

No. 13800 MINI-COLLINS FINAL ASSEMBLY 115V. 50/60 Cycle Unit (Plunger Drive)

Item	Part No.	Description	Req'd	Item	Part No.	Description	Req'd
1.	12616	Cord Assembly, Electrical	1	13.	12330	Stator, Motor, 115V. 50/60 Cycle	1
2.	13857	Handle, Male Half	1	12331	Stator, Motor, 230V. 50/60 Cycle		1
3.	14493	Key, Drive, Removable (not included in this assembly)	1	13947	Stator, Motor, 250V. 50 Cy.		1
4.	K-1109	Screw, Handle Attachment, 1/4-20x1" long	4	12558	Screw, Stator Alt.		2
5.	C-109-HC	Washer, Lock, 1/4"	4	15.	CD-107-A	Washer, Lock, #10 C'sunk	2
6.	13107	Rod, Torque	1	16.	10047	Washer, Belleville	2
7.	13105	Bracket, Torque Rod	1	17.	13142	Bearing, Ball, Armature	1
8.	13108	Cap, Elect. Contact Brush	2	18.	12607	Armature Assembly, Motor, 115V. 50/60 Cycle (includes Fan)	1
9.	12636	Brush, Elect. Contact, 115V. Motor	2	12608	Armature Assembly, Motor, 230V. (includes Fan)		1
10.	13110	Brush, Elect. Contact, 230V. & 250V. Motor	2	13946	Armature Assembly, Motor, 250V. 50 Cycle (includes Fan)		1
10.	13796	Holder Assembly, Elect. Contact Brush, 115V. (includes Lead Wire No. 13336)	2	19.	13631	Handle, Carrying	1
	13640	Holder Assembly, Elect. Contact Brush, 230V. & 250V. (includes Lead Wire No. 13337)	2	20.	13862	Bearing Set	1
11.	12549	Housing, Motor	1	21.	13141	Bearing, Ball, Armature	1
12.	13522	Motor Unit, 115V. 50/60 Cycle	1	22.	13101	Support, Motor	1
	13520	Motor Unit, 230V. 50/60 Cycle	1	23.	13116	Bearing, Needle, Worm Shaft	2
	13949	Motor Unit, 250V. 50 Cycle	1	24.	13117	Washer, Thrust, Needle Bearing	2

Item	Part No.	Description	Req'd
25.	13120	Worm Shaft	1
26.	G-052	Screw, Carrying Handle Att., #10-24x $\frac{5}{8}$ " long Button Head	4
27.	J-1114	Screw, Gear Housing Attachment, $\frac{1}{4}$ "-20x2" long, Flat Head	2
28.	L-1115	Screw, Gear Housing Attachment, $\frac{1}{4}$ -20x2 $\frac{1}{4}$ " long	2
29.	C-109-MP	Washer, Lock, Gear Housing Att., $\frac{1}{4}$ "	4
30.	K-1108	Screw, Gear Housing Attachment, $\frac{1}{4}$ -20x $\frac{7}{8}$ " long, Filister Head	2
31.	13140	Plug, Pipe, Gear Lube Access, $\frac{1}{8}$ " (see Item "A")	1
33.	13138	Bushing, Shoulder (see item "A")	2
34.	12896	Gear Assembly, Worm Wheel, Plunger Drive	1
35.	12895	Gear, Worm Wheel	1
36.	12897	Plunger, Worm Wheel	2
37.	12899	Spring, Compression, Worm Wheel Plunger	2
38.	O-100	Pin, Dowel, Plunger Retaining, $\frac{1}{8}$ x $\frac{1}{4}$ " long	2
39.	13114	Seal, O-Ring, Worm Wheel	2
40.	13453	Setscrew, Sleeve Retaining	2
41.	12898	Sleeve, Worm Wheel	2
42.	K-910	Screw, Gear Housing, #10-24x $\frac{7}{8}$ " long, Filister Head (see Item "A")	7
43.	CB-107	Washer, Tooth Lock, Gear Housing #10 (see Item "A")	7

**No. 13801 Mini-Collins Final Assembly —
230V. 50/60 Cycle Unit (Plunger Drive)**

Same as #13800 above except item 12, #13522 replaced by #13520.

**No. 13950 Mini-Collins Final Assembly —
250V. 50 Cycle Unit (Plunger Drive)**

Same as #13800 above except item 12, #13522 replaced by #13949.

