



SERVICE PARTS LIST

BULLETIN NO.
55-38-1800

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
4.5" (115mm) ANGLE GRINDER			Nov. 2014
CATALOG NO.	6148-59A	STARTING SERIAL NO.	C43A
		WIRING INSTRUCTION SEE PAGE 3	

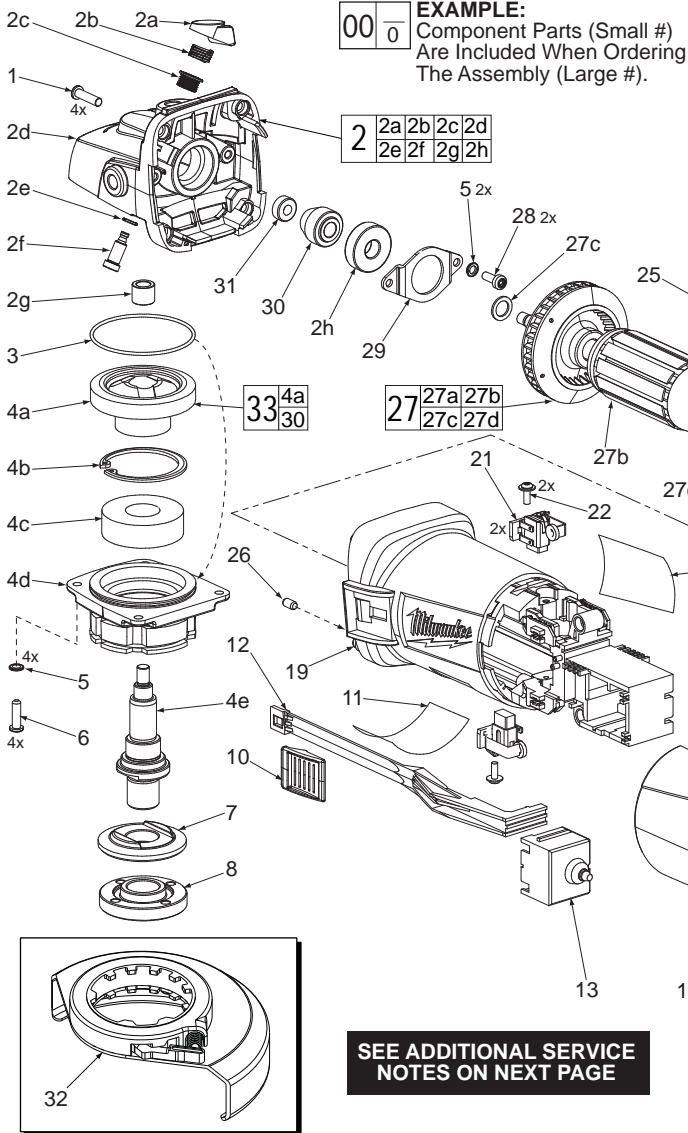


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
16	23-38-0020	Capacitor Assembly	(1)
17	44-76-0210	Cord Protector	(1)
18	22-64-4035	Cordset	(1)
19	31-50-3370	Motor Housing	(1)
20	12-20-0243	Nameplate	(1)
21	22-16-0070	Carbon Brush Assembly	(1)
22	05-88-1100	M3 x 10 Pan Hd. T-10 Screw	(2)
23	18-04-0185	Service Field	(1)
24	42-14-0495	Fan Baffle	(1)
25	05-88-1290	M4 x 76 Pan Hd. T-20 Screw	(2)
26	31-53-0240	Rubber Plug	(1)

- Functionally check Spindle lock Mechanism. Spindle Lock Pin (2f) must return briskly when released from engagement in Gear (4a).
- Orient Insulation Disc (27d) with shoulder facing Ball Bearing (27a) as shown. Exercise caution when installing. Make sure that the Insulation Disc rests against commutator bars with no visible gap.
- Rubber Plug (26) is to be placed in a cavity by the bearing bore in the back of Motor Housing (19).
- Orient the Needle Bearing (2g) such that vendor I.D. is facing the Gear (4a). Press flush ±.25mm from the surface of Gearcase (2d).
- Press the Carbon Brush Assy. (21) into slot of Motor Hsg. (19). Secure with screw (22), torque to 3-6 in./lbs.
- Add a few drops of Red Loctite® 277 to threads of Spindle lock Tube (2c) prior to assembly.
- O-Ring (2e) must be bottomed against flange of Pin (2f) prior to assembly.
- Press Ball Bearing (27a) onto armature shaft until seated on shaft shoulder.

