



SERVICE PARTS LIST

BUL. 54-08-1080

1/2" ELECTRIC DRILL

REVISED BUL. DATE Sept. 71

Catalog No. 1250-1

Starting Serial No. **459-1001**

WIRING INSTR. **58-01-0215**

Both Model and Serial No. must be furnished to obtain correct parts.

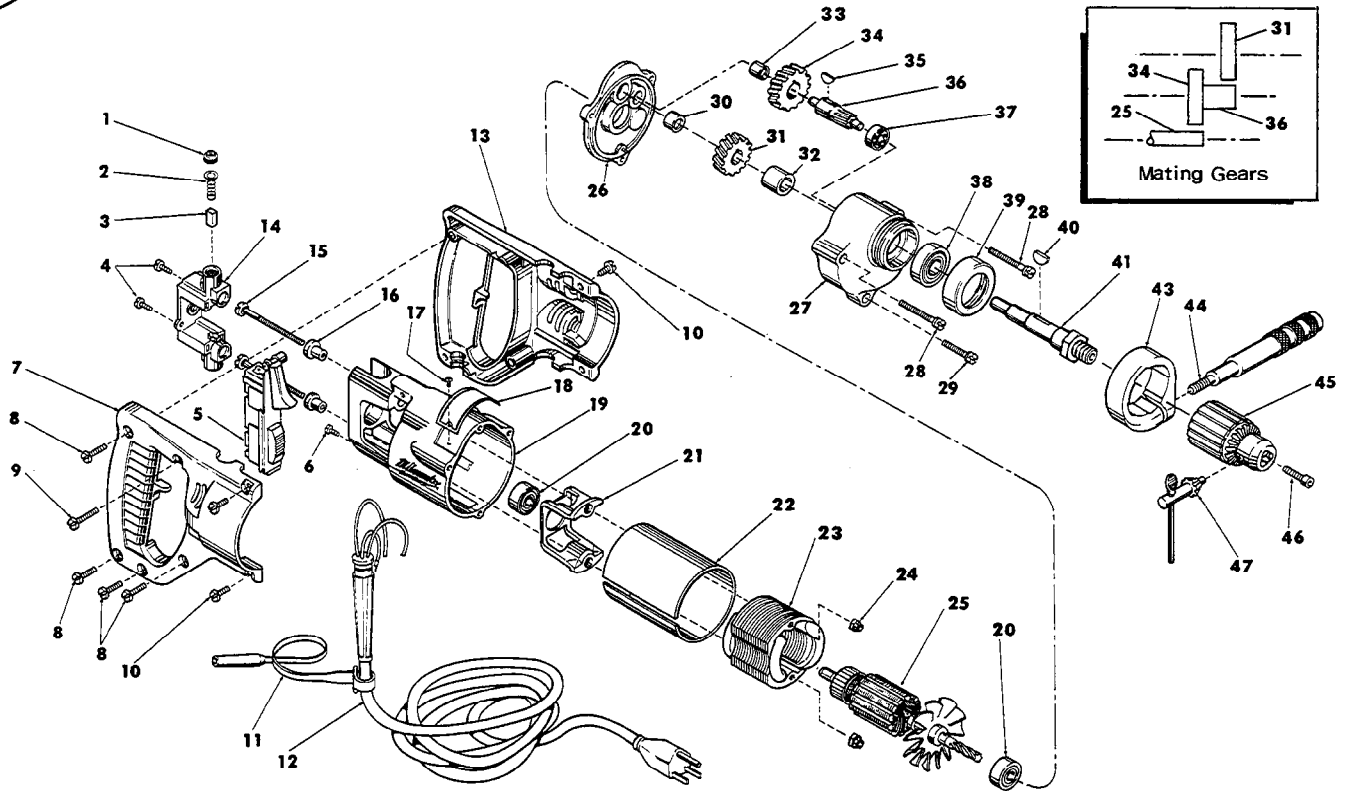


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	23-44-0120	Brush Retaining Screw	(2)	25	16-42-1400	115 V. Armature	(1)
2	23-52-0160	Brush Spring	(2)	26	28-28-0581	Diaphragm	(1)
3	22-16-0250	Carbon Brush	(2)	27	28-14-0681	Gear Case	(1)
4	06-81-5475	6-32x3/8 Binding Hd. Sem	(2)	28	06-81-6705	8-32x1-7/8 Fil. Hd. Sem	(2)
5	23-66-0751	Switch	(1)	29	06-81-6400	8-32x1-1/8 Fil. Hd. Sem	(1)
6	06-81-8625	6-32x1/4 Ground Screw	(1)	30	02-50-2110	Needle Bearing	(1)
7	31-44-0320	R.H. Half D Handle	(1)	31	32-75-2001	Spindle Gear	(1)
8	06-81-0400	8-32x3/4 Pan Hd. Screw	(4)	32	45-36-0210	Spindle Gear Spacer	(1)
9	06-81-0470	8-32x1 Pan Hd. Screw	(1)	33	02-50-1640	Needle Bearing	(1)
10	06-81-0045	8-32x1/2 Pan Hd. Screw	(4)	34	32-40-1241	Intermediate Gear	(1)
11	48-66-4040	Key Holder	(1)	35	06-42-0800	Woodruff Key	(1)
12	22-64-0385	Cord Set	(1)	36	36-66-2701	Intermediate Shaft	(1)
13	31-44-0321	L.H. Half D Handle	(1)	37	02-04-0640	Ball Bearing	(1)
14	22-22-0300	Brush Holder Assembly	(1)	38	02-04-1560	Ball Bearing	(1)
15	06-81-1050	8-32x2-7/16 Field Bolt	(2)	39	42-52-0071	Bearing Cap	(1)
16	31-86-0120	Insulating Spacer	(2)	40	06-42-1600	Woodruff Key	(1)
17	06-85-0200	6x1/4 Rd. Hd. Type Z Screw	(2)	41	38-50-3651	Spindle	(1)
18	12-99-0030	Nameplate	(1)	42	49-15-0200	Side Handle Assy. (Includes Fig. Nos. 43 & 44)	(1)
19	28-50-6141	Motor Housing	(1)	43	28-82-0130	Handle Ring	(1)
20	02-04-0940	Ball Bearing	(2)	44	43-62-0160	Side Handle	(1)
21	31-55-0080	Coil Shield	(1)	45	48-66-1360	1/2" Chuck (Includes Fig. 47)	(1)
22	23-16-0435	Field Insulator	(1)	46	06-75-3150	1/4-20x1 L.H. Skt. Cap Screw	(1)
23	18-42-1200	115 V. Field	(1)	47	48-66-3280	Chuck Key	(1)
24	06-57-2975	8-32 Flexlock Hex Nut	(2)				



SERVICE PARTS LIST

1/2" ELECTRIC DRILL

Catalog No. 1250-1

Starting Serial No. **459-3726**

Specify Catalog and Serial No. when ordering parts

BUL. 54-08-1081

REVISED BUL. 54-08-1080 DATE Jan. '74

WIRING INSTRUCTIONS 58-01-0216

950 R.P.M.

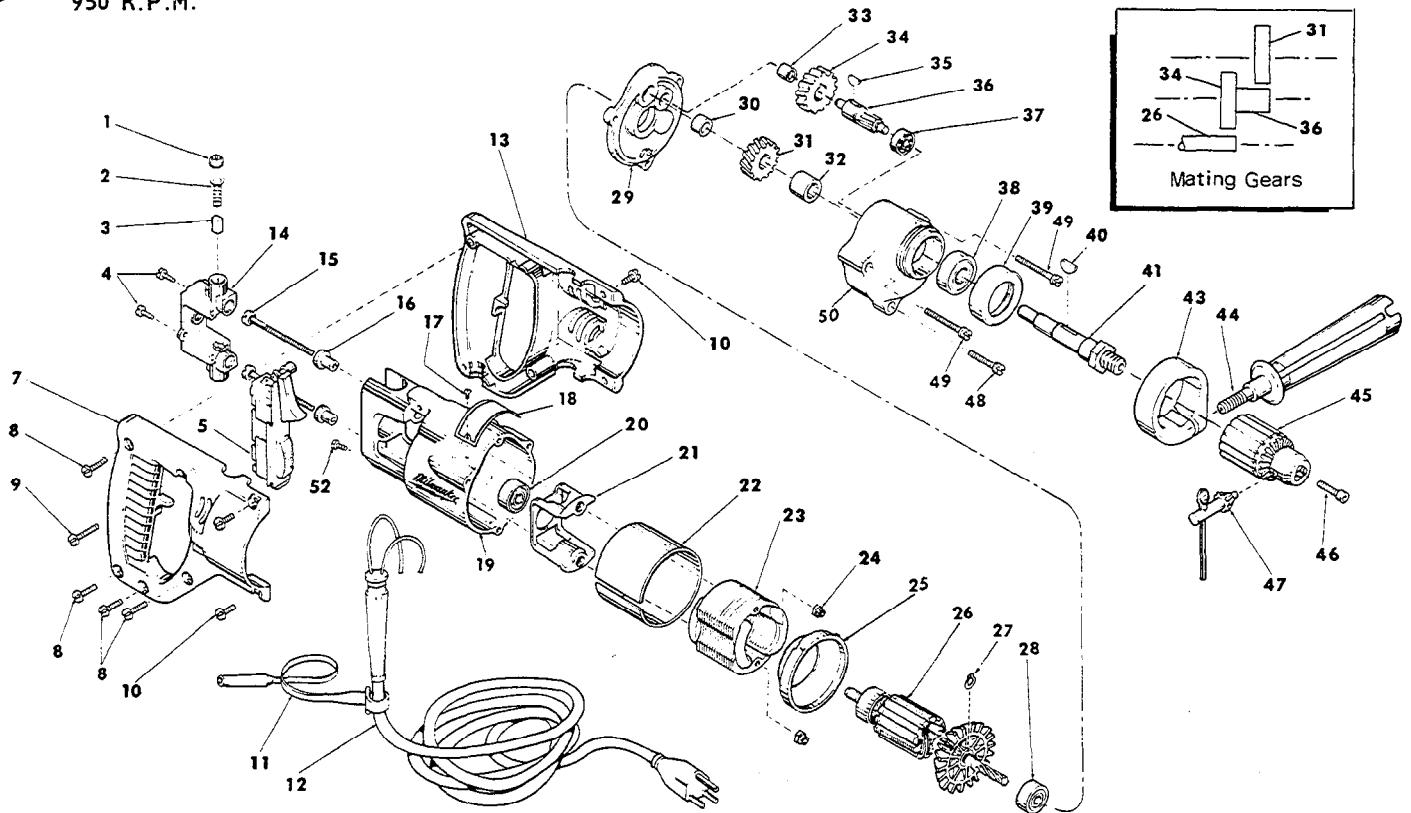


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	23-44-0120	Brush Retaining Screw	(2)	28	02-04-0940	Ball Bearing	(1)
2	23-52-0160	Brush Spring	(2)	★ 29	28-28-0582	Diaphragm	(1)
3	22-16-0250	Carbon Brush	(2)	30	02-50-2110	Needle Bearing	(1)
4	06-81-5475	6-32x3/8 Binding Hd. Sem	(2)	31	32-75-2001	Spindle Gear	(1)
5	23-66-0751	Switch	(1)	32	45-36-0210	Spindle Gear Spacer	(1)
7	31-44-0320	R.H. Half D Handle	(1)	33	02-50-1640	Needle Bearing	(1)
8	06-81-0400	8-32x3/4 Pan Hd. Screw	(4)	34	32-40-1241	Intermediate Gear	(1)
9	06-81-0470	8-32x1 Pan Hd. Screw	(1)	35	06-42-0800	Woodruff Key	(1)
10	06-81-0045	8-32x1/2 Pan Hd. Screw	(4)	36	36-66-2701	Intermediate Shaft	(1)
11	48-66-4040	Key Holder	(1)	37	02-04-0640	Ball Bearing	(1)
12	22-64-0385	Cord Set	(1)	38	02-04-1560	Ball Bearing	(1)
13	31-44-0321	L.H. Half D Handle	(1)	39	42-52-0071	Bearing Cap	(1)
14	22-22-0300	Brush Holder Assembly	(1)	40	06-42-1600	Woodruff Key	(1)
15	06-81-1050	8-32x2-7/16 Field Bolt	(2)	41	38-50-3651	Spindle	(1)
16	31-86-0120	Insulating Spacer	(2)	42	49-15-0200	Side Handle Assy.	(1)
17	06-85-0200	6x1/4 Rd. Hd. Type Z Screw	(2)			(Includes Fig. Nos. 43 & 44)	
18	12-99-0030	Nameplate	(1)	43	28-82-0130	Handle Ring	(1)
★ 19	28-50-6147	Motor Housing	(1)	★ 44	43-62-0550	Side Handle	(1)
★ 20	02-04-0891	Ball Bearing	(1)	45	48-66-1360	1/2" Chuck (Includes Fig. 47)	(1)
★ 21	31-55-0080	Coil Shield	(1)	46	06-75-3150	1/4-20x1 L.H. Skt. Cap Screw	(1)
★ 22	23-16-0455	Field Insulator	(1)	47	48-66-3280	Chuck Key	(1)
★ 23	18-42-1240	115 V. Field	(1)	48	06-81-6400	8-32x1-1/8 Fil. Hd. Sem	(1)
★ 24	06-57-2975	8-32 Flexlock Hex Nut	(2)	49	06-81-6705	8-32x1-7/8 Fil. Hd. Sem	(2)
★ 25	31-05-0050	Baffle	(1)	50	28-14-0681	Gear Case	(1)
★ 26	16-42-1425	115 V. Armature (Incl. Fig. No. 27)	(1)	★ 51	12-98-7081	Caution Plate (Not Shown)	(1)
27	34-60-0700	Snap Ring	(1)	52	06-81-8625	6-32x1/4 Ground Screw	(1)



SERVICE PARTS LIST

1/2" REVERSING DRILL

Catalog No. 1250-1

Starting Serial No. **459-4861**

Specify Catalog and Serial No. when ordering parts

BUL. 54-08-1082

REVISED BUL.
54-08-1081

DATE
FEB '78

WIRING INSTRUCTIONS
58-01-0218

950 R.P.M. FOR CAT. NO. 1250-3
6.2 AMPS (240V) TOOL USE:
18-36-0100 FIELD
16-36-0205 ARMATURE
22-16-0257 CARBON BRUSH
22-64-4100 CORD SET