Item	Part No.	Description	Req'd
44.	K-909	Screw, Handle Att., #10-24x $\frac{3}{4}$ " long, Filister Head	2
45.	CB-107	Washer, Tooth Lock, Handle Att., No. 10	2
46.	13858	Handle, Female Half	1
47.	K-1108	Screw, Handle Att., $\frac{1}{4}$ -20x $\frac{7}{8}$ " long, Filister Head	3
48.	C-109-HC	Washer, Lock, Handle Att., $\frac{1}{4}$ " Hi-Collar	3
49.	12514	Switch, On-Off (Normally Off)	1
50.	12515	Screw, Switch Att., 4mmx15mm long, fil. hd.	3
51.	12516	Switch, Rocker, FWD-REV.	1
52.	13118	Race, Needle Bearing, Inner	2
53.	13115	Support, Needle Bearing	1
54.	12339	Retainer, On-Off Switch, Phenolic	1
55.	12509	Screw, Switch Retainer, 4mmx8mm Long	2
56.	12438	Setscrew, Brush Holder	2
57.	13119	Worm Shaft Assembly	1
58.	13137-1	Housing Half, Drive Gear (not sold separately, see item "A")	1
59.	13137-2	Housing Half, Drive Gear (not sold separately, see item "A")	1
60.	13155	Cap, Torque Rod	1
61.	13641	Label, Identification	1
62.	12337	Jumper Wire, Switch	3
63.	14492	Gear Assembly, Worm Wheel, Removable Square Drive (not included in this assembly)	1
A	13137	Housing Assembly, Drive Gear	1

**No. 13827 Mini-Collins Final Assembly —
115V. 50/60 Cycle Unit (Square Drive)**

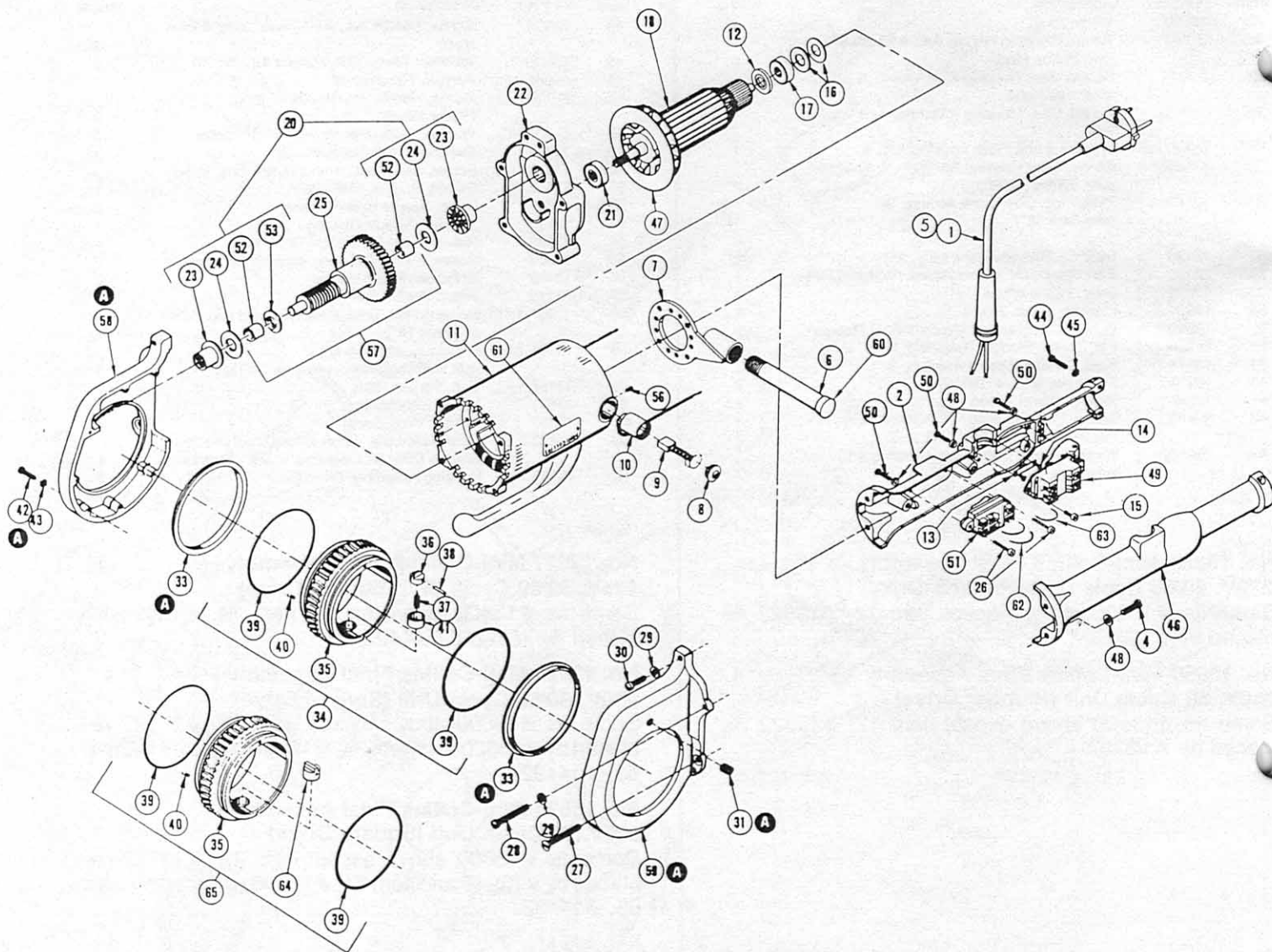
Same as #13800 above except item 34, #12896 replaced by item 63, #14492.