SEE ADDITIONAL SERVICE NOTES ON NEXT PAGE

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	05-88-1255	M14 x 22 Pan Hd. ST T-20 Screw	(8)
2	14-29-0310	Gearcase Assembly	(1)
2a	42-42-0590	Spindle Lock Button	(1)
2b	40-50-1330	Spring	(1)
2c	42-42-0580	Spindle Lock Tube	(1)
2d	-----	Gearcase	(1)
2e	34-40-0450	O-Ring	(1)
2f	42-60-1660	Spindle Lock Pin	(1)
2g	02-50-0025	Needle Bearing	(1)
2h	02-04-0620	Ball Bearing	(1)
3	34-40-0180	O-Ring	(1)
4a	-----	Spiral Bevel Gear	(1)
4b	34-80-2275	Retaining Ring	(1)
4c	02-04-1150	Ball Bearing	(1)
4d	28-53-0410	Gearcase Cover	(1)
4e	38-50-0130	M14 Output Shaft	(1)
5	05-90-0225	Spring Washer	(6)
6	05-88-1210	M4 x 14 Pan Hd. T-20 Screw	(4)
7	43-05-0055	Inner Disc Flange	(1)
8	44-40-0125	Outer Disc Flange	(1)
10	31-92-0430	Slide Switch Button	(1)
11	10-15-0023	Warning Label	(1)
12	31-92-0470	Switch Pole	(1)
13	23-66-2665	Switch	(1)
15	31-44-0386	Rear Handle Assembly	(1)
15a	31-50-0405	Rear Handle Support	(1)
15b	31-50-0415	Rear Handle Cover	(1)

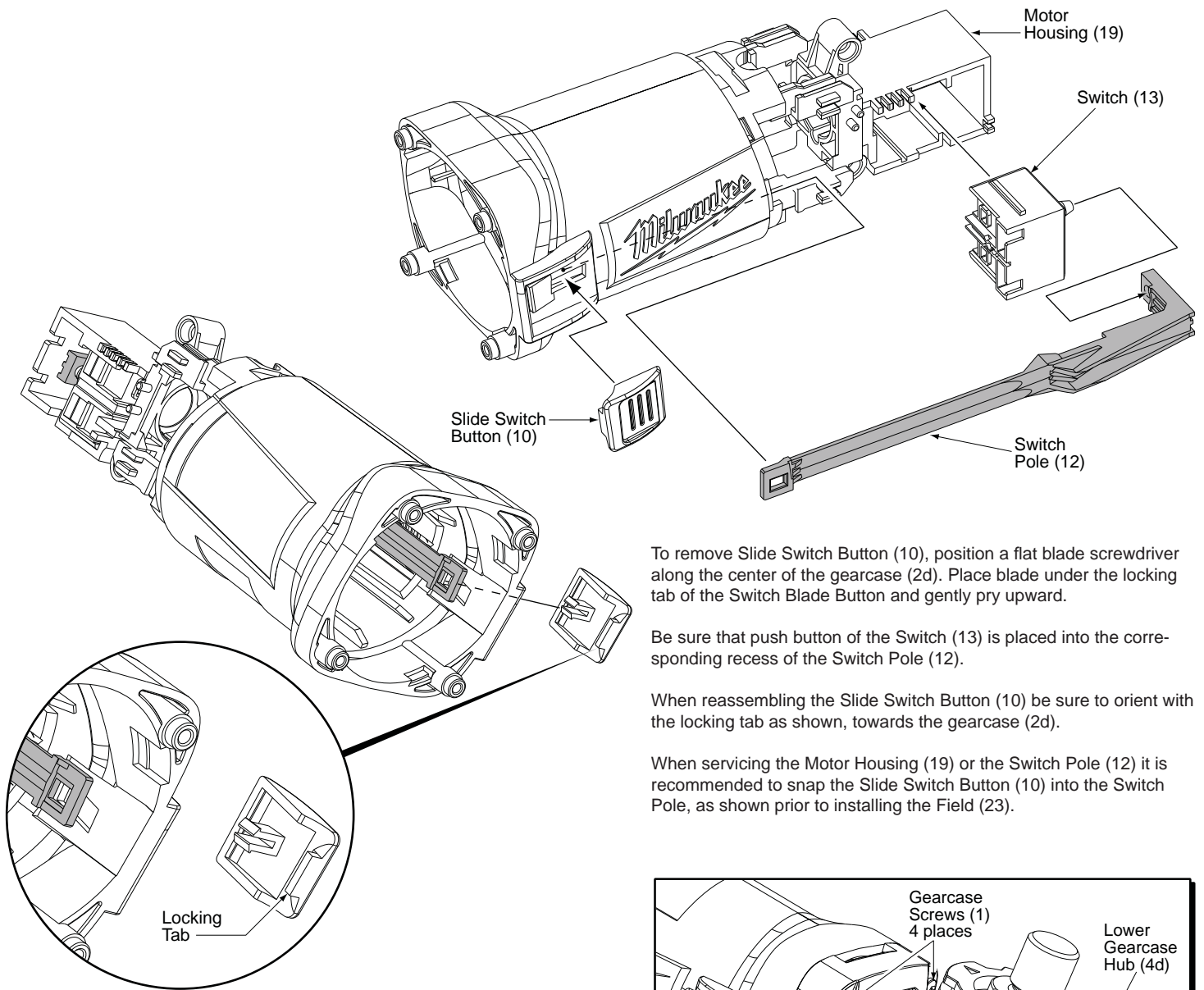
FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
27	16-04-0180	Service Armature Assembly	(1)
27a	02-04-2110	Ball Bearing	(1)
27b	-----	Armature	(1)
27c	45-88-0406	Washer	(1)
27d	43-86-0010	Insulator Ring	(1)
28	05-88-1280	M4 x 10 Pan Hd. T-20 Screw	(2)
29	44-66-0450	Bearing Retainer	(1)
30	-----	Bevel Pinion	(1)
31	05-55-0620	M5 Hex Nut	(1)
32	43-54-1070	4.5" T27 Guard	(1)
33	14-29-0025	Gear Set	(1)
	42-62-0110	Side Handle (Not Shown)	(1)
	49-96-0015	Spanner Wrench (Not Shown)	(1)