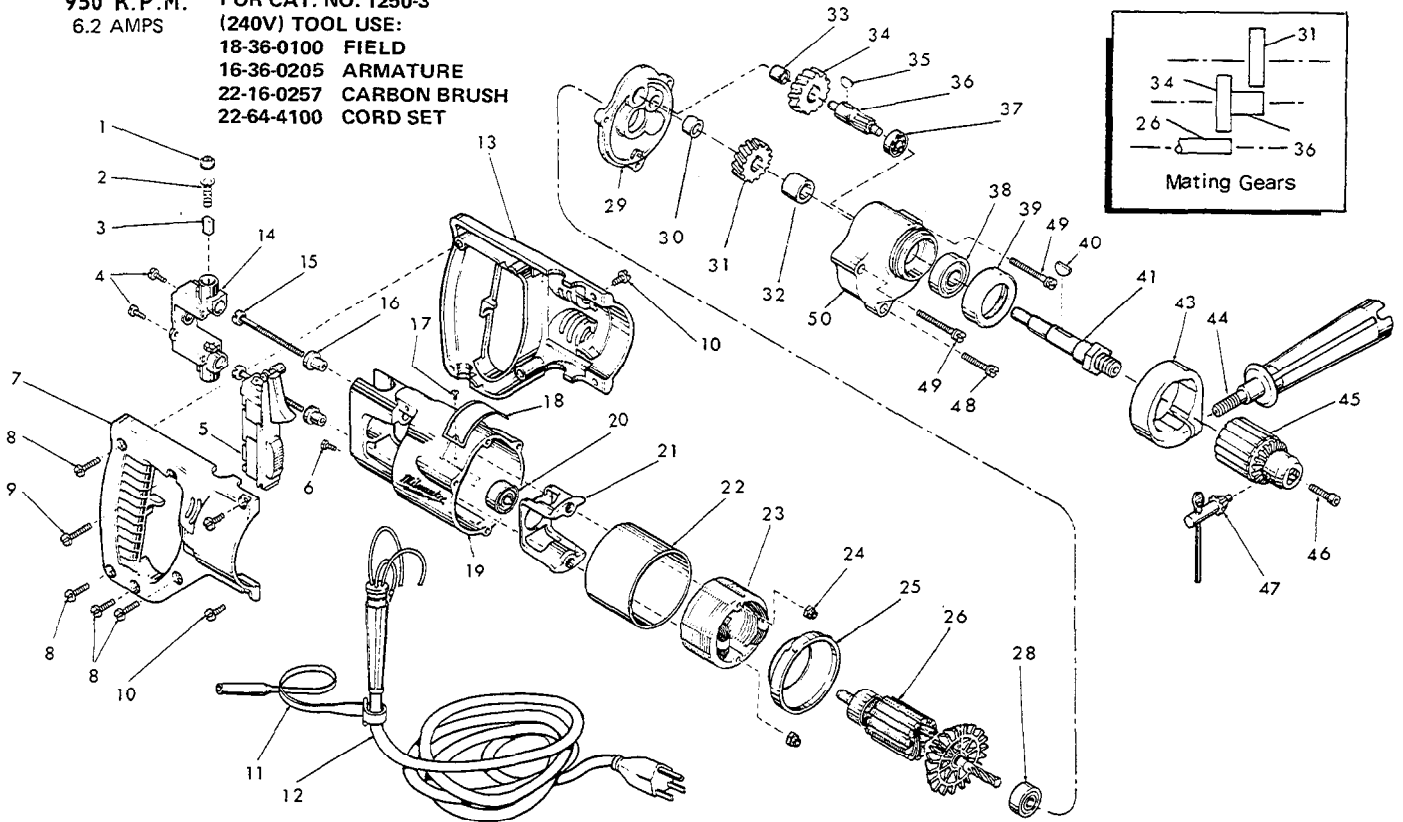


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	23-44-0120	Brush Retaining Screw	(2)	28	02-04-0940	Ball Bearing	(1)
2	23-52-0160	Brush Spring	(2)	29	28-28-0582	Diaphragm	(1)
3	22-16-0250	Carbon Brush	(2)	30	02-50-2110	Needle Bearing	(1)
4	06-81-5477	6-32x3/8 Phillips Pan Hd. Sem	(2)	31	32-75-2001	Spindle Gear	(1)
5	23-66-0751	Switch	(1)	32	45-36-0210	Spindle Gear Spacer	(1)
6	06-81-8625	6-32x1/4 Ground Screw	(1)	33	02-50-1640	Needle Bearing	(1)
★ 7	31-44-0326	R.H. Half D Handle	(1)	34	32-40-1241	Intermediate Gear	(1)
8	06-81-0402	8-32x3/4 Pan Hd. Screw	(4)	35	06-42-0800	Woodruff Key	(1)
9	06-81-0472	8-32x1 Pan Hd. Screw	(1)	36	36-66-2701	Intermediate Shaft	(1)
10	06-81-0047	8-32x1/2 Pan Hd. Screw	(4)	37	02-04-0640	Ball Bearing	(1)
11	48-66-4040	Key Holder	(1)	38	02-04-1560	Ball Bearing	(1)
12	22-64-0385	Cord Set	(1)	39	42-52-0071	Bearing Cap	(1)
13	31-44-0321	L.H. Half D Handle	(1)	40	06-42-1600	Woodruff Key	(1)
14	22-22-0300	Brush Holder Assembly	(1)	41	38-50-3651	Spindle	(1)
★ 15	06-81-1055	8-32x2-3/16 Field Bolt	(2)	42	49-15-0200	Side Handle Assy. (Includes Fig. Nos. 43 & 44)	(1)
16	31-86-0120	Insulating Spacer	(2)	43	28-82-0130	Handle Ring	(1)
17	06-85-0200	6x1/4 Rd. Hd. Type Z Screw	(2)	44	43-62-0550	Side Handle	(1)
18	12-99-0030	Nameplate	(1)	45	48-66-1360	1/2" Chuck (Includes Fig. 47)	(1)
19	28-50-6147	Motor Housing	(1)	46	06-75-3150	1/4-20x1 L.H. Skt. Cap Screw	(1)
20	02-04-0891	Ball Bearing	(1)	47	48-66-3280	Chuck Key	(1)
★ 21	31-55-0030	Coil Shield	(1)	48	06-81-6402	8-32x1-1/8 Fil. Hd. Sem	(1)
★ 22	23-16-0456	Field Insulator	(1)	49	06-81-6707	8-32x1-7/8 Fil. Hd. Sem	(2)
★ 23	18-30-0100	120 V. Field	(1)	50	28-14-0681	Gear Case	(1)
24	06-57-2975	8-32 Flexlock Hex Nut	(2)	51	12-98-7081	Caution Plate (Not Shown)	(1)
25	31-05-0050	Baffle	(1)				
★ 26	16-30-0205	120 V. Armature	(1)				



SERVICE PARTS LIST

1/2" REVERSING DRILL

Catalog No. 1250-1

Starting
Serial No. **459-8900**

Specify Catalog and Serial No. when ordering parts

BUL. 54-08-1083

REVISED BUL.
54-08-1082

DATE
Aug. '78

WIRING INSTRUCTIONS
58-01-0244

950 R.P.M.
6.2 AMPS

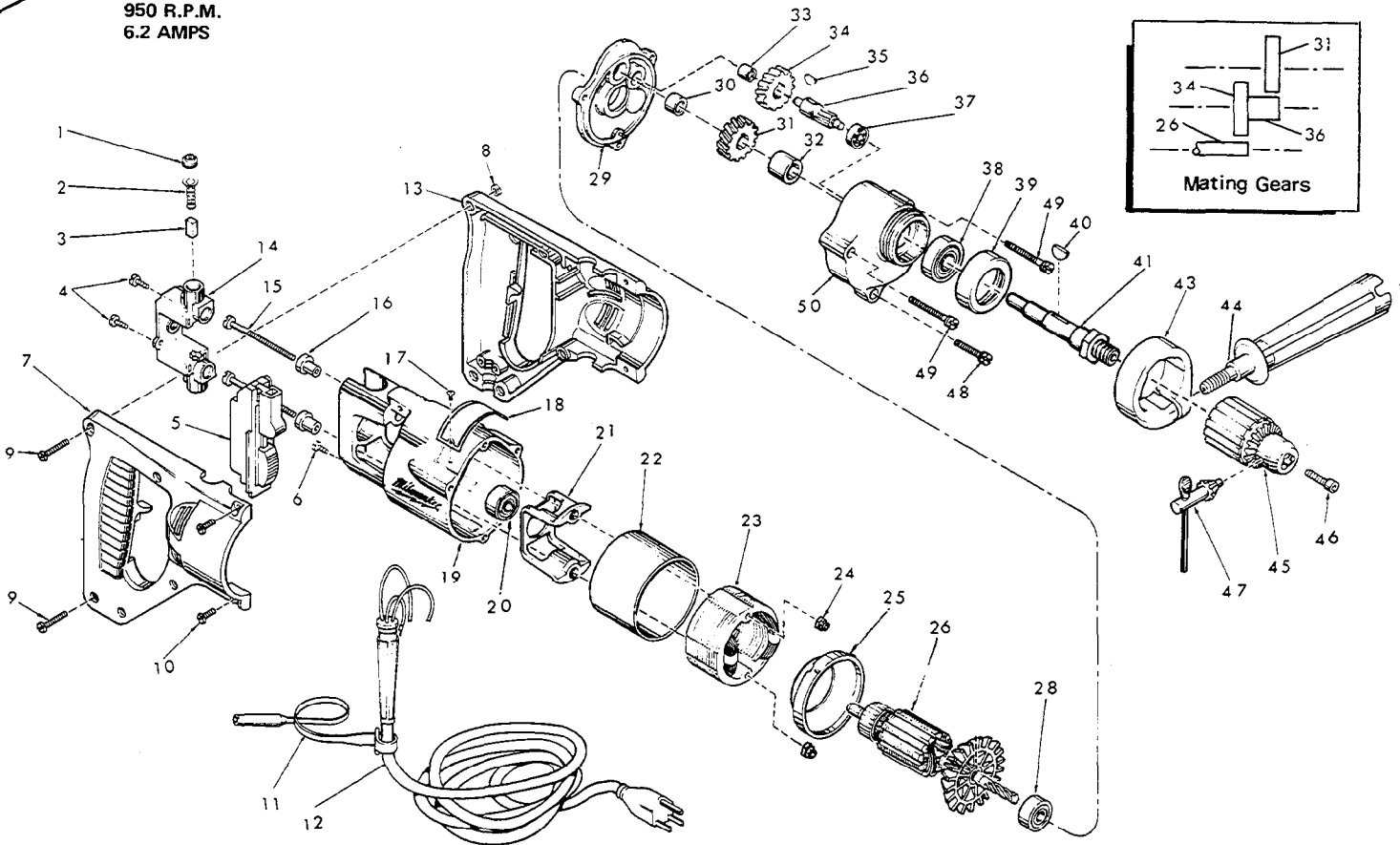


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	23-44-0120	Brush Retaining Screw	(2)	28	02-04-0940	Ball Bearing	(1)
2	23-52-0160	Brush Spring	(2)	29	28-28-0582	Diaphragm	(1)
3	22-16-0250	Carbon Brush	(2)	30	02-50-2110	Needle Bearing	(1)
4	06-81-5477	6-32x3/8 Phillips Pan Hd. Sem	(2)	31	32-75-2001	Spindle Gear	(1)
★ 5	23-66-1020	Switch	(1)	32	45-36-0210	Spindle Gear Spacer	(1)
6	06-81-8625	6-32x1/4 Ground Screw	(1)	33	02-50-1640	Needle Bearing	(1)
★ 7	31-44-0565	R.H. Half D Handle	(1)	34	32-40-1241	Intermediate Gear	(1)
★ 8	06-55-0825	8-32 Hex Nut	(5)	35	06-42-0800	Woodruff Key	(1)
9	06-81-0472	8-32x1 Pan Hd. Screw	(5)	36	36-66-2701	Intermediate Shaft	(1)
10	06-81-0047	8-32x1/2 Pan Hd. Screw	(4)	37	02-04-0640	Ball Bearing	(1)
11	48-66-4040	Key Holder	(1)	38	02-04-1560	Ball Bearing	(1)
★ 12	22-64-0405	Cord Set	(1)	39	42-52-0071	Bearing Cap	(1)
★ 13	31-44-0575	L.H. Half D Handle	(1)	40	06-42-1600	Woodruff Key	(1)
★ 14	22-22-0302	Brush Holder Assembly	(1)	41	38-50-3651	Spindle	(1)
15	06-81-1055	8-32x2-3/16 Field Bolt	(2)	42	49-15-0200	Side Handle Assy. (Includes Fig. Nos. 43 & 44)	(1)
16	31-86-0120	Insulating Spacer	(2)	43	28-82-0130	Handle Ring	(1)
17	06-85-0200	6x1/4 Rd. Hd. Type Z Screw	(2)	44	43-62-0550	Side Handle	(1)
18	12-99-0030	Nameplate	(1)	45	48-66-1360	1/2" Chuck (Includes Fig. 47)	(1)
19	28-50-6147	Motor Housing	(1)	46	06-75-3150	1/4-20x1 L.H. Skt. Cap Screw	(1)
20	02-04-0891	Ball Bearing	(1)	47	48-66-3280	Chuck Key	(1)
21	31-55-0030	Coil Shield	(1)	48	06-81-6402	8-32x1-1/8 Fil. Hd. Sem	(1)
22	23-16-0456	Field Insulator	(1)	49	06-81-6707	8-32x1-7/8 Fil. Hd. Sem	(2)
23	18-30-0100	120 V. Field	(1)	50	28-14-0681	Gear Case	(1)
24	06-57-2975	8-32 Flexlock Hex Nut	(2)	51	12-98-7081	Caution Plate (Not Shown)	(1)
25	31-05-0050	Baffle	(1)				
26	16-30-0205	120 V. Armature	(1)				



SERVICE PARTS LIST

BULLETIN NO.
54-08-1084

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN 54-08-1083	DATE May '83
1/2" REVERSING DRILL			
CATALOG NO. 1250-1		STARTING SERIAL NO. 459-11000	
CAT. NO. 1250-6		START SER. NO. 459-11000	BILINGUAL LABEL 10-98-6400

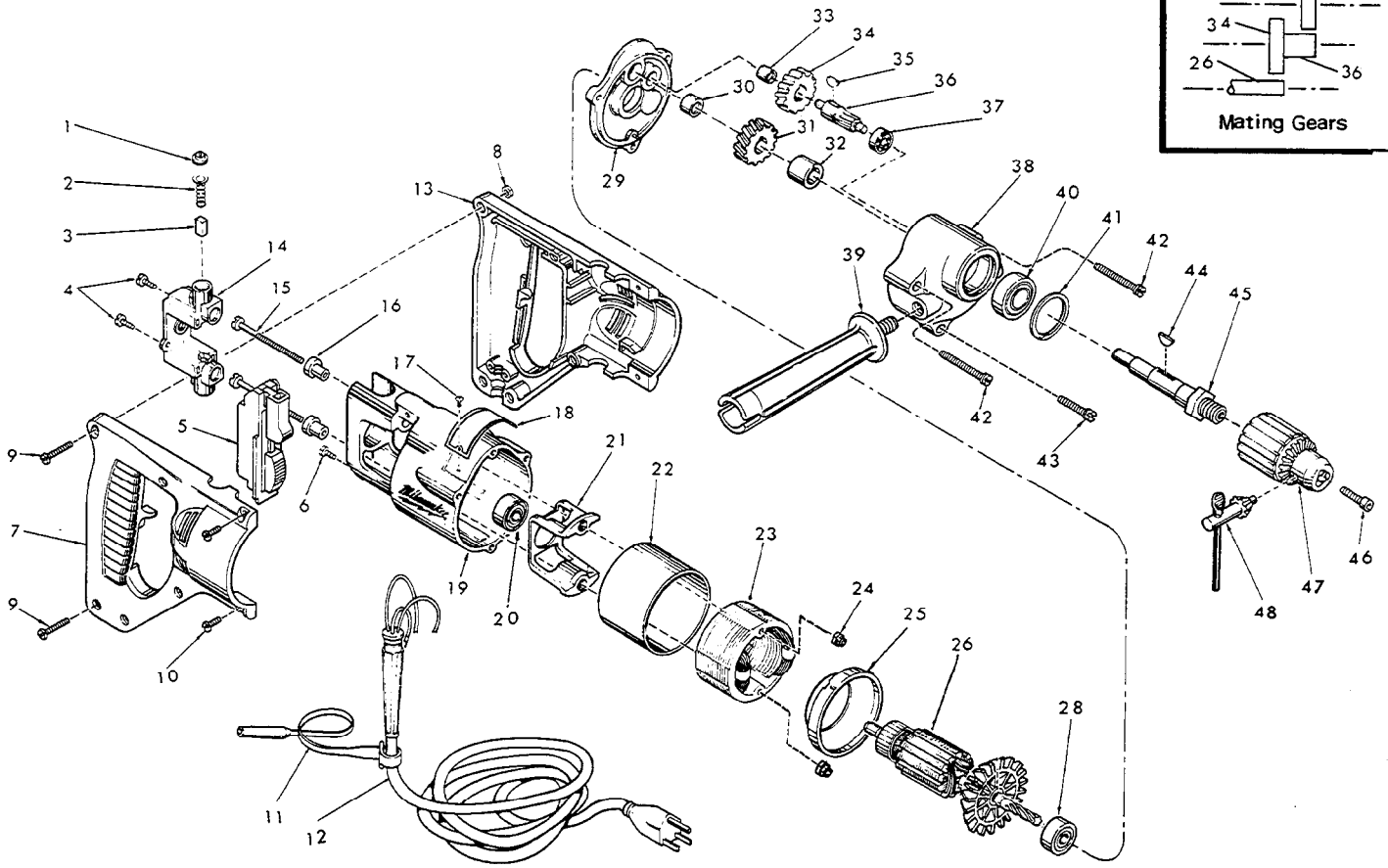
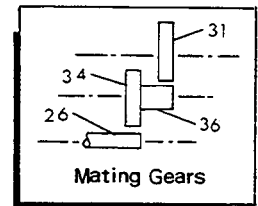