**No. 13828 Mini-Collins Final Assembly —
230V. 50/60 Cycle Unit (Square Drive)**

Same as #13800 above except item 12, #13522 replaced by #13520 and item 34, #12896 replaced by item 63, #14492.

**No. 13829 Mini-Collins Final Assembly —
250V. 50 Cycle Unit (Square Drive)**

Same as #13800 above except item 12, #13522 replaced by #13949 and item 34, #12896 replaced by item 63, #14492.



No. 14400 MINI-COLLINS FINAL ASSEMBLY

Double Insulated, 220V., Standard Unit (Plunger Drive)

Item	Part No.	Description	Req'd	Item	Part No.	Description	Req'd
1.	14404	Cord Assembly, Electrical, 2-Wire (includes Item No. 5)	1	21.	13141	Bearing, Ball, Armature, Front	1
2.	14405	Handle, Male Half (See No. 14449)	1	22.	14446	Support, Motor	1
4.	14407	Screw, Handle Attachment, 6x25 RPJX	4	23.	13116	Bearing, Needle, Worm Shaft (Front and Rear)	2
5.	14408	Collar, Electrical Cord (included in Item No. 1)	1	24.	13117	Washer, Thrust	2
6.	14409	Rod, Torque	1	25.	13120	Worm Shaft	1
7.	14410	Bracket, Torque Rod	1	26.	14447	Screw, Switch Attachment (Rocker), #7x $\frac{3}{8}$ " long, Sht. Mtl., Pan Hd., Phil.	2
8.	14411	Cap., Electrical, Contact Brush	2	27.	14420	Screw, Gear Housing Attachment, 6x50 UHJX	2
9.	14423	Brush, Electrical Contact	2	28.	14421	Screw, Gear Housing Attachment, 6x50 RPJX	2
10.	14413	Holder Assembly, Brush, Electrical Contact, 220V.	2	29.	C-109	Washer, Lock, No. 10	4
11.	14414	Housing and Stator Assembly, Motor	1	30.	K-1108	Screw, Gear Housing Attachment, $\frac{1}{4}$ -20x $\frac{7}{8}$ " long, Mach., Fil. Hd., Sit.	2
12.	14406	Insulator, Creeping Current	1	31.	13140	Plug, Pipe, Gear Lube Access, $\frac{1}{8}$ " (See item "A")	1
13.	14415	Clamp Electrical Cord (included with Item No. 2)	1	33.	13138	Bushing, Shoulder (See Item "A")	2
14.	14416	Screw, Cord Assembly Mounting, #6x $\frac{3}{8}$ " long, Sheet Metal, Pan Hd. Phil.	2	34.	12896	Gear Assembly, Worm Wheel	1
15.	14448	Screw, Swivel Attachment, (On-Off), #7x $\frac{3}{8}$ " long, Sheet Metal, Pan Hd. Phil.	1	35.	12895	Gear, Worm Wheel	1
16.	10047	Washer, Belleville	2	36.	12897	Plunger, Worm Wheel Gear	2
17.	13142	Bearing, Ball, Armature, Rear	1	37.	12899	Spring, Compression, Plunger	2
18.	14417	Armature Assembly, 220V. Motor, (includes Fan Item No. 47)	1	38.	O-100	Pin, Dowel, Plunger, $\frac{1}{8}$ x $\frac{1}{4}$ " long	2
20.	13862	Bearing Set (includes Items No. 23, 24, 52, 53)	1	39.	13114	Seal, O-Ring, Worm Wheel Gear	2
				40.	13453	Setscrew, Sleeve Retaining (Special)	2