*** LUBRICATION NOTE:** When servicing the Gears (4a & 30) or the Gearcase (2d), 90-95% of the old grease must be removed prior to new grease being added.

FIG. LUBRICATION (*See lubrication note above):

- 4a,30 Type "Y" Grease, No. 49-08-5270, Must Be Applied To All Gear Teeth.
- 2d,2e Lightly coat with grease O-Ring and bearing bore in Gearcase.
- 2d .4 Ounces (13 Grams) Type "Y" Grease, No. 49-08-5270.

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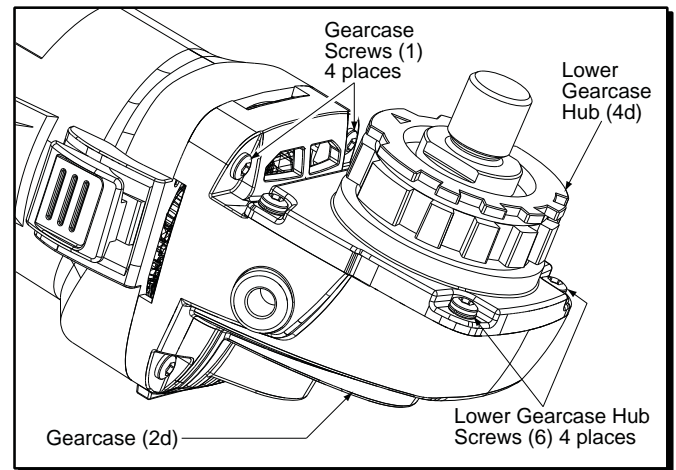


To remove Slide Switch Button (10), position a flat blade screwdriver along the center of the gearcase (2d). Place blade under the locking tab of the Switch Blade Button and gently pry upward.

Be sure that push button of the Switch (13) is placed into the corresponding recess of the Switch Pole (12).

When reassembling the Slide Switch Button (10) be sure to orient with the locking tab as shown, towards the gearcase (2d).

When servicing the Motor Housing (19) or the Switch Pole (12) it is recommended to snap the Slide Switch Button (10) into the Switch Pole, as shown prior to installing the Field (23).