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	23-44-0120	Brush Retaining Screw	(2)	25	31-05-0050	Baffle	(1)
2	23-52-0160	Brush Spring	(2)	★26	16-30-0210	120 V. Armature	(1)
3	22-16-0250	Carbon Brush	(2)	★27	10-98-5987	Warning Label (Not Shown) Omit For Canadian Tools	(1)
★4	06-95-0116	6-32 x 5/8" Pan Hd. Taptite Screw	(2)	28	02-04-0940	Ball Bearing	(1)
5	23-66-1020	Switch	(1)	29	28-28-0582	Diaphragm	(1)
★6	06-95-5150	Ground Screw	(1)	30	02-50-2110	Needle Bearing	(1)
7	31-44-0565	R.H. Half D Handle	(1)	31	32-75-2001	Spindle Gear	(1)
★8	06-55-0835	8-32 Hex Nut	(5)	32	45-36-0210	Spindle Gear Spacer	(1)
★9	06-81-0473	8-32 x 1" Pan Hd. Pozidriv Screw	(5)	33	02-50-1640	Needle Bearing	(1)
★10	06-95-0700	8-32 x 1/2" Pan Hd. Taptite Screw	(4)	34	32-40-1241	Intermediate Gear	(1)
11	48-66-4040	Key Holder	(1)	35	06-42-0800	Woodruff Key	(1)
12	22-64-0405	Cord Set	(1)	★36	36-66-2701	Intermediate Shaft	(1)
13	31-44-0575	L.H. Half D Handle	(1)	37	02-04-0640	Ball Bearing	(1)
14	22-22-0302	Brush Holder Assembly	(1)	★38	28-14-0686	Gear Case	(1)
15	06-81-1055	8-32x2-3/16 Field Bolt	(2)	★39	43-62-0605	Side Handle	(1)
16	31-86-0120	Insulating Spacer	(2)	40	02-04-1560	Ball Bearing	(1)
17	06-85-0200	6x1/4 Rd. Hd. Type Z Screw	(2)	★41	34-80-2500	Retaining Ring	(1)
18	12-99-0030	Nameplate	(1)	42	06-81-6707	8-32x1-7/8 Fil. Hd. Sem	(2)
19	28-50-6147	Motor Housing	(1)	43	06-81-6402	8-32x1-1/8 Fil. Hd. Sem	(1)
20	02-04-0891	Ball Bearing	(1)	44	06-42-1600	Woodruff Key	(1)
21	31-55-0030	Coil Shield	(1)	45	38-50-3651	Spindle	(1)
22	23-16-0456	Field Insulator	(1)	46	06-75-3150	1/4-20x1 L.H. Skt. Cap Screw	(1)
23	18-30-0100	120 V. Field	(1)	47	48-66-1360	1/2" Chuck (Includes Fig. 48)	(1)
24	06-57-2975	8-32 Flexlock Hex Nut	(2)	48	48-66-3280	Chuck Key	(1)



SERVICE PARTS LIST

BULLETIN NO.
54-08-1085

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN 54-08-1084	DATE May '84
1/2" REVERSING DRILL			
CATALOG NO. 1250-1		STARTING SERIAL NO. 459-21000	
CAT. NO. 1250-6	START SER. NO. 459-21000	BILINGUAL LABEL 10-98-6400	

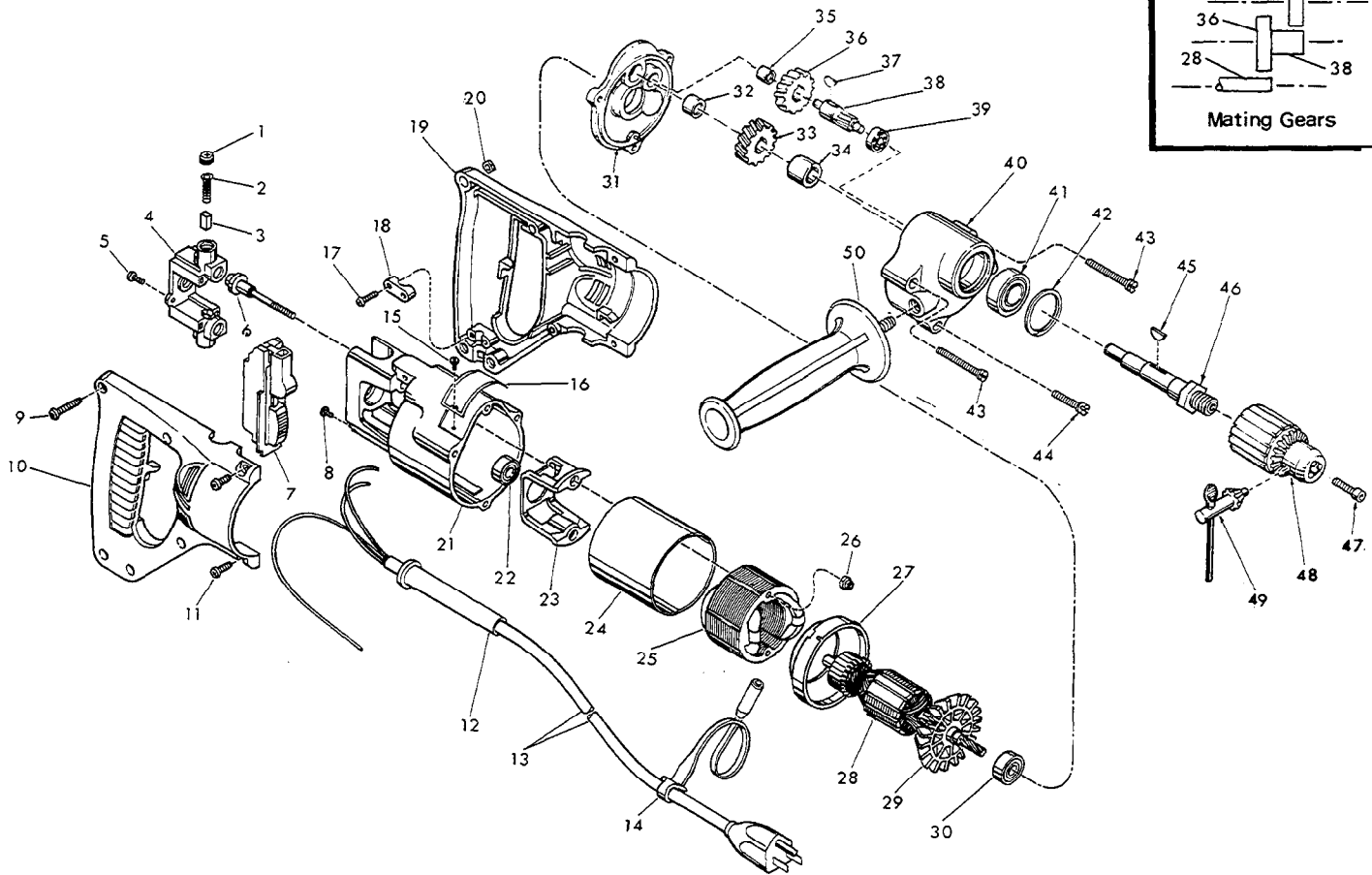
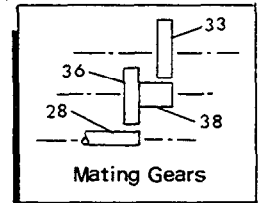


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
★	1	23-44-0190 Brush Retaining Screw	(2)	★	28	16-30-0225 120 V. Armature (Incl. Fig. No. 29)	(1)
★	2	23-52-0160 Brush Spring	(2)	★	29	22-84-0530 Fan Assembly	(1)
★	3	22-16-0275 Carbon Brush	(2)	★	30	02-04-0911 Ball Bearing	(1)
★	4	22-22-1330 Brush Holder Assembly	(1)	★	31	28-28-0585 Diaphragm	(1)
★	5	06-95-0075 6-32 x 3/8 Trus Hd. Taptite Screw	(2)	★	32	02-50-2110 Needle Bearing	(1)
★	6	06-81-1058 Insulated Field Bolt	(2)	★	33	32-75-2001 Spindle Gear	(1)
★	7	23-66-1020 Switch	(1)	★	34	45-36-0210 Spindle Gear Spacer	(1)
★	8	06-95-5150 Ground Screw	(1)	★	35	02-50-1640 Needle Bearing	(1)
★	9	06-81-0473 8-32 x 1" Pan Hd. Pozidriv Screw	(5)	★	36	32-40-1241 Intermediate Gear	(1)
★	10	31-44-1300 R.H. Half D. Handle	(1)	★	37	06-42-0800 Woodruff Key	(1)
★	11	06-95-0700 8-32 x 1/2" Pan Hd. Taptite Screw	(4)	★	38	36-66-2701 Intermediate Shaft	(1)
★	12	44-76-0150 Cord Protector	(1)	★	39	02-04-0640 Ball Bearing	(1)
★	13	22-64-0155 Cord Set	(1)	★	40	28-14-0686 Gear Case	(1)
★	14	48-66-4040 Key Holder	(1)	★	41	02-04-1560 Ball Bearing	(1)
★	15	06-85-0200 6 x 1/4 Rd. Hd. Type Z Screw	(2)	★	42	34-80-2500 Retaining Ring	(1)
★	16	12-99-0030 Nameplate Blank	(1)	★	43	06-95-5270 8-32 x 1-7/8 Fil. Hd. Sem	(2)
★	17	06-95-0216 8-16 x 5/8" Plastite Screw	(2)	★	44	06-95-5250 8-32 x 1-1/8 Fil. Hd. Sem	(1)
★	18	31-17-0156 Cord Clamp	(1)	★	45	06-42-1600 Woodruff Key	(1)
★	19	31-44-1305 L.H. Half D Handle	(1)	★	46	38-50-3651 Spindle	(1)
★	20	06-55-0835 8-32 Hex Nut	(5)	★	47	06-75-3150 1/4-20 x 1 L.H. Skt. Cap Screw	(1)
★	21	28-50-6201 Motor Housing	(1)	★	48	48-66-1360 1/2" Chuck (Incl. Fig. 49)	(1)
★	22	02-04-0845 Ball Bearing	(1)	★	49	48-66-3280 Chuck Key	(1)
★	23	31-55-0030 Coil Shield	(1)	★	50	43-62-0875 Side Handle	(1)
★	24	23-16-0456 Field Insulator	(1)	★	51	10-98-5987 Warning Label (Not Shown) Omit For Canadian Tools	
★	25	18-30-0100 120 V. Field	(1)				
★	26	06-57-2975 8-32 Flexlock Hex Nut	(2)				
★	27	31-05-0050 Baffle	(1)				



SERVICE PARTS LIST

BULLETIN NO.
54-08-1086

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN 54-08-1085	DATE Sept. '85
1/2" REVERSING DRILL			
CATALOG NO. 1250-1		STARTING SERIAL NO. 459-25000	
CAT. NO.		START SER. NO.	
		BILINGUAL LABEL	
WIRING INSTRUCTION 58-01-0244			