Item	Part No.	Description	Req'd
41.	12898	Sleeve, Plunger	2
42.	K-910	Screw, Gear Housing, #10-24x7/8" long, Mach., Fil. Hd., Slit. (see Item "A")	7
43.	CB-107	Washer, Lock, Int. Tooth, #10 (see Item "A")	7
44.	14435	Screw, Handle, 5x16 RPJX	2
45.	14436	Washer, Lock, Int. Tooth, M5	2
46.	14437	Handle, Female Half (See No. 14449)	1
47.	14422	Fan, Armature (included in Item No. 18)	1
48.	13825	Washer, Lock, M6	7
49.	14440	Switch, "On-Off" (Normally Off)	1
50.	14441	Screw, Handle, 6x20 RPJX	3
51.	14442	Switch, Rocker, (FWD-REV)	1
52.	13118	Race, Needle Bearing, Inner	2
53.	13115	Support, Needle Bearing	1
56.	14443	Setscrew, Brush Holder	2
57.	13119	Worm Shaft Assembly (includes Items 25, 52, 53)	1

Item	Part No.	Description	Req'd
58.	13137-1	Housing Half (not sold separately, see Item "A")	1
59.	13137-2	Housing Half (not sold separately, see Item "A")	1
60.	13155	Cap, Torque Rod	1
61.	14444	Plate, Identification	1
62.	14720	Jumper Wire, Switch	2
63.	14721	Jumper Wire, Switch	1
A	13137	Housing Assembly	1
	13102	Lubricant, 8-oz. Tube	
	14449	Handle Assembly (includes items 2, 46, 13)	1
Not included in this assembly:			
64.	14493	Key, Drive, Removable	1
65.	14492	Gear Assembly, Worm Wheel Removable Square Drive	1
	14445	Hardware Kit, Screw and Washer (includes all attaching hardware)	1

**No. 14402 Mini-Collins Final Assembly —
Double Insulated 220V. VDE Unit (Plunger Drive)**
Same as #14400 above except add #14311 capacitor,
#14312 capacitor.

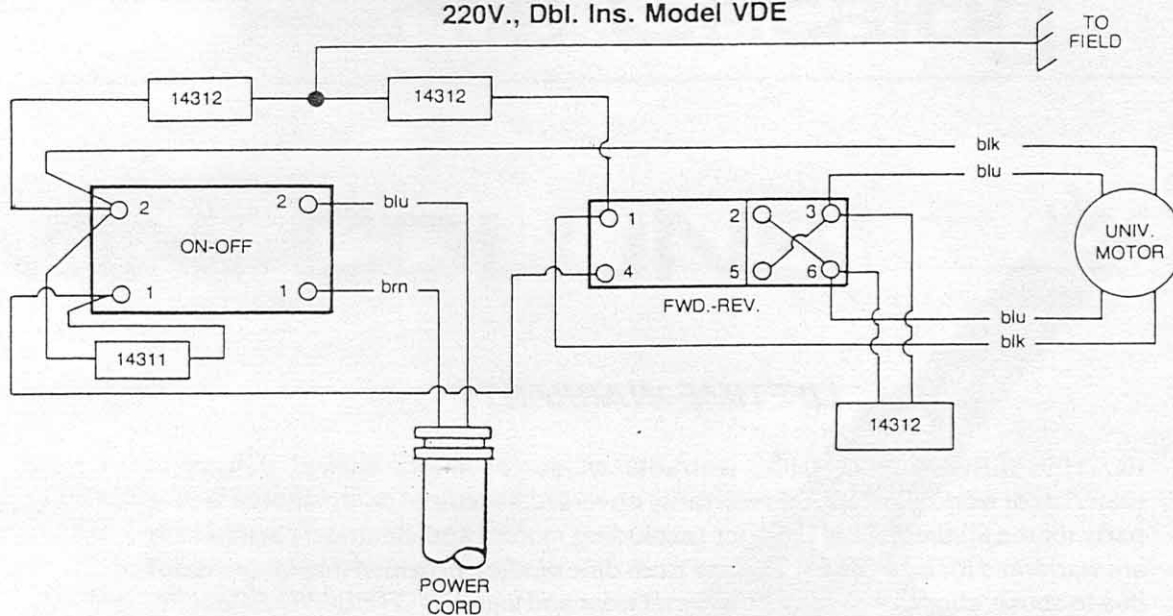
**No. 14403 Mini-Collins Final Assembly —
Double Insulated, 220V. CH Unit (Plunger Drive)**
Same as #14400 except add #14314 capacitor, #14315
capacitor, #14316 filter, #14317 inductor.