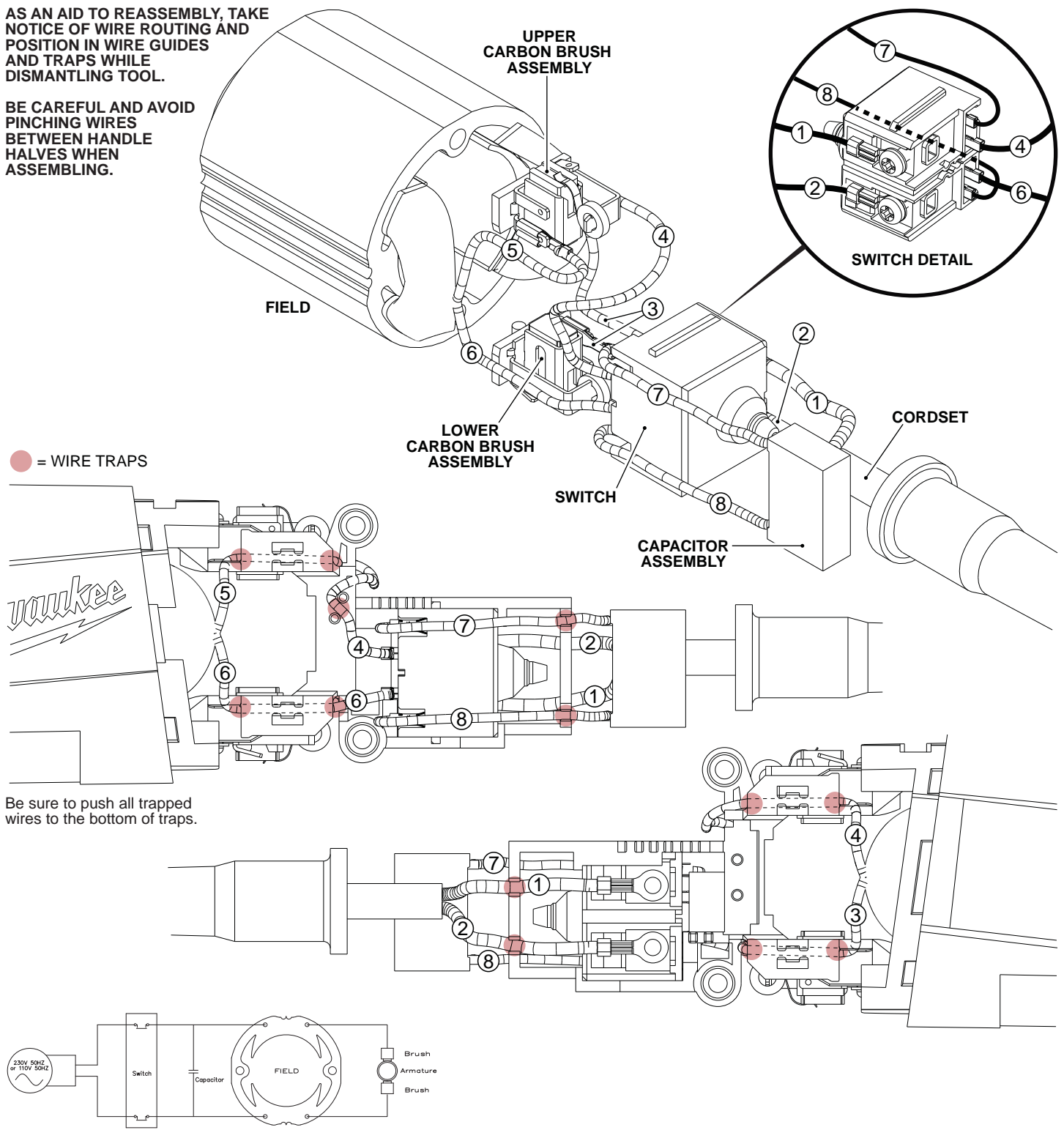
When servicing the Gearcase (2d), first remove the four Screws (1) and Lower Gearcase Hub (4d) to prevent damage to the bottom two Screws (6) that secure the Gearcase.

SCREW / CHUCK TORQUE CHART

Fig.	Number	Description	Seat Torque	
			(kg.-cm)	(in.-lbs.)
1	05-88-1255	Used on front of Gearcase (2d)	14-20	12-17
1	05-88-1255	Used on Rear Handle Cover (15b) to secure Cordset (18) area	16-21	14-18
1	05-88-1255	Used on Rear Handle Cover (15b) to secure to Motor Housing (19)	13-17	11-15
6	05-88-1210	Used to secure Gearcase Cover (4d) to bottom of Gearcase (2d)	14-20	12-17
22	05-88-1100	Used to secure Brush Assy. (21)	3-6	3-6
25	05-88-1290	Used to secure Field (23)	14-20	12-17
28	05-88-1280	Used to secure Bearing Retainer (29)	12-20	12-17
31	05-55-0620	Hex Nut on Armature (27b)	55-65	47-56

AS AN AID TO REASSEMBLY, TAKE NOTICE OF WIRE ROUTING AND POSITION IN WIRE GUIDES AND TRAPS WHILE DISMANTLING TOOL.

BE CAREFUL AND AVOID PINCHING WIRES BETWEEN HANDLE HALVES WHEN ASSEMBLING.



Be sure to push all trapped wires to the bottom of traps.

WIRING SCHEMATIC

WIRING SPECIFICATIONS

Wire No.	Wire Color	Origin or Part No.	Gauge	Length	Terminals, Connectors and End Wire Preparation
1	Blue	22-64-4030	--	--	Component of cord set. Connect to top position on side of switch.
2	Brown	22-64-4030	--	--	Component of cord set. Connect to bottom position on side of switch.
3	Red	18-04-0185	--	--	Component of field. Connect to lower carbon brush assembly.
4	Black	18-04-0185	--	--	Component of field. Connect to front of switch, see detail.
5	White	18-04-0185	--	--	Component of field. Connect to upper carbon brush assembly.
6	Black	18-04-0185	--	--	Component of field. Connect to front of switch, see detail.
7	Black	23-38-0020	--	--	Component of capacitor assembly. Connect to front of switch, see detail.
8	Black	23-38-0020	--	--	Component of capacitor assembly. Connect to front of switch, see detail.