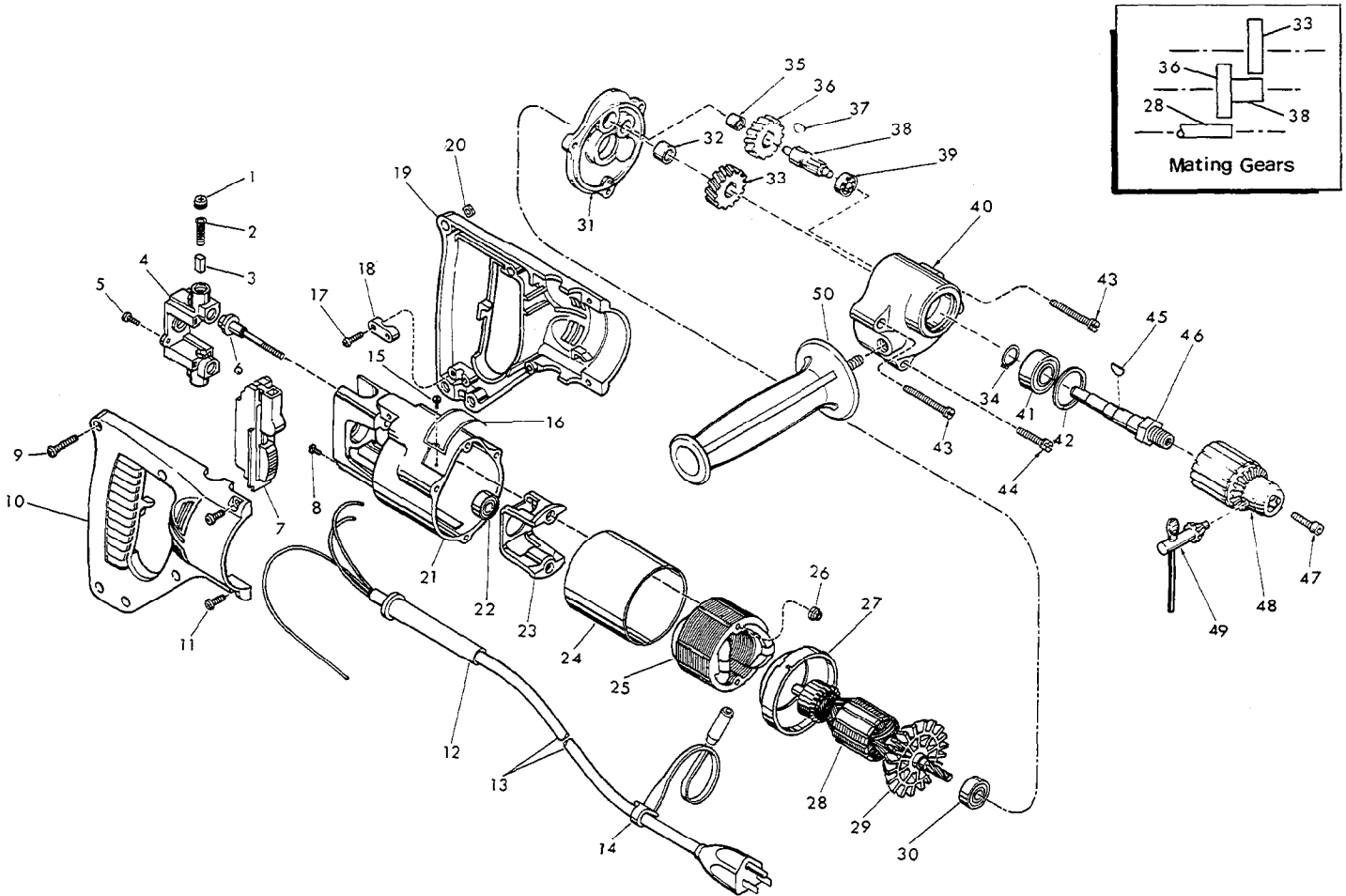


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	23-44-0190	Brush Retaining Screw	(2)	28	16-30-0225	120 V. Armature (Incl. Fig. No. 29)	(1)
2	23-52-0160	Brush Spring	(2)	29	22-84-0530	Fan Assembly	(1)
3	22-16-0275	Carbon Brush	(2)	30	02-04-0911	Ball Bearing	(1)
4	22-22-1330	Brush Holder Assembly	(1)	31	28-28-0585	Diaphragm	(1)
5	06-95-0075	6-32 x 3/8 Trus Hd. Taptite Screw	(2)	★ 32	02-50-2440	Needle Bearing	(1)
6	06-81-1058	Insulated Field Bolt	(2)	33	32-75-2001	Spindle Gear	(1)
7	23-66-1020	Switch	(1)	★ 34	34-60-1200	Retaining Ring	(1)
8	06-95-5150	Ground Screw	(1)	35	02-50-1640	Needle Bearing	(1)
9	06-81-0473	8-32 x 1" Pan Hd. Pozidriv Screw	(5)	36	32-40-1241	Intermediate Gear	(1)
10	31-44-1300	R.H. Half D. Handle	(1)	37	06-42-0800	Woodruff Key	(1)
11	06-95-0700	8-32 x 1/2" Pan Hd. Taptite Screw	(4)	38	36-66-2701	Intermediate Shaft	(1)
12	44-76-0150	Cord Protector	(1)	39	02-04-0640	Ball Bearing	(1)
13	22-64-0155	Cord Set	(1)	40	28-14-0686	Gear Case	(1)
14	48-66-4040	Key Holder	(1)	★ 41	02-04-1536	Ball Bearing	(1)
15	06-85-0200	6 x 1/4 Rd. Hd. Type Z Screw	(2)	42	34-80-2500	Retaining Ring	(1)
16	12-99-0030	Nameplate Blank	(1)	43	06-95-5270	8-32 x 1-7/8 Fil. Hd. Sem	(2)
17	06-95-0216	8-16 x 5/8" Plastite Screw	(2)	44	06-95-5250	8-32 x 1-1/8 Fil. Hd. Sem	(1)
18	31-17-0156	Cord Clamp	(1)	45	06-42-1600	Woodruff Key	(1)
19	31-44-1305	L.H. Half D Handle	(1)	★ 46	38-50-5470	Spindle	(1)
20	06-55-0835	8-32 Hex Nut	(5)	47	06-75-3150	1/4-20 x 1 L.H. Skt. Cap Screw	(1)
21	28-50-6201	Motor Housing	(1)	48	48-66-1360	1/2" Chuck (Incl. Fig. 49)	(1)
22	02-04-0845	Ball Bearing	(1)	49	48-66-3280	Chuck Key	(1)
23	31-55-0030	Coil Shield	(1)	50	43-62-0875	Side Handle	(1)
24	23-16-0456	Field Insulator	(1)	★ 51	10-98-5986	Warning Label (Not Shown)	
25	18-30-0100	120 V. Field	(1)				
26	06-57-2975	8-32 Flexlock Hex Nut	(2)				
27	31-05-0050	Baffle	(1)				



SERVICE PARTS LIST

BULLETIN NO.
54-08-1087

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
1/2" REVERSING DRILL		54-08-1086	Oct. '87
CATALOG NO. 1250-1	STARTING SERIAL NO. 459-26200	WIRING INSTRUCTION 58-01-0212	

EXAMPLE:



Component Parts (Small #) Are Included
When Ordering The Assembly Part (Large #).

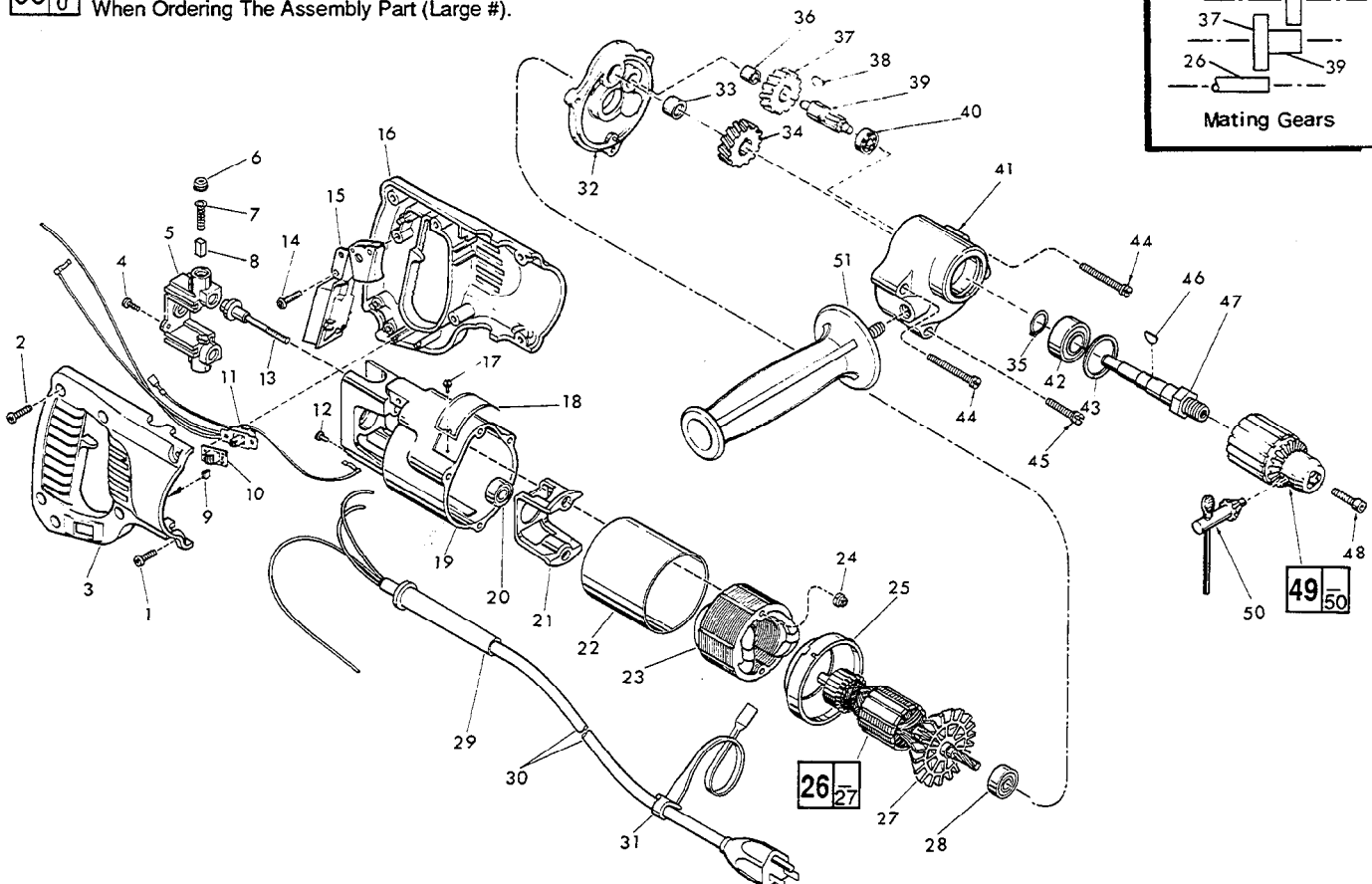
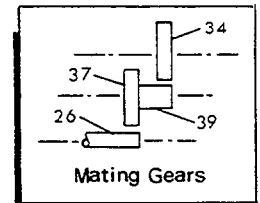


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
★ 1	06-82-5316	8-32x1/2" Slot Pan Hd. Torx Screw	(4)	30	22-64-0155	Cord Set	(1)
★ 2	06-82-7260	7-18 x 5/8" Pan Hd. Plastite Torx Screw	(5)	31	48-66-4040	Key Holder	(1)
★ 3	31-44-1466	Right Handle Half	(1)	★ 32	28-28-0586	Diaphragm	(1)
4	06-95-0075	6-32 x 3/8" Truss Hd. Taptite Screw	(2)	33	02-50-2440	Needle Bearing	(1)
5	22-22-1330	Brush Holder Assembly	(1)	34	32-75-2001	Spindle Gear	(1)
6	23-44-0190	Brush Retaining Cap	(2)	35	34-60-1200	Retaining Ring	(1)
7	23-52-0160	Brush Spring	(2)	36	02-50-1640	Needle Bearing	(1)
8	22-16-0275	Carbon Brush	(2)	37	32-40-1241	Intermediate Gear	(1)
★ 9	42-38-0240	Bumper	(2)	38	06-42-0800	Woodruff Key	(1)
★ 10	31-12-0195	Switch Cap	(1)	39	36-66-2701	Intermediate Shaft	(1)
★ 11	23-66-1453	Switch Assembly	(1)	40	02-04-0640	Ball Bearing	(1)
12	06-95-5150	6-32 x 1/4" Hex Hd. Taptite Sems	(1)	★ 41	28-14-1910	Gear Case	(1)
13	06-81-1058	8-32 x 2.19 Field Bolt	(2)	42	02-04-1536	Ball Bearing	(1)
★ 14	06-82-7260	7-18 x 5/8" Pan Hd. Plastite Torx Screw	(1)	43	34-80-2500	Retaining Ring	(1)
★ 15	23-66-0167	On-Off Switch	(1)	★ 44	06-82-5502	8-32 x 2-1/4" Pan Taptite Torx	(2)
★ 16	31-44-1471	Left Handle Half	(1)	★ 45	06-82-5404	8-32 x 1-3/8" Pan Taptite Torx	(1)
17	06-85-0200	Nameplate Screw	(2)	46	06-42-1600	Woodruff Key	(1)
★ 18	12-99-0043	Nameplate Blank	(1)	47	38-50-5470	Spindle	(1)
19	28-50-6201	Motor Housing	(1)	48	06-75-3150	1/4-20 x 1 L.H. Skt. Cap Screw	(1)
20	02-04-0845	Ball Bearing	(1)	49	48-66-1360	1/2" Chuck	(1)
21	31-55-0030	Coil Shield	(1)	50	48-66-3280	Chuck Key	(1)
22	23-16-0456	Field Insulator	(1)	51	43-62-0875	Side Handle	(1)
23	18-30-0100	120 V. Field	(1)				
24	06-57-2975	8-32 Flexlock Hex Nut	(2)				
25	31-05-0050	Baffle	(1)				
26	16-30-0225	120 V. Armature	(1)				
27	22-84-0530	Fan Assembly	(1)				
28	02-04-0911	Ball Bearing	(1)				
29	44-76-0150	Cord Protector	(1)				

LUBRICATION:

41 3-1/4 Oz. Type "A" Grease, 49-08-0800.



SERVICE PARTS LIST

**BULLETIN NO.
54-08-1088**

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN 54-08-1087	DATE Jan. '94
1/2" REVERSING DRILL			
CATALOG NO.	1250-1	STARTING SERIAL NO.	459A
			WIRING INSTRUCTION 58-01-0212

EXAMPLE:
Component Parts (Small #)
Are Included When Ordering
The Assembly (Large #).

