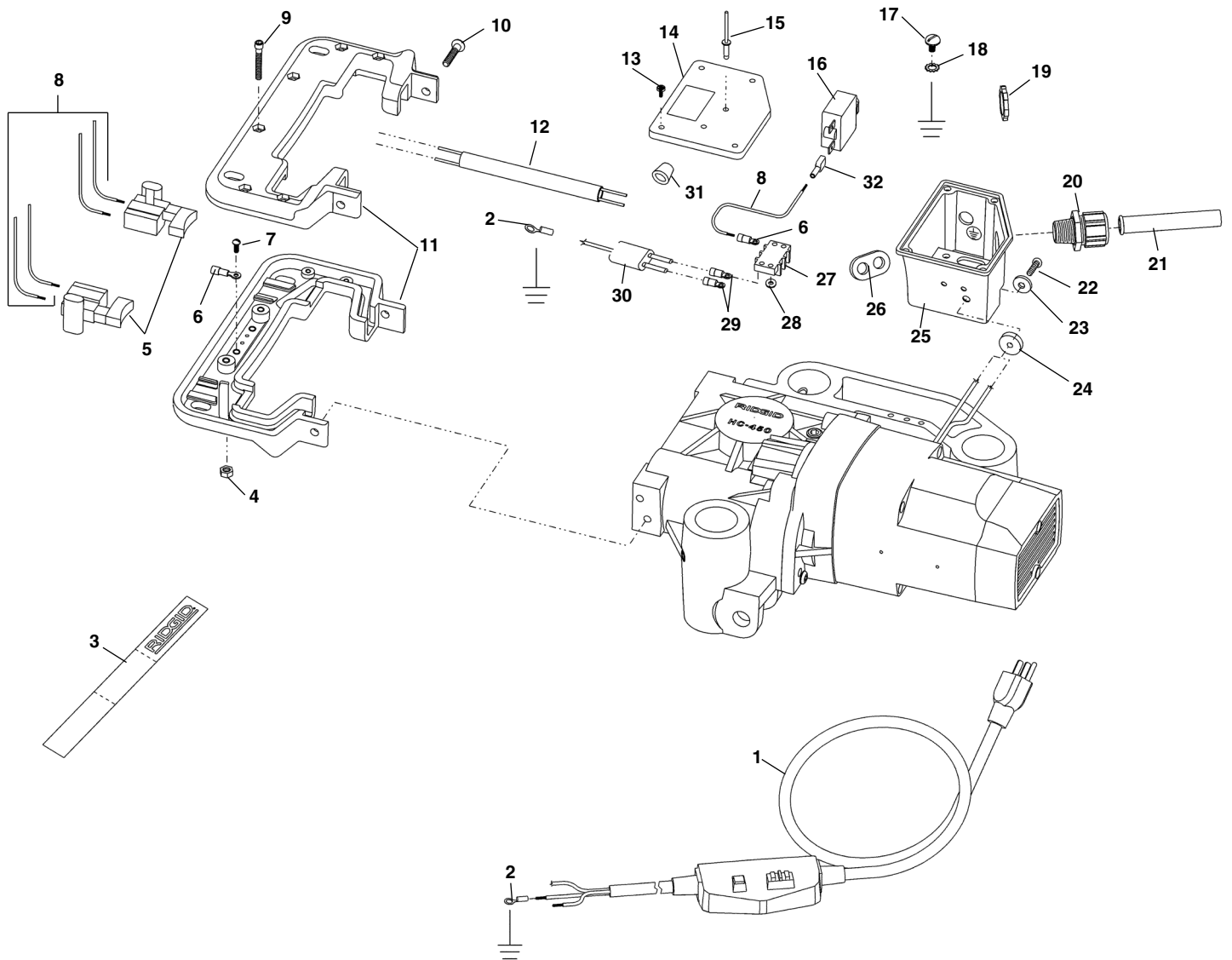
## Motor Type 2 – Motors built after Serial Number EAL XXXX 1109



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

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
1	10908	Screw, Self Tapping (4)	9	41592	Washer
2	10913	End Cover	10	35328	Fan Shroud
3	10918	Bumper (2)	11	42777	Rubber Sleeve
4	34078	Brush Assembly Set 115V	12	43017	Bearing
	34083	Brush Assembly Set 230V	13	38833	Armature Assembly 120V
5	10923	Screw, #10-24 x 2" Soc. Hd. Cap (6)		38838	Armature Assembly 230V
6	39003	Shields (2)		38843	Armature Assembly 100V
7	10903	Motor Housing HC-450	14	77227	Armature Sleeve
8	38848	Field 120V	15	77232	Bearing
	38853	Field 220V			
	38858	Field 100V			