**No. 14432 Mini-Collins Final Assembly —
Double Insulated 220V. Standard Unit
(Square Drive)**
Same as #14400 above except Item 34, #12896 re-
placed by item 65, #14492.

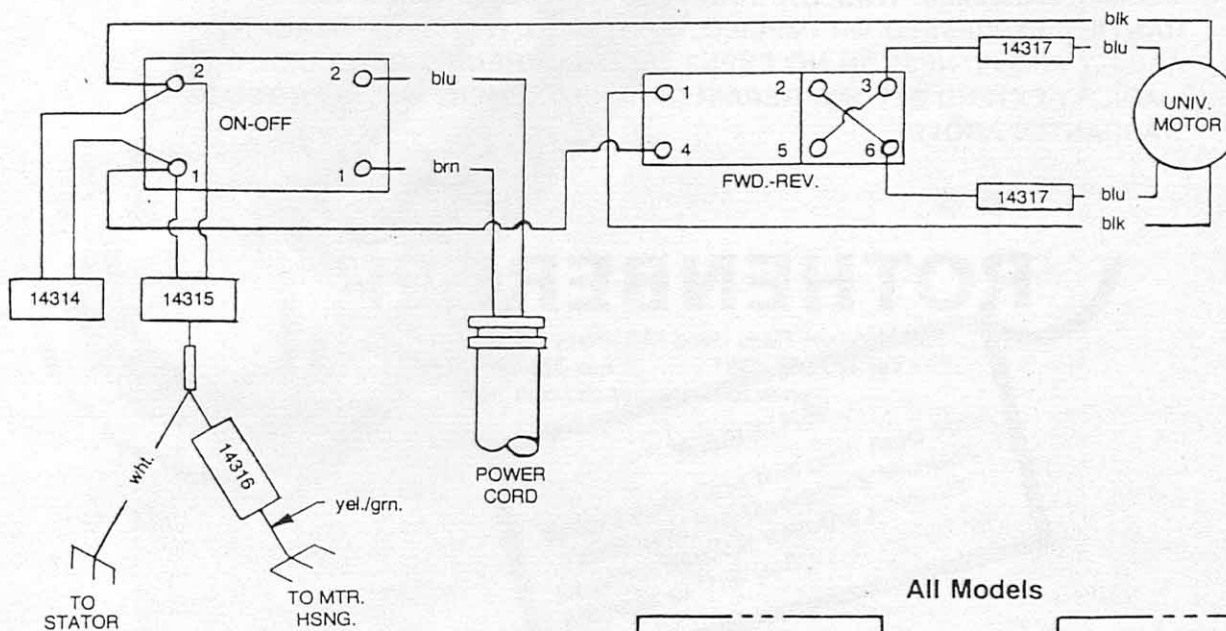
**No. 14433 Mini-Collins Final Assembly —
Double Insulated 220V. VDE Unit (Square Drive)**
Same as #14400 above except item 34, #12896 re-
placed by item 65, #14492 and add #14311 capacitor,
#14312 capacitor.

**No. 14434 Mini-Collins Final Assembly —
Double Insulated 220V. CH Unit (Square Drive)**
Same as #14400 above except item 34, #12896 re-
placed by item 54, #14492 and add #14314 capacitor,
#14315 capacitor, #14316 filter, #14317 inductor.

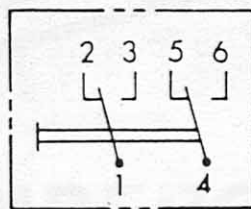
WIRING DIAGRAM
220V., Dbl. Ins. Model VDE



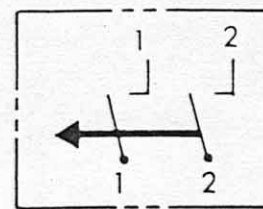
WIRING DIAGRAM
220V., Dbl. Ins. Model CH



All Models



FWD-REV SWITCH



ON-OFF SWITCH