00
0

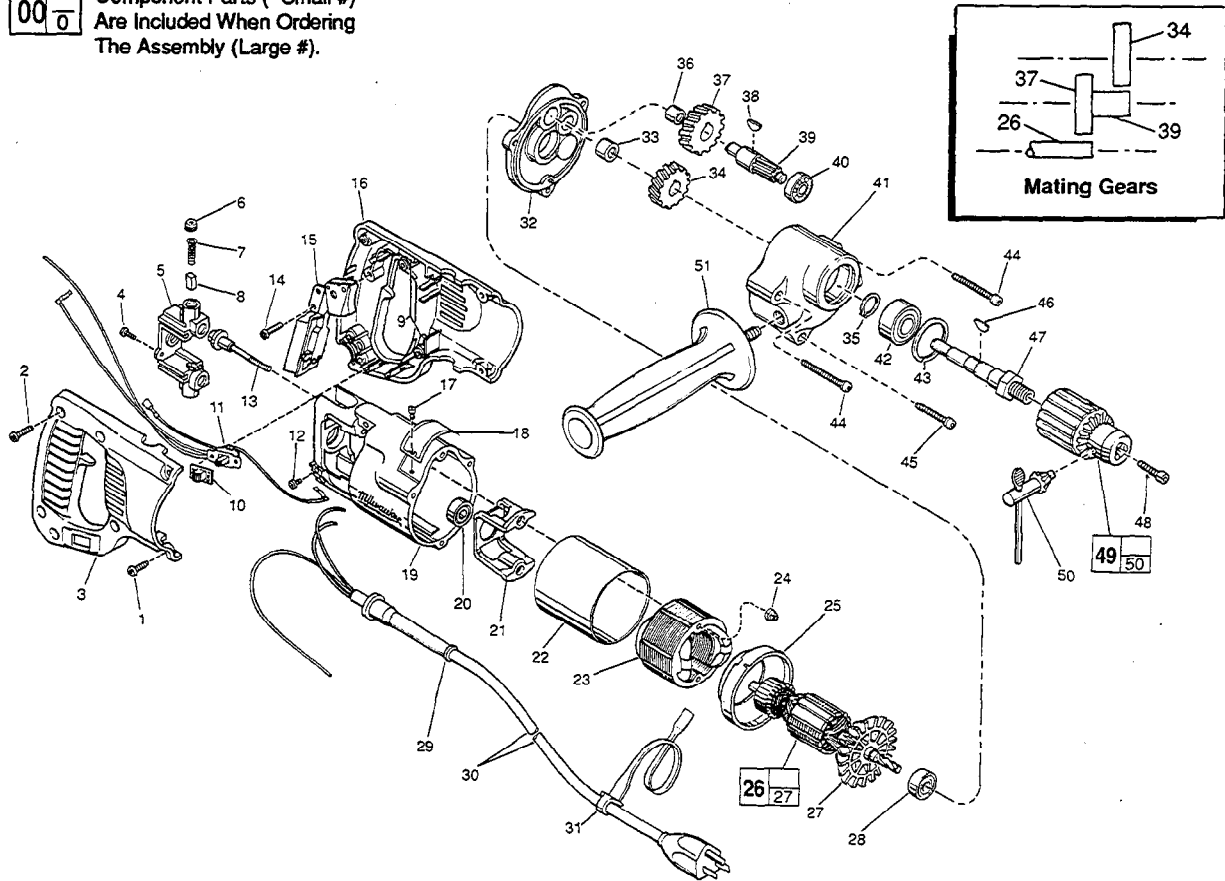


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
	1	06-82-5316 8-32 x 1/2" Pan Hd. Taptite T-20	(2)
★	2	06-82-7270 8-16 x 5/8" Pan Hd. Plastite T-20	(5)
★	3	31-44-1467 Right Handle Half	(1)
	4	06-95-0075 6-32 x 3/8" Truss Hd. Taptite Screw	(2)
	5	22-22-1330 Brush Holder Assembly	(1)
	6	23-44-0190 Brush Retaining Cap	(2)
	7	23-52-0160 Brush Spring	(2)
	8	22-16-0275 Carbon Brush	(2)
★	9	14-46-1001 Foam Slug Kit (10 Slugs)	(2)
★	10	31-12-0196 Switch Cap	(1)
★	11	23-66-1875 Switch Assembly	(1)
	12	06-95-5150 6-32 x 1/4" Hex Hd. Taptite Sems	(1)
	13	06-81-1058 8-32 x 2.19 Field Bolt	(2)
★	14	06-82-7270 8-16 x 5/8" Pan Hd. Plastite T-20	(1)
	15	23-66-0167 On-Off Switch	(1)
★	16	31-44-1656 Left Handle Half	(1)
★	17	06-72-1720 Nameplate Rivet	(2)
★	18	12-99-1750 Service Nameplate	(1)
★	19	28-50-6220 Motor Housing	(1)
	20	02-04-0845 Ball Bearing	(1)
	21	31-55-0030 Coil Shield	(1)
	22	23-16-0456 Field Insulator	(1)
	23	18-30-0100 120 V. Field	(1)
	24	06-57-2975 8-32 Flexlock Hex Nut	(2)
	25	31-05-0050 Baffle	(1)
	26	16-30-0225 120 V. Armature	(1)
★	27	22-84-0531 Fan Assembly	(1)
	28	02-04-0911 Ball Bearing	(1)
★	29	44-76-0210 Cord Protector	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
★	30	22-64-3190 Cord Set	(1)
	31	48-66-4040 Key Holder	(1)
★	32	28-28-0601 Diaphragm	(1)
	33	02-50-2440 Needle Bearing	(1)
	34	32-75-2001 Spindle Gear	(1)
	35	34-60-1200 Retaining Ring	(1)
	36	02-50-1640 Needle Bearing	(1)
	37	32-40-1241 Intermediate Gear	(1)
	38	06-42-0800 Woodruff Key	(1)
	39	36-66-2701 Intermediate Shaft	(1)
	40	02-04-0640 Ball Bearing	(1)
	41	28-14-1910 Gear Case	(1)
	42	02-04-1536 Ball Bearing	(1)
	43	34-80-2500 Retaining Ring	(1)
	44	06-82-5502 8-32 x 2-1/4" Pan Hd. Taptite T-20	(2)
	45	06-82-5404 8-32 x 1-3/8" Pan Hd. Taptite T-20	(1)
	46	06-42-1600 Woodruff Key	(1)
	47	38-50-5470 Spindle	(1)
	48	06-75-3150 1/4-20 x 1 L.H. Skt. Cap Screw	(1)
	49	48-66-1360 1/2" Chuck	(1)
	50	48-66-3280 Chuck Key	(1)
	51	43-62-0875 Side Handle	(1)

LUBRICATION:

41 3-1/4 Oz. Type "A" Grease, No. 49-08-0800.



SERVICE PARTS LIST

BULLETIN NO.
54-08-1089

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS	
1/2" REVERSING DRILL	
CATALOG NO. 1250-1	STARTING SERIAL NO. 459B
FOR SERIAL NUMBERS: 459B394510000 TO 459B395070065 USE SERVICE PARTS LIST ON REVERSE SIDE OF THIS BULLETIN	

REVISED BULLETIN 54-08-1088	DATE Mar. '95
WIRING INSTRUCTION 58-01-0771	

EXAMPLE:
Component Parts (Small #)
Are Included When Ordering
The Assembly (Large #).

00

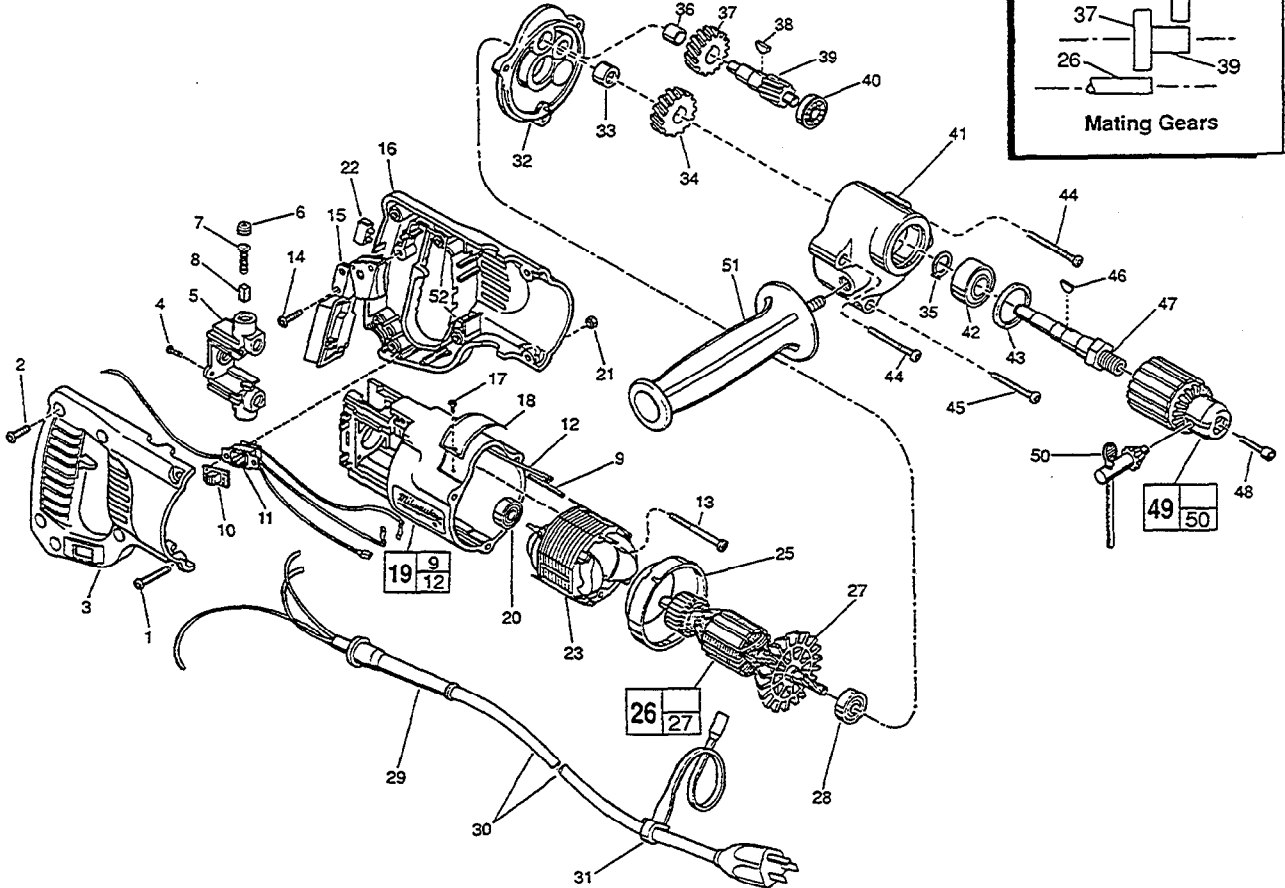
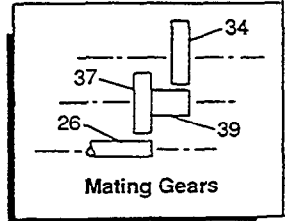


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
★ 1	06-82-2390	8-32 x 1-1/4" Pan Hd. T-20	(2)
2	06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20	(5)
★ 3	31-44-1651	Right Handle Half	(1)
★ 4	06-82-7240	6-19 x 1/2" Pan Hd. Plastite T-15	(2)
★ 5	22-22-1380	Brush Holder Assembly	(1)
6	23-44-0190	Brush Retaining Cap	(2)
7	23-52-0160	Brush Spring	(2)
8	22-16-0275	Carbon Brush	(2)
★ 9	44-60-0530	Ground Pin	(1)
10	31-12-0196	Switch Cap	(1)
★ 11	23-66-1868	Switch Assembly	(1)
★ 12	23-94-6100	Ground Wire Assembly	(1)
★ 13	06-82-7410	8-16 x 1-7/8" Pan Hd. Plastite T-20	(2)
14	06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20	(1)
15	23-66-0167	On-Off Switch	(1)
16	31-44-1656	Left Handle Half	(1)
17	06-72-1720	Nameplate Rivet	(2)
18	12-99-1750	Service Nameplate	(1)
★ 19	31-50-0846	Motor Housing Assembly	(1)
20	02-04-0845	Ball Bearing	(1)
★ 21	06-55-0835	8-32 Hex Nut	(2)
★ 22	22-56-0456	Terminal Block	(1)
★ 23	18-31-0100	120 V. Field	(1)
★ 24	31-50-0020	Motor Housing	(1)
25	31-05-0050	Baffle	(1)
26	16-30-0225	120 V. Armature	(1)
27	22-84-0531	Fan Assembly	(1)
28	02-04-0911	Ball Bearing	(1)
29	44-76-0210	Cord Protector	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
30	22-64-3190	Cord Set	(1)
31	48-66-4040	Key Holder	(1)
32	28-28-0601	Diaphragm	(1)
33	02-50-2440	Needle Bearing	(1)
34	32-75-2001	Spindle Gear	(1)
35	34-60-1200	Retaining Ring	(1)
36	02-50-1640	Needle Bearing	(1)
37	32-40-1241	Intermediate Gear	(1)
38	06-42-0800	Woodruff Key	(1)
39	36-66-2701	Intermediate Shaft	(1)
40	02-04-0640	Ball Bearing	(1)
41	28-14-1910	Gear Case	(1)
42	02-04-1536	Ball Bearing	(1)
43	34-80-2500	Retaining Ring	(1)
★ 44	06-82-7453	8-16 x 2-1/4" Pan Hd. Plastite T-20	(2)
★ 45	06-82-7354	8-16 x 1-3/8" Pan Hd. Plastite T-20	(1)
46	06-42-1600	Woodruff Key	(1)
47	38-50-5470	Spindle	(1)
48	06-75-3150	1/4-20 x 1 L.H. Skt. Cap Screw	(1)
49	48-66-1360	1/2" Chuck	(1)
50	48-66-3280	Chuck Key	(1)
51	43-62-0875	Side Handle	(1)
52	14-46-1001	Foam Slug Kit (10 Slugs)	(2)

LUBRICATION:
41 3-1/4 Oz. Type "A" Grease, No. 49-08-0800.



SERVICE PARTS LIST

BULLETIN NO.

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
1/2" REVERSING DRILL			
CATALOG NO. 1250-1	STARTING SERIAL NO.	WIRING INSTRUCTION 58-01-0773	

EXAMPLE:
Component Parts (Small #)
Are Included When Ordering
The Assembly (Large #).

00 0

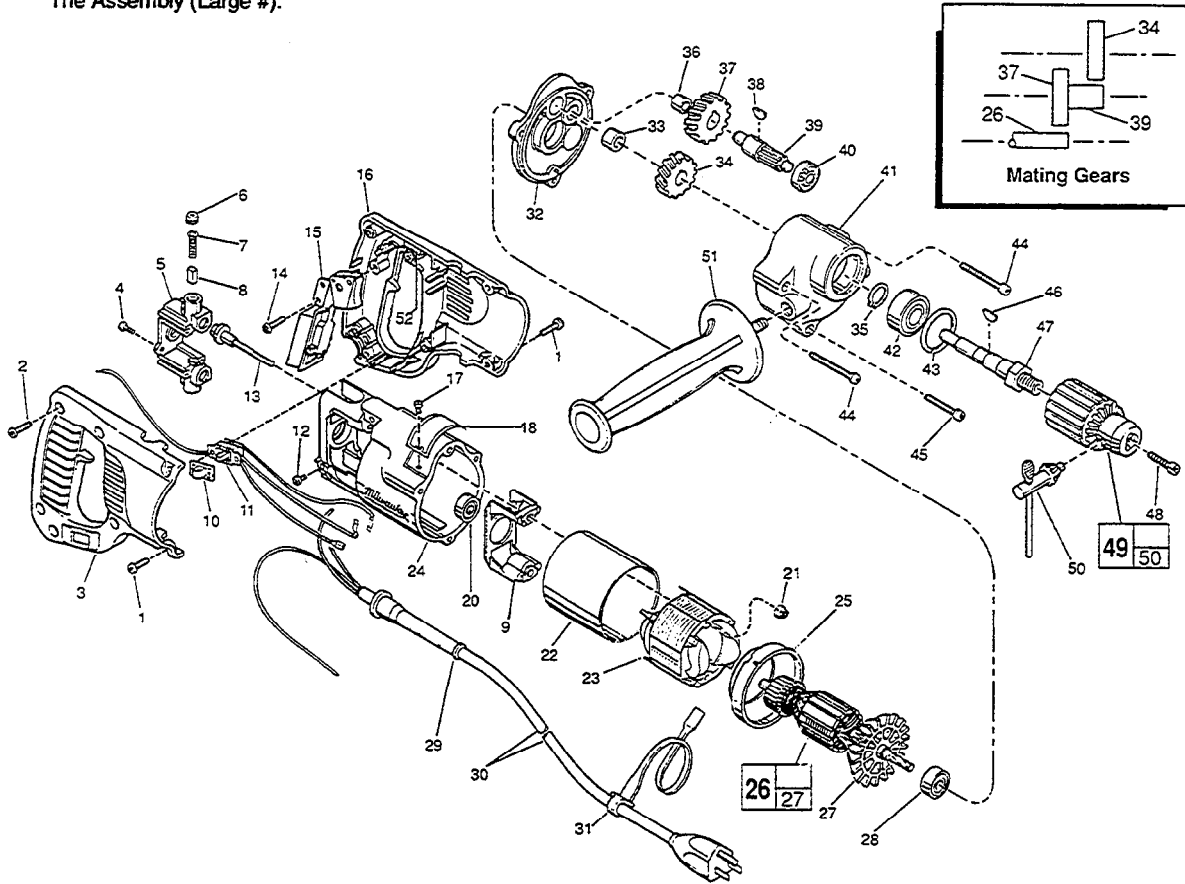


FIG. PART NO.	DESCRIPTION OF PART	NO. REQ.
★ 1 06-82-5316	8-32 x 1/2" Pan Hd. Slk. Taptite T-20	(4)
2 06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20	(5)
3 31-44-1651	Right Handle Half	(1)
★ 4 06-95-0075	6-32 x 3/8" Truss Hd. Taptite T-10	(2)
5 22-22-1380	Brush Holder Assembly	(1)
6 23-44-0190	Brush Retaining Cap	(2)
7 23-52-0150	Brush Spring	(2)
8 22-16-0275	Carbon Brush	(2)
★ 9 31-55-0190	Coil Shield	(1)
10 31-12-0196	Switch Cap	(1)
11 23-66-1868	Switch Assembly	(1)
★ 12 06-95-5150	6-32 x 1/4" Hex Hd. Taptite Sems	(1)
★ 13 06-81-1060	8-32 x 2-1/4" Field Bolt	(2)
14 06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20	(1)
15 23-66-0167	On-Off Switch	(1)
16 31-44-1656	Left Handle Half	(1)
17 06-72-1720	Nameplate Rivet	(2)
18 12-99-1750	Service Nameplate	(1)
20 02-04-0845	Ball Bearing	(1)
★ 21 06-57-2975	8-32 Flexlock Hex Nut	(2)
★ 22 23-16-0456	Field Insulator	(1)
23 18-31-0100	120 V. Field	(1)
★ 24 28-50-6220	Motor Housing	(1)
25 31-05-0050	Baffle	(1)
26 16-30-0225	120 V. Armature	(1)
27 22-84-0531	Fan Assembly	(1)
28 02-04-0911	Ball Bearing	(1)
29 44-76-0210	Cord Protector	(1)

FIG. PART NO.	DESCRIPTION OF PART	NO. REQ.
30 22-64-3190	Cord Set	(1)
31 48-66-4040	Key Holder	(1)
32 28-28-0601	Diaphragm	(1)
33 02-50-2440	Needle Bearing	(1)
34 32-75-2001	Spindle Gear	(1)
35 34-60-1200	Retaining Ring	(1)
36 02-50-1640	Needle Bearing	(1)
37 32-40-1241	Intermediate Gear	(1)
38 06-42-0800	Woodruff Key	(1)
39 36-66-2701	Intermediate Shaft	(1)
40 02-04-0640	Ball Bearing	(1)
41 28-14-1910	Gear Case	(1)
42 02-04-1536	Ball Bearing	(1)
43 34-60-2500	Retaining Ring	(1)
★ 44 06-82-5502	8-32 x 2-1/4" Pan Hd. Taptite T-20	(2)
★ 45 06-82-5404	8-32 x 1-3/8" Pan Hd. Taptite T-20	(1)
46 06-42-1600	Woodruff Key	(1)
47 38-50-5470	Spindle	(1)
48 06-75-3150	1/4-20 x 1 L.H. Skt. Cap Screw	(1)
49 48-66-1360	1/2" Chuck	(1)
50 48-66-3280	Chuck Key	(1)
51 43-62-0875	Side Handle	(1)
★ 52 14-46-1001	Foam Slug Kit (10 Slugs)	(1)

LUBRICATION:

41 3-1/4 Oz. Type "A" Grease, No. 49-08-0800.