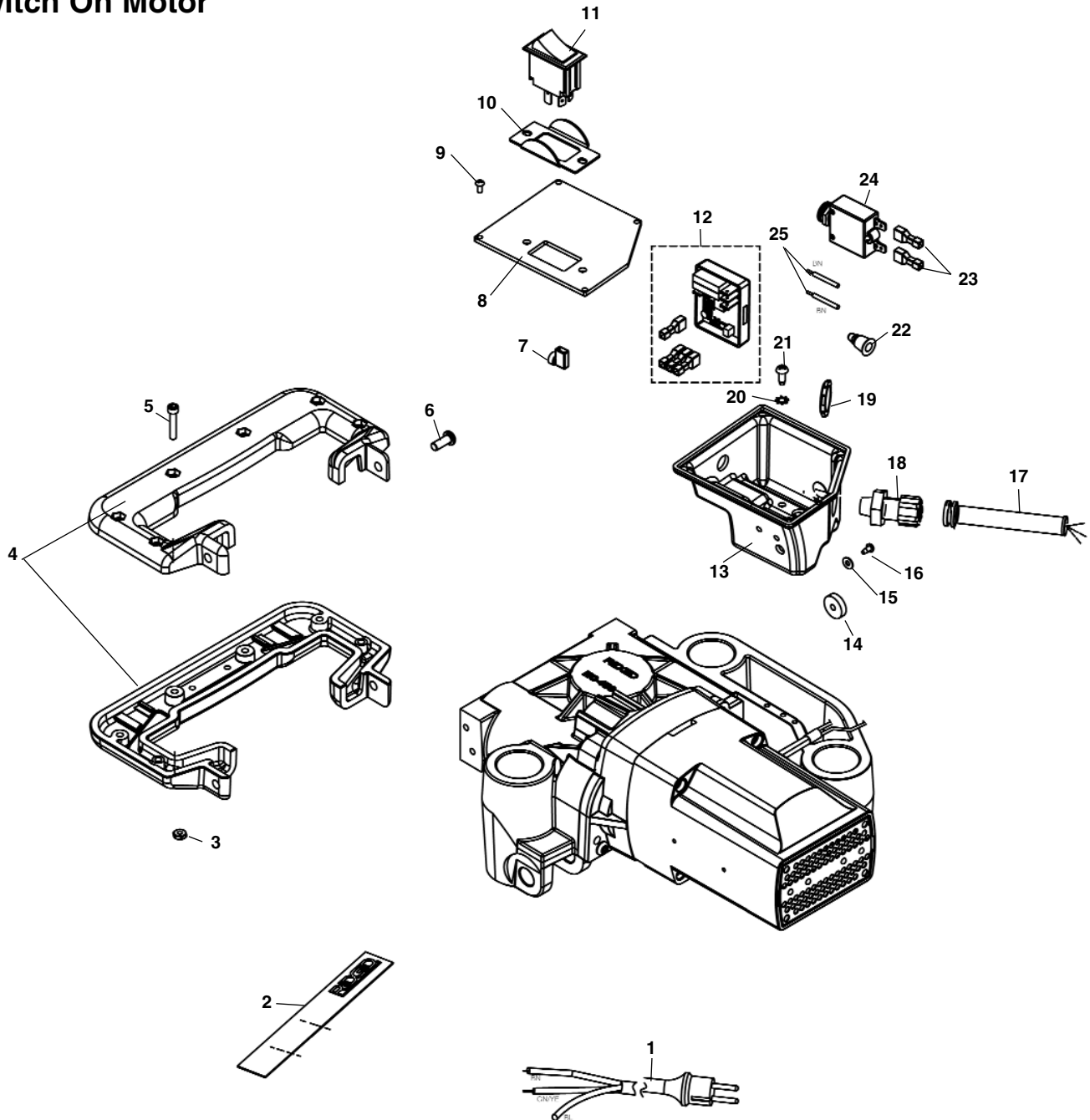
**120V/220 Components  
Switch In Handle**



**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	50502	Power Cord w/GFCI 120V	11	59257	Handle Set	21	77002	Cord Guard
	65842	Power Cord w/GFCI 220V	12	59342	Insulator Tube	22	93740	Screw Self Tap (2)
2	26292	Ring Terminal	13	72167	Screw, #6-32 x 5/16" (4)	23	90812	Washer
3	59097	Cinch Strap	14	72147	Cover Plate 120V	24	59397	Gasket
4	44695	Hex Nut #10-24 (6)		59227	Cover Plate, 230V	25	59122	Junction Box
5	59317	Switch 115V (2)	15	59112	Pop Rivet, 5/32" (4)	26	59402	Seal
	59362	Switch, 230V (2)	16	61302	Circuit Breaker 15 Amp (120V)	27	59367	Terminal Block (220V Only)
6	83895	Ring Terminal		59357	Circuit Breaker, 6 Amp (220V)	28	90817	Washer (220V only)
7	32318	Screw, #6-32 x 5/16" (2)	17	59192	Screw, #10-24 x 1/2" FH Soc.	29	90807	Ring Terminal (2) (220V Only)
8	77027	Switch Wire Set	18	46985	Lock Washer #10	30	36502	Suppressor (220V Only)
9	93680	Soc. Hd. Cap Screw #10-24 x 1" (8)	19	65642	Lock Nut 1/2" NPT	31	44635	Wire Nut
10	32205	Soc. Hd. Cap Screw, 1/2" - 20 x 5/8" (4)	20	65602	Strain Relief	32	59007	Terminal Set