SERVICE PARTS LIST

BULLETIN NO.
54-08-1090

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
1/2" REVERSING DRILL		54-08-1089	Dec. '94
CATALOG NO.	1250-1	WIRING INSTRUCTION	
STARTING SERIAL NO.	459C	58-01-0773	

EXAMPLE:
Component Parts (Small #)
Are Included When Ordering
The Assembly (Large #).

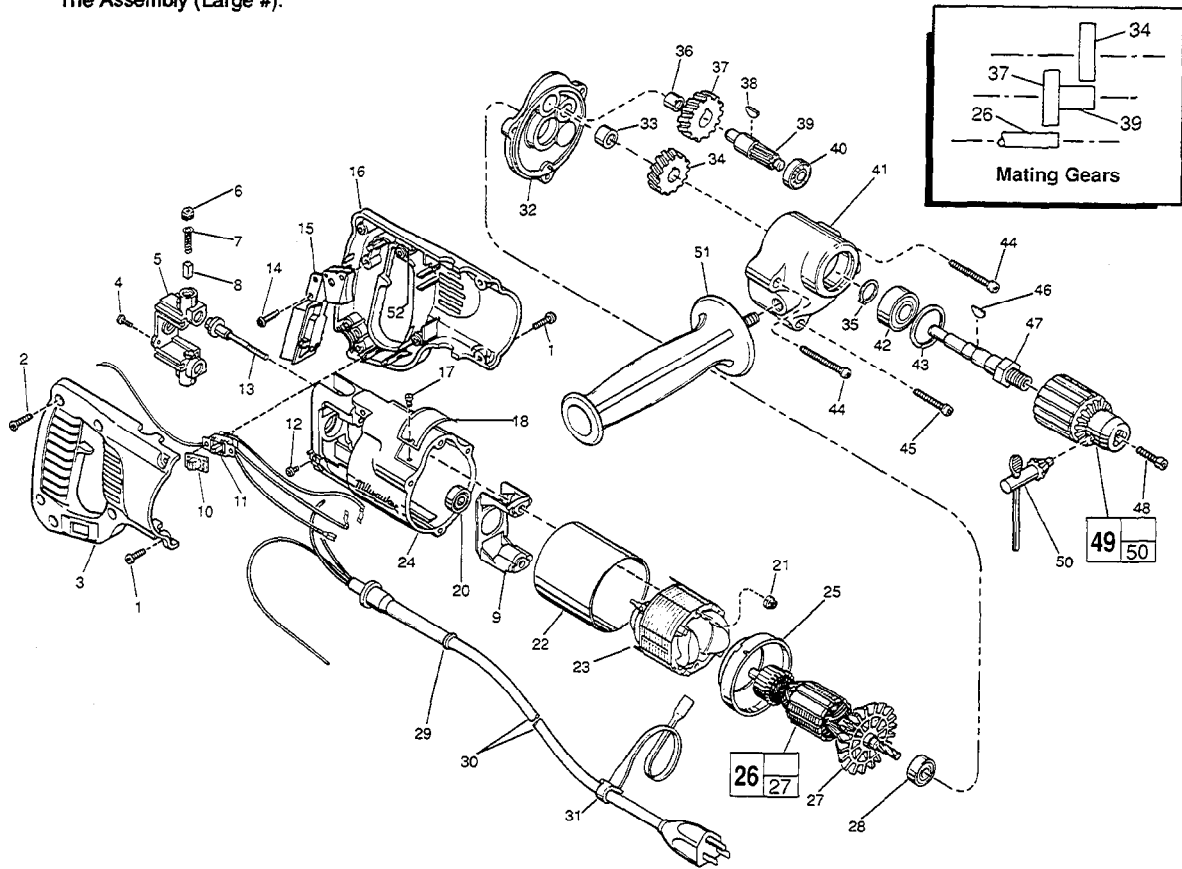


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
★	1	8-32 x 1/2" Pan Hd. Stt. Taptite T-20	(4)
	2	8-16 x 5/8" Pan Hd. Plastite T-20	(5)
	3	Right Handle Half	(1)
★	4	6-32 x 3/8" Truss Hd. Taptite T-10	(2)
	5	Brush Holder Assembly	(1)
	6	Brush Retaining Cap	(2)
	7	Brush Spring	(2)
	8	Carbon Brush	(2)
★	9	Coil Shield	(1)
	10	Switch Cap	(1)
	11	Switch Assembly	(1)
★	12	6-32 x 1/4" Hex Hd. Taptite Sems	(1)
★	13	8-32 x 2-1/4" Field Bolt	(2)
	14	8-16 x 5/8" Pan Hd. Plastite T-20	(1)
	15	On-Off Switch	(1)
	16	Left Handle Half	(1)
	17	Nameplate Rivet	(2)
	18	Service Nameplate	(1)
	20	Ball Bearing	(1)
★	21	8-32 Flexlock Hex Nut	(2)
★	22	Field Insulator	(1)
	23	120 V. Field	(1)
★	24	Motor Housing	(1)
	25	Baffle	(1)
	26	120 V. Armature	(1)
	27	Fan Assembly	(1)
	28	Ball Bearing	(1)
	29	Cord Protector	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
	30	22-64-3190 Cord Set	(1)
	31	48-66-4040 Key Holder	(1)
	32	28-28-0601 Diaphragm	(1)
	33	02-50-2440 Needle Bearing	(1)
	34	32-75-2001 Spindle Gear	(1)
	35	34-60-1200 Retaining Ring	(1)
	36	02-50-1640 Needle Bearing	(1)
	37	32-40-1241 Intermediate Gear	(1)
	38	06-42-0800 Woodruff Key	(1)
	39	36-66-2701 Intermediate Shaft	(1)
	40	02-04-0640 Ball Bearing	(1)
	41	28-14-1910 Gear Case	(1)
	42	02-04-1536 Ball Bearing	(1)
	43	34-80-2500 Retaining Ring	(1)
★	44	06-82-5502 8-32 x 2-1/4" Pan Hd. Taptite T-20	(2)
★	45	06-82-5404 8-32 x 1-3/8" Pan Hd. Taptite T-20	(1)
	46	06-42-1600 Woodruff Key	(1)
	47	38-50-5470 Spindle	(1)
	48	06-75-3150 1/4-20 x 1 L.H. Skt. Cap Screw	(1)
	49	48-66-1360 1/2" Chuck	(1)
	50	48-66-3280 Chuck Key	(1)
	51	43-62-0875 Side Handle	(1)
★	52	14-46-1001 Foam Slug Kit (10 Slugs)	(1)

LUBRICATION:

41 3-1/4 Oz. Type "A" Grease, No. 49-08-0800.



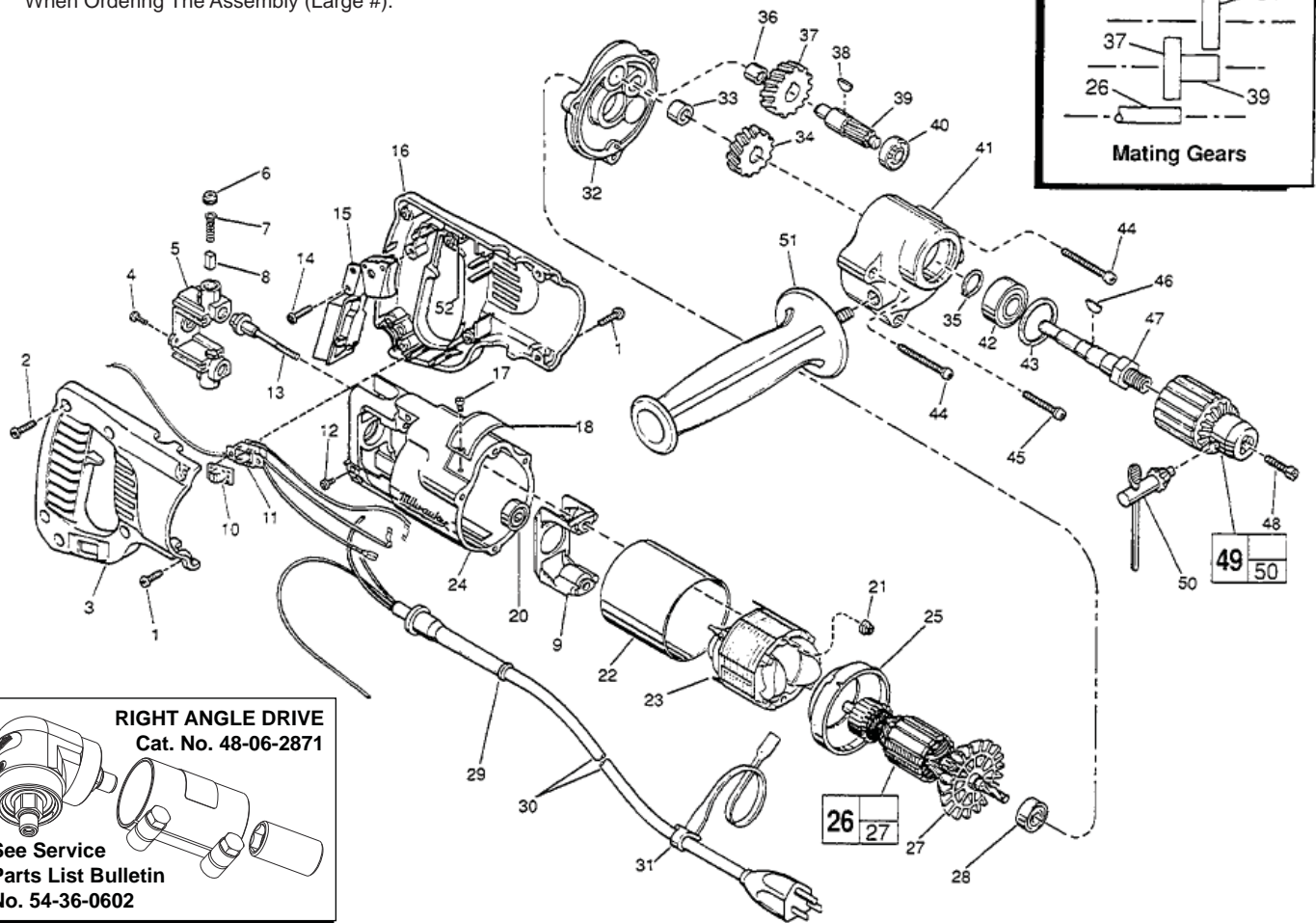
SERVICE PARTS LIST

BULLETIN NO.
54-08-1091

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS	
1/2" REVERSING DRILL	
CATALOG NO. 1250-1	STARTING SERIAL NO. 459D

REVISED BULLETIN 54-08-1090	DATE Jan. 2013
WIRING INSTRUCTION 58-01-0773	

EXAMPLE:
Component Parts (Small #) Are Included
When Ordering The Assembly (Large #).



RIGHT ANGLE DRIVE
Cat. No. 48-06-2871

See Service Parts List Bulletin No. 54-36-0602

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	06-82-5316	8-32 x 1/2" Pan Hd. Slit. Taptite T-20	(4)	31	48-66-4040	Key Holder	(1)
2	06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20	(5)	32	28-28-0601	Diaphragm	(1)
3	31-44-1651	Right Handle Half	(1)	33	02-50-2440	Needle Bearing	(1)
4	06-95-0075	6-32 x 3/8" Truss Hd. Taptite T-10	(2)	★ 34	32-75-2011	Spindle Gear	(1)
5	22-22-1380	Brush Holder Assembly	(1)	35	34-60-1200	Retaining Ring	(1)
6	23-44-0190	Brush Retaining Cap	(2)	36	02-50-1640	Needle Bearing	(1)
7	23-52-0160	Brush Spring	(2)	★ 37	32-40-1251	Intermediate Gear	(1)
8	22-16-0275	Carbon Brush	(2)	38	06-42-0800	Woodruff Key	(1)
9	31-55-0190	Coil Shield	(1)	★ 39	36-66-2711	Intermediate Shaft	(1)
10	31-12-0196	Switch Cap	(1)	★ 40	02-04-0725	Ball Bearing	(1)
11	23-66-1868	Switch Assembly	(1)	★ 41	28-14-1921	Gear Case	(1)
12	06-95-5150	6-32 x 1/4" Hex Hd. Taptite Sems	(1)	42	02-04-1536	Ball Bearing	(1)
13	06-81-1060	8-32 x 2-1/4" Field Bolt	(2)	43	34-80-2500	Retaining Ring	(1)
14	06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20	(1)	★ 44	06-82-5532	8-32 x 2-1/2" Pan Hd. Taptite T-20	(2)
15	23-66-0167	On-Off Switch	(1)	★ 45	06-82-5432	8-32 x 1-5/8" Pan Hd. Taptite T-20	(1)
16	31-44-1656	Left Handle Half	(1)	★ 46	06-42-2000	Woodruff Key	(1)
17	06-72-1720	Nameplate Rivet	(2)	★ 47	38-50-5475	Spindle	(1)
18	12-99-1750	Service Nameplate	(1)	48	06-75-3150	1/4-20 x 1 L.H. Skt. Cap Screw	(1)
20	02-04-0845	Ball Bearing	(1)	49	48-66-1360	1/2" Chuck	(1)
21	06-57-2975	8-32 Flexlock Hex Nut	(2)	50	48-66-3280	Chuck Key	(1)
22	23-16-0456	Field Insulator	(1)	51	43-62-0875	Side Handle	(1)
23	18-31-0100	120 V. Field	(1)	52	14-46-1001	Foam Slug Kit (10 Slugs)	(1)
24	28-50-6220	Motor Housing	(1)				
25	31-05-0050	Baffle	(1)				
★ 26	16-30-0226	120 V. Armature	(1)				
27	22-84-0531	Fan Assembly	(1)				
28	02-04-0911	Ball Bearing	(1)				
29	44-76-0210	Cord Protector	(1)				
30	22-64-3190	Cord Set	(1)				

LUBRICATION:
★ 41 3-3/4 Oz. Type "A" Grease, No. 49-08-0800.

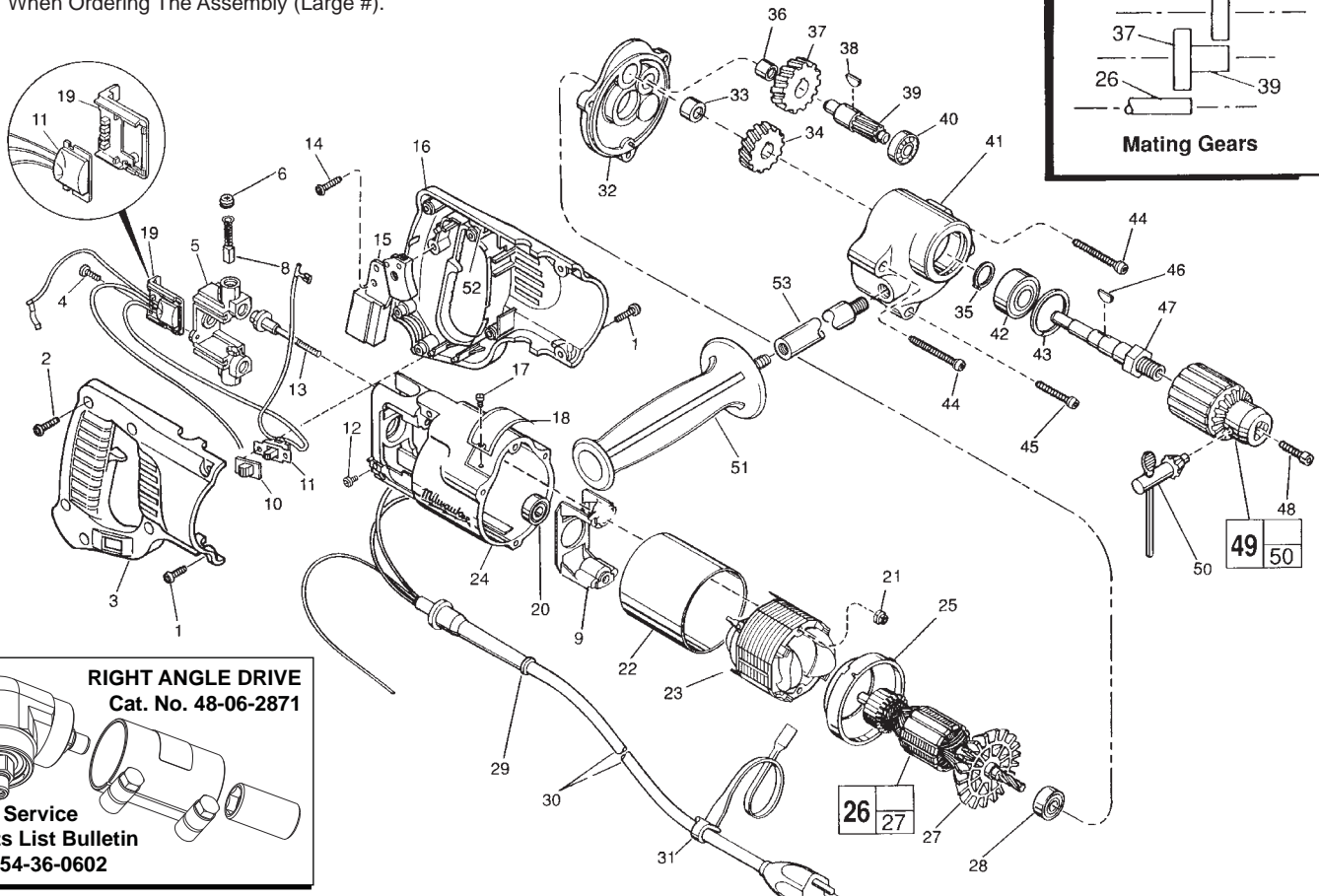


SERVICE PARTS LIST

BULLETIN NO.
54-08-1092

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN 54-08-1091	DATE Jan. 2013
1/2" REVERSING DRILL			
CATALOG NO. 1250-1	STARTING SERIAL NO. 459E	WIRING INSTRUCTION 58-01-0298	

EXAMPLE:
Component Parts (Small #) Are Included
When Ordering The Assembly (Large #).



RIGHT ANGLE DRIVE
Cat. No. 48-06-2871

See Service
Parts List Bulletin
No. 54-36-0602

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
	1	06-82-5316 8-32 x 1/2" Pan Hd. Slit. Taptite T-20	(4)		33	02-50-2440 Needle Bearing	(1)
	2	06-82-7270 8-16 x 5/8" Pan Hd. Plastite T-20	(5)		34	32-75-2011 Spindle Gear	(1)
	3	31-44-1651 Right Handle Half	(1)		35	34-60-1200 Retaining Ring	(1)
	4	06-95-0075 6-32 x 3/8" Truss Hd. Taptite T-10	(2)		36	02-50-1640 Needle Bearing	(1)
	5	22-22-1380 Brush Holder Assembly	(1)		37	32-40-1251 Intermediate Gear	(1)
	6	23-44-0190 Brush Retaining Cap	(2)		38	06-42-0800 Woodruff Key	(1)
*	8	22-18-0910 Carbon Brush Assembly	(2)		39	36-66-2711 Intermediate Shaft	(1)
	9	31-55-0190 Coil Shield	(1)		40	02-04-0725 Ball Bearing	(1)
	10	31-12-0196 Switch Cap	(1)	*	41	28-14-1922 Gear Case	(1)
*	11	14-20-0356 Switch Assembly	(1)		42	02-04-1536 Ball Bearing	(1)
	12	06-95-5150 6-32 x 1/4" Hex Hd. Taptite Sems	(1)		43	34-80-2500 Retaining Ring	(1)
	13	06-81-1060 8-32 x 2-1/4" Field Bolt	(2)		44	06-82-5532 8-32 x 2-1/2" Pan Hd. Taptite T-20	(2)
	14	06-82-7270 8-16 x 5/8" Pan Hd. Plastite T-20	(1)		45	06-82-5432 8-32 x 1-5/8" Pan Hd. Taptite T-20	(1)
*	15	23-66-1965 On-Off Switch	(1)		46	06-42-2000 Woodruff Key	(1)
	16	31-44-1656 Left Handle Half	(1)		47	38-50-5475 Spindle	(1)
	17	06-72-1720 Nameplate Rivet	(2)		48	06-75-3150 1/4-20 x 1 L.H. Skt. Cap Screw	(1)
	18	12-99-1750 Service Nameplate	(1)		49	48-66-1360 1/2" Chuck	(1)
*	19	43-72-0176 Heat Sink Holder	(1)		50	48-66-3280 Chuck Key	(1)
	20	02-04-0845 Ball Bearing	(1)	*	51	43-62-1265 Side Handle	(1)
	21	06-57-2975 8-32 Flexlock Hex Nut	(2)		52	14-46-1001 Foam Slug Kit (10 Slugs)	(1)
	22	23-16-0456 Field Insulator	(1)	*	53	43-62-1170 Side Handle Extension	(1)
*	23	18-31-0600 120 V. Field	(1)				
	24	28-50-6220 Motor Housing	(1)				
*	25	31-05-0055 Baffle	(1)				
	26	16-30-0226 120 V. Armature	(1)				
	27	22-84-0531 Fan Assembly	(1)				
	28	02-04-0911 Ball Bearing	(1)				
	29	44-76-0210 Cord Protector	(1)				
	30	22-64-3190 Cord Set	(1)				
	31	48-66-4040 Key Holder	(1)				
	32	28-28-0601 Diaphragm	(1)				

FIG. LUBRICATION:
41 3-3/4 Oz. Type "A" Grease, No. 49-08-0800.

FIG. NOTES:
51 Apply Red Loctite To Threads Of Side Handle.

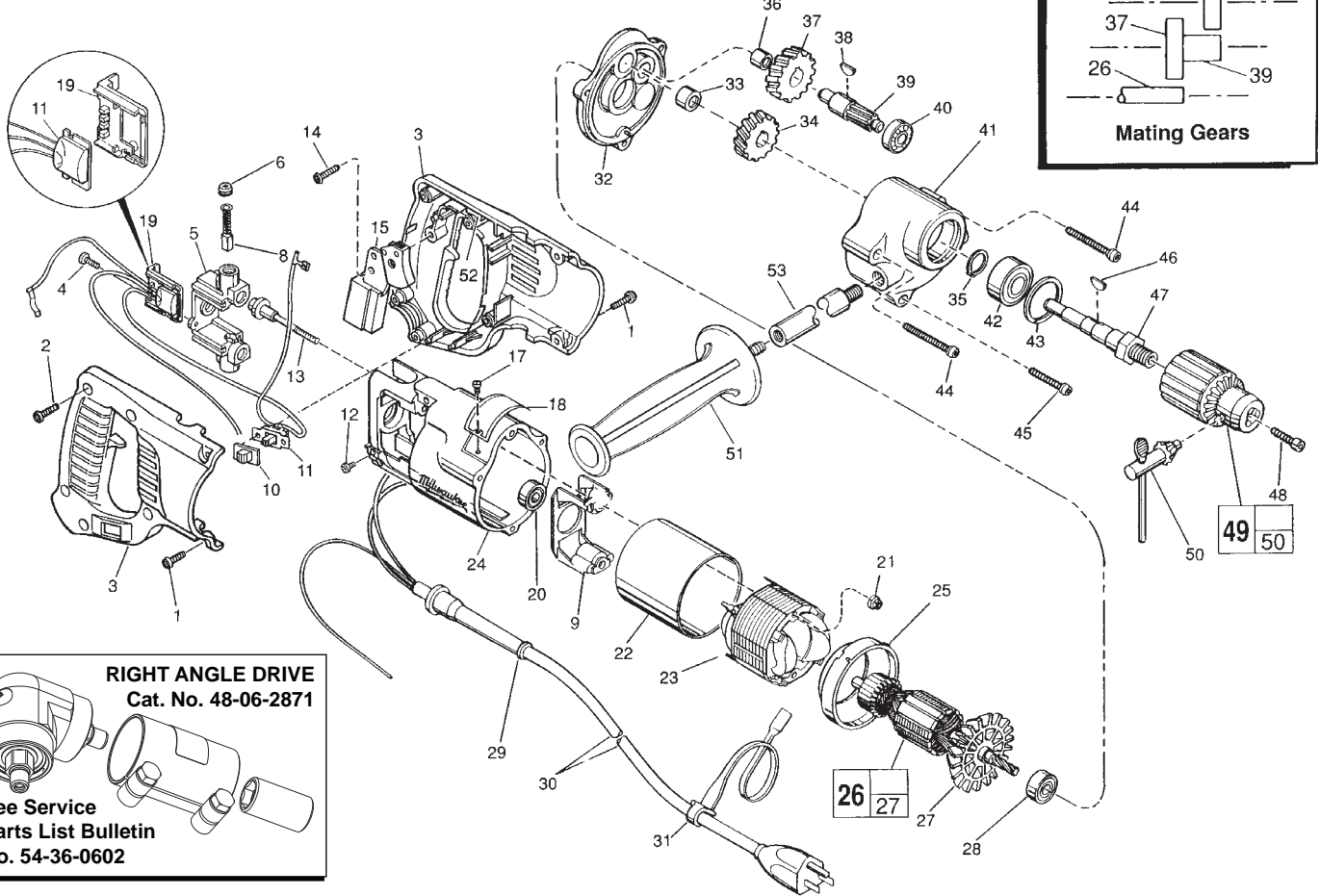


SERVICE PARTS LIST

BULLETIN NO.
54-08-1093

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN 54-08-1092	DATE Jan. 2013
1/2" REVERSING DRILL			
CATALOG NO. 1250-1	STARTING SERIAL NO. 459F	WIRING INSTRUCTION 58-01-0298	

EXAMPLE:
Component Parts (Small #) Are Included
When Ordering The Assembly (Large #).



RIGHT ANGLE DRIVE
Cat. No. 48-06-2871

See Service Parts List Bulletin No. 54-36-0602

FIG. PART NO.	DESCRIPTION OF PART	NO. REQ.	FIG. PART NO.	DESCRIPTION OF PART	NO. REQ.
1	06-82-5316 8-32 x 1/2" Pan Hd. Slit. Taptite T-20	(4)	33	02-50-2440 Needle Bearing	(1)
2	06-82-7270 8-16 x 5/8" Pan Hd. Plastite T-20	(5)	34	32-75-2011 Spindle Gear	(1)
★ 3	31-44-1680 Right and Left Handle Halves	(1)	35	34-60-1200 Retaining Ring	(1)
4	06-95-0075 6-32 x 3/8" Truss Hd. Taptite T-10	(2)	36	02-50-1640 Needle Bearing	(1)
5	22-22-1380 Brush Holder Assembly	(1)	37	32-40-1251 Intermediate Gear	(1)
6	23-44-0190 Brush Retaining Cap	(2)	38	06-42-0800 Woodruff Key	(1)
8	22-18-0910 Carbon Brush Assembly	(2)	39	36-66-2711 Intermediate Shaft	(1)
9	31-55-0190 Coil Shield	(1)	40	02-04-0725 Ball Bearing	(1)
10	31-12-0196 Switch Cap	(1)	41	28-14-1922 Gear Case	(1)
★ 11	14-20-0366 Reverse Switch Assembly	(1)	42	02-04-1536 Ball Bearing	(1)
12	06-95-5150 6-32 x 1/4" Hex Hd. Taptite Sems	(1)	43	34-80-2500 Retaining Ring	(1)
13	06-81-1060 8-32 x 2-1/4" Field Bolt	(2)	44	06-82-5532 8-32 x 2-1/2" Pan Hd. Taptite T-20	(2)
14	06-82-7270 8-16 x 5/8" Pan Hd. Plastite T-20	(1)	45	06-82-5432 8-32 x 1-5/8" Pan Hd. Taptite T-20	(1)
15	23-66-1965 On-Off Switch	(1)	46	06-42-2000 Woodruff Key	(1)
17	06-72-1720 Nameplate Rivet	(2)	47	38-50-5475 Spindle	(1)
18	12-99-1750 Service Nameplate	(1)	48	06-75-3150 1/4-20 x 1 L.H. Skt. Cap Screw	(1)
19	43-72-0176 Heat Sink Holder	(1)	49	48-66-1360 1/2" Chuck	(1)
20	02-04-0845 Ball Bearing	(1)	50	48-66-3280 Chuck Key	(1)
21	06-57-2975 8-32 Flexlock Hex Nut	(2)	51	43-62-1265 Side Handle	(1)
22	23-16-0456 Field Insulator	(1)	52	14-46-1001 Foam Slug Kit (10 Slugs)	(1)
23	18-31-0600 120 V. Field	(1)	53	43-62-1170 Side Handle Extension	(1)
24	28-50-6220 Motor Housing	(1)			
25	31-05-0055 Baffle	(1)			
26	16-30-0226 120 V. Armature	(1)			
27	22-84-0531 Fan Assembly	(1)			
28	02-04-0911 Ball Bearing	(1)			
29	44-76-0210 Cord Protector	(1)			
30	22-64-3190 Cord Set	(1)			
31	48-66-4040 Key Holder	(1)			
32	28-28-0601 Diaphragm	(1)			

FIG. LUBRICATION:
41 3-3/4 Oz. Type "A" Grease, No. 49-08-0800.

FIG. NOTES:
51 Apply Red Loctite To Threads Of Side Handle.