## Switch On Motor



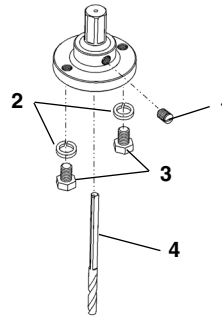
**NOTE: Order parts by Catalog Number only.  
DO NOT order by Reference Number.**

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
1	50502	Power Cord w GFCI 115V	9	72167	Screw #6-32 x 5/16" (4)	19	65642	Lock Nut 1/2"
	65842	Power Cord w GFCI 220V	10	10408	Switch Guard	20	49685	Washer
	89155	Power Cord 100V	11	58597	Switch	21	59192	Flat Head Screw #10-24 x 1/2"
2	59097	Cinch Strap	12	39318	Soft Start Assy. (220V Only)	22	44635	Wire Nut
3	44695	Hex Nut #10-24 (6)	13	40758	Junction Box	23	59007	Terminal Set
4	40748	Handle Set w/o Switch Holes	14	59397	Gasket	24	61302	Circuit Breaker 12 Amp (120V)
5	93680	Soc. Hd Cap Screw #10-24 x 1" (6)	15	90812	Washer		59357	Circuit Breaker 6 Amp (220V)
6	32205	Soc. Hd Cap Screw 1/2"-20 x 5/8" (4)	16	93740	Self Tap Screw (2)		58962	Circuit Breaker 15 Amp (100V)
7	40773	Right Angle Disconnect (2)	17	77002	Cord Guard	25	73012	Lead Wire Asm
8	40753	Cover Plate 120V	18	65602	Strain Relief			

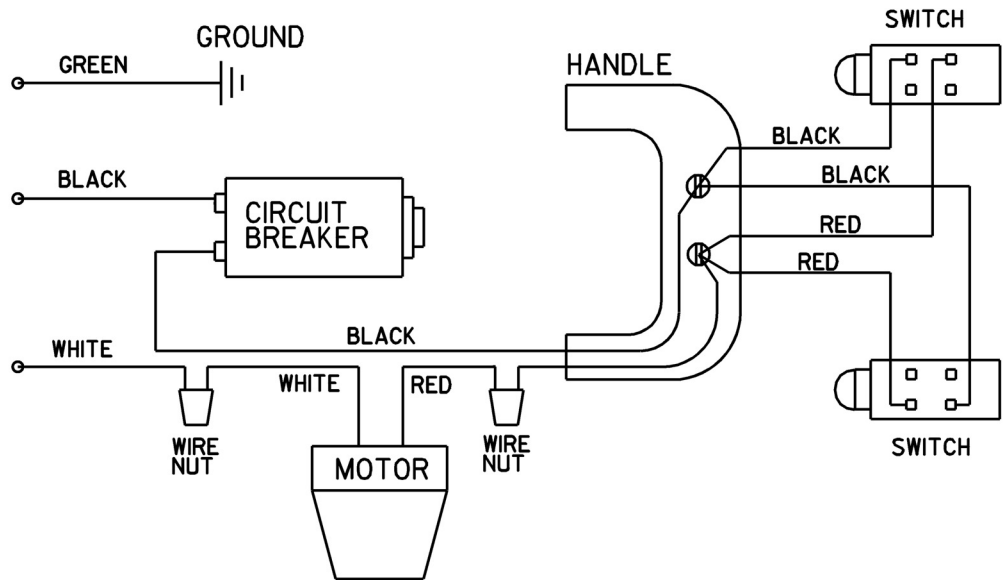
## R-4 Arbor Assembly

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

Ref. No.	Catalog No.	Description
—	59502	R-4 Arbor Assembly
1	59387	Set Screw, 5/16" - 24 x 1/2", Cup Pt.
2	60080	Lock Washer, 5/16" (2)
3	60010	Hex Screw, 5/16" - 18 x 1/2" (2)
4	53085	Pilot Drill, 1/4"



## 120V Wiring Diagram Switch In Handle



## 230V Wiring Diagram Switch In Handle