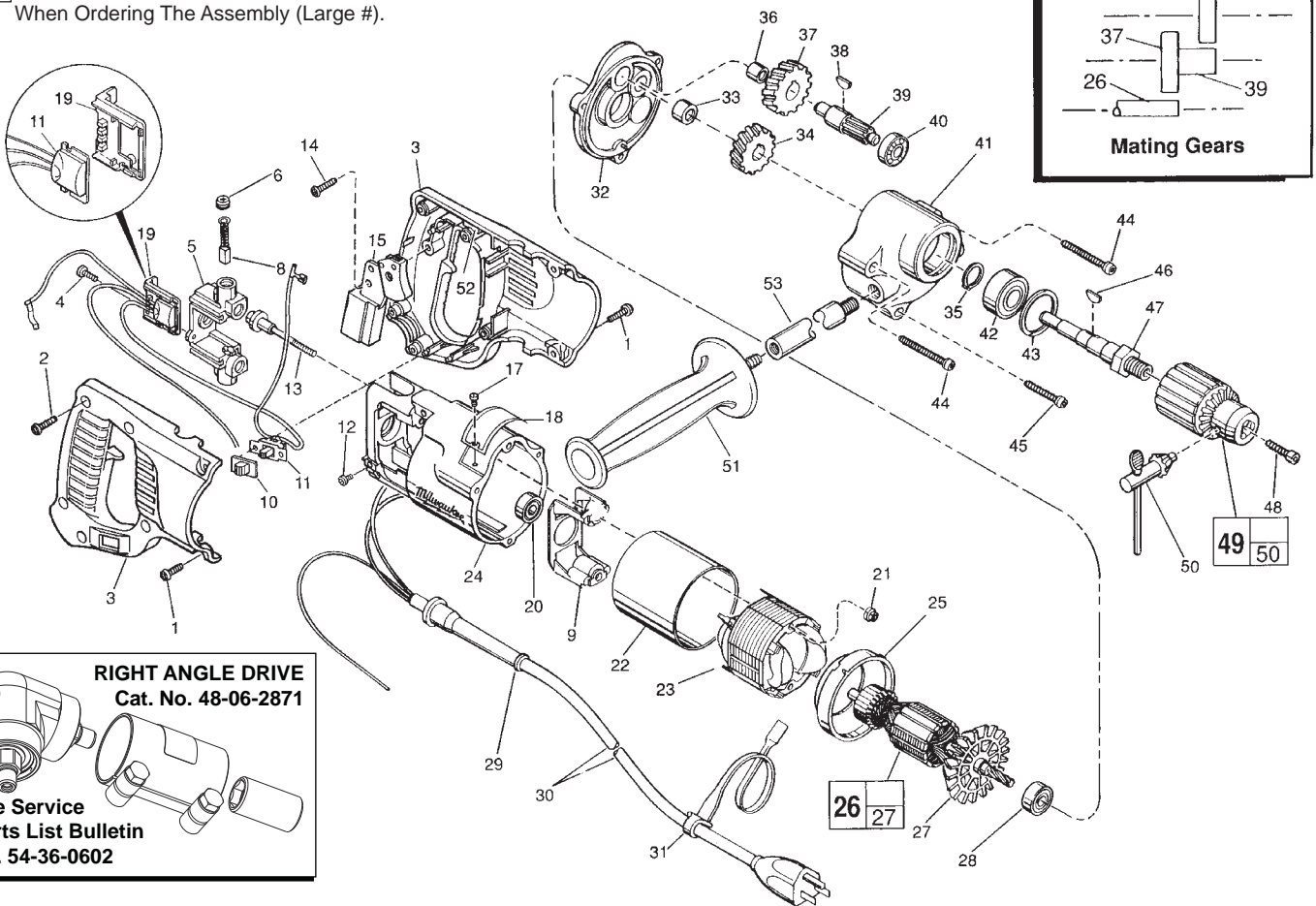


SERVICE PARTS LIST

BULLETIN NO.
54-08-1094

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN 54-08-1093	DATE Jan. 2013
1/2" REVERSING DRILL			
CATALOG NO. 1250-1	STARTING SERIAL NO. 459G	WIRING INSTRUCTION 58-01-0299	

EXAMPLE:
Component Parts (Small #) Are Included
When Ordering The Assembly (Large #).



RIGHT ANGLE DRIVE
Cat. No. 48-06-2871

See Service
Parts List Bulletin
No. 54-36-0602

FIG. PART NO.	DESCRIPTION OF PART	NO. REQ.
1 06-82-5316	8-32 x 1/2" Pan Hd. Slit. Taptite T-20	(4)
2 06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20	(5)
3 31-44-1680	Right and Left Handle Halves	(1)
4 06-95-0075	6-32 x 3/8" Truss Hd. Taptite T-10	(2)
5 22-22-1380	Brush Holder Assembly	(1)
6 23-44-0190	Brush Retaining Cap	(2)
8 22-18-0910	Carbon Brush Assembly	(2)
9 31-55-0190	Coil Shield	(1)
10 31-12-0196	Switch Cap	(1)
★ 11 14-20-0376	Remote Switch Assembly	(1)
12 06-95-5150	6-32 x 1/4" Hex Hd. Taptite Sems	(1)
13 06-81-1060	8-32 x 2-1/4" Field Bolt	(2)
14 06-82-7270	8-16 x 5/8" Pan Hd. Plastite T-20	(1)
★ 15 23-66-0205	Switch	(1)
17 06-72-1720	Nameplate Rivet	(2)
18 12-99-1750	Service Nameplate	(1)
19 43-72-0176	Heat Sink Holder	(1)
20 02-04-0845	Ball Bearing	(1)
21 06-57-2975	8-32 Flexlock Hex Nut	(2)
22 23-16-0456	Field Insulator	(1)
23 18-31-0600	120 V. Field	(1)
24 28-50-6220	Motor Housing	(1)
25 31-05-0055	Baffle	(1)
26 16-30-0226	120 V. Armature	(1)
27 22-84-0531	Fan Assembly	(1)
28 02-04-0911	Ball Bearing	(1)
29 44-76-0210	Cord Protector	(1)
30 22-64-3190	Cord Set	(1)
31 48-66-4040	Key Holder	(1)
32 28-28-0601	Diaphragm	(1)

FIG. PART NO.	DESCRIPTION OF PART	NO. REQ.
33 02-50-2440	Needle Bearing	(1)
34 32-75-2011	Spindle Gear	(1)
35 34-60-1200	Retaining Ring	(1)
36 02-50-1640	Needle Bearing	(1)
37 32-40-1251	Intermediate Gear	(1)
38 06-42-0800	Woodruff Key	(1)
39 36-66-2711	Intermediate Shaft	(1)
40 02-04-0725	Ball Bearing	(1)
41 28-14-1922	Gear Case	(1)
42 02-04-1536	Ball Bearing	(1)
43 34-80-2500	Retaining Ring	(1)
44 06-82-5532	8-32 x 2-1/2" Pan Hd. Taptite T-20	(2)
45 06-82-5432	8-32 x 1-5/8" Pan Hd. Taptite T-20	(1)
46 06-42-2000	Woodruff Key	(1)
47 38-50-5475	Spindle	(1)
48 06-75-3150	1/4-20 x 1 L.H. Skt. Cap Screw	(1)
49 48-66-1360	1/2" Chuck	(1)
50 48-66-3280	Chuck Key	(1)
51 43-62-1265	Side Handle	(1)
52 14-46-1001	Foam Slug Kit (10 Slugs)	(1)
53 43-62-1170	Side Handle Extension	(1)

FIG. LUBRICATION:
41 3-3/4 Oz. Type "A" Grease, No. 49-08-0800.

FIG. NOTES:
51 Apply Red Loctite To Threads Of Side Handle.



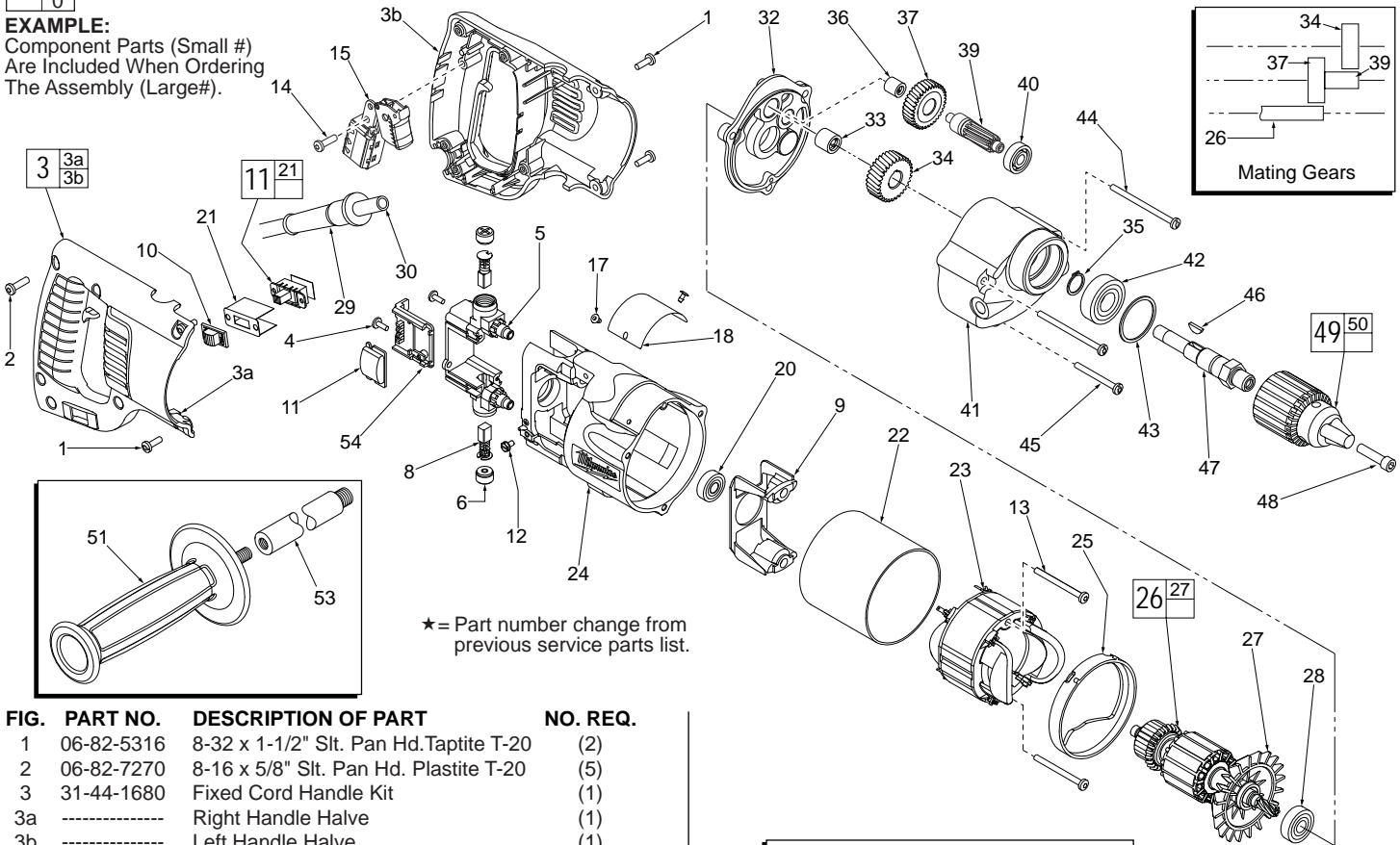
SERVICE PARTS LIST

BULLETIN NO.
54-08-1095

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
1/2" REVERSING DRILL		54-08-1094	Jan. 2014
CATALOG NO.	1250-1	WIRING INSTRUCTION	
STARTING SERIAL NO.	459H	58-01-0299	

00
0

EXAMPLE:
Component Parts (Small #)
Are Included When Ordering
The Assembly (Large#).



★ = Part number change from previous service parts list.

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	06-82-5316	8-32 x 1-1/2" Slit. Pan Hd. Taptite T-20	(2)
2	06-82-7270	8-16 x 5/8" Slit. Pan Hd. Plastite T-20	(5)
3	31-44-1680	Fixed Cord Handle Kit	(1)
3a	-----	Right Handle Halve	(1)
3b	-----	Left Handle Halve	(1)
4	06-95-0075	6-32 x 3/8" Truss Hd. Taptite	(2)
★ 5	22-22-1381	Brush Holder Assembly	(1)
6	23-44-0190	Brush Retaining Cap	(2)
8	22-18-0910	Carbon Brush Assembly	(2)
9	31-55-0190	Coil Shield	(1)
10	31-12-0196	Switch Cap	(1)
11	14-20-0376	Remote Switch Assembly	(1)
12	06-95-5150	6-32 x 1/4" Hex Hd. Taptite Sems	(1)
★ 13	06-82-7380	7-18 x 1-7/8" Pan Hd. Taptite T-20	(2)
14	06-82-7270	8-16 x 5/8" Slit. Pan Hd. Plastite T-20	(1)
15	23-66-0205	Switch	(1)
17	06-72-1700	Nameplate Rivet	(2)
18	12-99-1750	Service Nameplate	(1)
20	02-04-0845	Ball Bearing	(1)
21	-----	Paper Insulator	(1)
22	23-16-0456	Field Insulator	(1)
23	18-31-0600	120 Volt Field - Auto Assembly	(1)
★ 24	28-50-6222	Motor Housing	(1)
25	31-05-0055	Baffle	(1)
26	16-30-0226	120 Volt Armature	(1)
27	22-84-0531	Fan Assembly	(1)
28	02-04-0911	Ball Bearing	(1)
29	44-76-0210	Cord Protector	(1)
30	22-64-3190	Cord Set	(1)
31	48-66-4040	Key Holder (Not Shown)	(1)
32	28-28-0601	Diaphragm	(1)
33	02-50-2440	Needle Bearing	(1)
34	32-75-2011	Spindle Gear	(1)
35	34-60-1200	Retaining Ring	(1)
36	02-50-1640	Needle Bearing	(1)
★ 37	32-75-2052	Intermediate Gear	(1)
★ 39	36-66-2712	Intermediate Shaft	(1)
40	02-04-0725	Ball Bearing	(1)
41	28-14-1922	Gear Case	(1)
42	02-04-1536	Ball Bearing	(1)

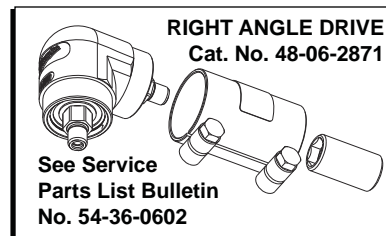


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
43	34-80-2500	Retaining Ring	(1)
44	06-82-5532	8-32 x 2-1/2" Slit. Pan Hd. Taptite T-20	(2)
45	06-82-5432	8-32 x 1-5/8" Slit. Pan Hd. Taptite T-20	(1)
46	06-42-2000	Woodruff Key	(1)
47	38-50-5475	Spindle	(1)
48	06-75-3150	1/4-20 x 1" L.H. Skt. Cap Screw	(1)
★ 49	48-66-1355	1/2" Chuck	(1)
50	48-66-3280	Chuck Key (Not Shown)	(1)
51	43-62-1265	Side Handle	(1)
53	43-62-1170	Side Handle Extension	(1)
54	43-72-0176	Heat Sink Holder	(1)

FIG. LUBRICATION

41 3-3/4 Oz. Type "A" Grease, 49-08-0800.

FIG. NOTES:

51 Apply Red Loctite To Threads Of Side Handle.